EXHIBIT 1
DATE 03/25/2013
HB 590

An Estimate of the Economic Ramifications Attributable to the Potential Medicaid Expansion on the Montana Economy

Prepared for:
The Office of the Commissioner of Securities and Insurance
State of Montana

Submitted by:
The Bureau of Business and Economic Research
The University of Montana

January 2013

Executive Summary

The U.S. Supreme Court ruled early in the summer of 2012 that states that do not expand their Medicaid programs to 138 percent of the federal poverty level ($31,809 for a family of four) will not lose funding for their entire Medicaid program. In essence, this ruling means that states may now choose to not expand their Medicaid programs without the fear of losing all federal funding for Medicaid.

The largest, potential new cost for states under the Affordable Care Act (ACA) is the state option to expand Medicaid. The expansion however increases cost for two groups, those newly eligible under the expansion and those previously eligible but not enrolled in Medicaid. From 2014 to 2016, the federal government will pay 100 percent of the cost for newly eligible Medicaid enrollees, and half the cost of administering the program. From 2017 and beyond, the state will assume a greater share of the cost as the federal match decreases and the state share increases, eventually reaching 10 percent in 2020 and thereafter. The state's share of serving the previously eligible for Medicaid is based on the Federal Medical Assistance Percentage (FMAP) calculated each year by the Centers for Medicare and Medicaid Services, currently 34 percent in Montana.

While the costs of the Medicaid expansion are obvious, there are certain benefits that accrue to the expansion as well. New federal dollars will flow into Montana as the federal government supports each state's Medicaid expansion. These dollars otherwise wouldn't exist, and as such, new dollars create jobs, labor income, and potential new tax revenues for state governments. Uncompensated medical care, including under-compensated medical care, provided to Medicaid enrollees should decrease as uninsured now become insured. While this may not manifest itself as reduced medical costs for other Montanans, it does decrease the amount of cost-shifting that otherwise would occur without the expansion. Other less quantifiable benefits of transitioning from uninsured to insured include decreased morbidity and mortality, increased productivity, and better access to usual sources of care, particularly primary care.

Estimating the potential cost and benefits of expanding Medicaid is fraught with challenges. The Bureau of Business and Economic Research (BBER) at The University of Montana conducted an intensive survey of households during 2011 to help identify some of the key parameters necessary to model the Medicaid expansion. Many aspects of modeling the expansion are subject to best judgments, such as the take-up rate among Medicaid enrollees and the future cost of serving a newly expanded Medicaid population.

The take-up rate of Medicaid enrollees is highly variable from state to state. Participation in Medicaid varies from a low of 63 percent in Louisiana to a high of 83 percent in Massachusetts. Conservative states in general have lower take-up rates (54 percent) relative to more liberal states (61 percent). Compounding these differences in take-up rates is that childless adults are expected to be the largest constituency of newly eligible adults and childless adults are typically less likely to enroll in Medicaid than others.

The target population for the Medicaid expansion is the uninsured with incomes below 138 percent of the federal poverty level ($15,415 for an individual and $31,809 for a family of four). Using BBER survey data, the number of uninsured in Montana meeting this poverty threshold is 69,000. This conforms to recently released estimates provided by the American Community Survey, U.S. Census, that 68,259 uninsured Montanans are under 138 percent of the federal poverty level.

Not all of the 69,000 individuals eligible for the expansion will enroll. Many factors, including the method of enrollment, influence the participation rate in Medicaid. A 2011 study by Lake Research Partners indicates that on-line enrollment increases the probability that Medicaid eligible populations will enroll, compared to much lower probabilities for enrollment at government offices or community centers. Not only is the tool for enrollment important, the intensity of state efforts in outreach should influence the proportion of the Medicaid eligible population that enrolls in the expansion.

Another consideration is the bubble population which are those at risk of cycling in and out of Medicaid due to changing income and family circumstances. Many studies suggest the population most likely to move in and out of Medicaid is those between 138 percent and 150 percent of the federal poverty level. In Montana, this could add another 4,400 individuals to Medicaid. If instead the poverty threshold is increased to 200 percent of the federal poverty level ($22,340 for individuals and $46,100 for a family of four), another 26,000 uninsured Montanans could be added to the Medicaid expansion.

Another challenge to estimating the number of potential Medicaid enrollees is due to the woodwork effect and crowd-out. The woodwork effect is the population previously eligible for Medicaid before the expansion who now enrolls in Medicaid. This population may now enroll since the Medicaid enrollment process may be made simpler, and the state aggressively markets the expansion. The woodwork effect may also exist since the individual mandate upheld by the Supreme Court may encourage individuals to enroll rather than face the penalty for having no health insurance. For Montana, this woodwork effect is small, only 4,000 uninsured with incomes below 33 percent of the federal poverty level are expected to enroll in the expansion.

A more significant effect, however, is the potential for crowd-out. Crowd-out occurs when individuals are pushed from private insurance to a cheaper public alternative, such as Medicaid. Crowd-out occurs because employers may choose to drop health insurance coverage for their low-wage workers and instead send them into Medicaid for health coverage. In addition, those individuals with other forms of private insurance coverage may find the Medicaid option a cheaper alternative. The magnitude of crowd-out varies significantly in the literature. One recent study estimated crowd-out to be as high as 25.8 percent of newly enrolled Medicaid beneficiaries. The BBER estimates the potential crowd-out population to be approximately 14,000.

One variable often missing from studies on the Medicaid expansion is the growth in the Medicaid eligible population over time. In the BBER analysis, the Medicaid population is expected to increase at approximately 1 percent per year. This growth rate is based on

fourth quarter overall Medicaid growth for 2010 to 2012. Take-up rates are assumed to vary by year as the marketing of the Medicaid expansion increases awareness and enrollment policies are simplified based on the previous year's experiences. Beginning in 2014, the take-up rate in Montana is assumed to be 57 percent and increases incrementally year-by-year to eventually reach 83 percent in 2020 and thereafter. Following this methodology, 56,000 new Medicaid enrollees are expected to enroll in 2014, ultimately reaching 78,000 in 2021. Nearly 25 percent of new Medicaid enrollees are the previously insured that enroll in Medicaid as the result of losing their private health insurance coverage. The remaining enrollees (42,000) are those that now qualify for Medicaid under the expansion due to the higher income threshold and those previously eligible that now enroll in the program.

In order to properly estimate the cost of the Medicaid expansion, two groups must be modeled. The woodwork effect population will receive the traditional federal medical assistance percentage (FMAP) over the course of the Medicaid expansion. The current FMAP for Montana is 66 percent, which means that for every dollar the state contributes toward the care of the Medicaid enrollee, the federal government contributes $1.94.

For the remaining newly eligible Medicaid enrollees the FMAP is 100 percent during 2014 through 2016. The FMAP is ten phased down until it reaches 90 percent in 2020. The phase down in the FMAP is gradual, 95 percent in 2017, 94 percent in 2018, and 93 percent in 2019. Starting in 2020 and thereafter, the state share of the FMPA is 10 percent for newly eligible Medicaid enrollees.

Another critical variable in modeling the cost of the Medicaid expansion is the cost per member per year (PMPY). The Kaiser Family Foundation reports per enrollee spending for FY 2009 by type of Medicaid enrollee. Although the average spending per Medicaid enrollee is $7,348 per year, spending per enrollee varies from a high of almost $23,000 per enrollee for the aged to $2,900 per enrollee for children. Spending on adults is 60 percent of the average spending for all groups combined, or $4,382. As a point of comparison, Mathematica Policy Institute estimates the per member per month (PMPM) cost for non-disabled adults in Montana during 2006 at $735, excluding administrative costs, or almost $9,000 annually. In-house analysis of Medicaid claims data for adults 18 to 64 years of age, for the period October 2010 to September 2011, indicates PMPM medical costs of $641, and PMPM pharmacy costs of $151, for a total PMPM cost of $792. Annualized, the PMPY costs total $9,504. A Montana Department of Public Health and Human Services (DPHHS) analysis of non-disabled Medicaid enrollees in 2009 estimates PMPM costs of $825, or $9,900 annually.

Since a sizable proportion of the Medicaid expansion will be childless adults, the relative health of this population will be a key driver behind the actual costs per enrollee. The BBER estimates that of the 42,000 childless adults that may enroll in Medicaid, 25 percent self-report fair to poor health. It is likely then that the sickest of childless adults may be the first to enroll in the Medicaid expansion. For this reason, the BBER uses PMPY costs as documented by BBER analysis, DPHHS analysis, and Mathematica Policy Institute analysis of Montana Medicaid data for non-disabled adults.

As such, two cost scenarios are modeled, one with 2011 PMPY costs of $9,504 and another with 2009 PMPY costs of $9,900 for non-disabled adults.

Since medical costs escalate each year, all PMPY costs are escalated over the 2014 to 2021 modeling period according the Consumer Price Index for medical care services. For the 2005 to 2011 period, medical care prices increased at an annual rate of 3.6 percent, or nearly 45 percent higher than the general inflation rate over the same period.

Under the lower-cost scenario, state obligations to the Medicaid expansion, excluding administrative costs, total $363.1 million for FY 2014 through FY 2021. State obligations increase year by year as per enrollee cost increase, take-up rates increase, the Medicaid population grows, and the state FMAP gradually increases. The federal government financial obligation totals $5.8 billion over the entire FY 2014 to FY 2021 modeling period. The federal government's share increases each fiscal year, albeit by smaller percentages due to the decreasing FMAP from 2017 and beyond. Under the lower-cost per enrollee scenario, total state and federal obligations for FY 2014 through FY 2021 total $6.1 billion.

As a point of contrast and comparison, a higher-cost per enrollee was modeled. This higher cost scenario assumes that PMPY costs are $1,226 above the lower cost scenario. All costs are again exclusive of administrative costs associated with the Medicaid expansion.

Total state obligations for the higher-cost scenario amount to $406 million, compared to $363 million under the lower-cost scenario, for the FY 2014 to FY 2021 period. Federal obligations increase as well, totaling $6.4 billion or $0.6 billion more than the lower-cost scenario.

Administrative costs are estimated according to Mathematica Policy Institute analysis of Montana Medicaid in 2009. Administrative costs are 6 percent of total costs, consistent with the national average for administrative costs. Total administrative costs are split equally between the state and the federal government.

Adding administrative costs to both modeling scenarios increases the total state obligation to the Medicaid expansion program to $517.7 million over FY 2014 to FY 2021. For the high-cost scenario, total state obligations increase to $578.8 million for FY 2014 through FY 2021.

The Medicaid expansion will reduce the number of Montanans without health insurance from 20 percent to 16 percent. As an example, the "donut hole" population becomes vulnerable should the state choose not to expand Medicaid. The donut hole population is identified as those uninsured whose incomes make them too rich for Medicaid yet too poor for the advanceable premium tax credits and cost-sharing reductions available in Montana's Federally Facilitated Exchange. This is a significant population among Montana's uninsured, representing 37,000 individuals. Without the expansion of Medicaid, this uninsured population will remain without affordable health care insurance.

There are several dynamics surrounding the expansion of Medicaid that influence the total costs of providing new health care coverage to the uninsured. Uncompensated medical care, including under-compensated medical care, is health care that is not fully paid for directly by individuals as out-of-pocket payments or by insurance carriers. Hospitals, community providers, and physicians all provide, to varying degrees, uncompensated care. Because medical care requiring hospitalization is the most expensive, hospitals provide the majority of uncompensated care. A substantial portion of uncompensated care is also provided by the taxpayer through Medicare, Medicaid Disproportionate Share Hospital Payments, state and local tax appropriations, federal grants to community health centers, and federal direct care provided by the Department of Veterans Affairs and Indian Health Service. Uncompensated care results in a cost-shifting across all payers of health care. For hospitals, cost-shifting allows them to provide care associated with the mission of the hospital, including charity care. This "social good" is paid for by public and private payers through higher taxes and health care insurance premiums. Cost-shifting is well documented in the health care literature.

The six-year average cost for hospital delivered charity care and bad debt in Montana is $244.9 million, assuming the cost of uncompensated care is 50 percent of total charges. Using a methodology advanced by Hadley et al (2008) it is possible to estimate total uncompensated care by provider. Total uncompensated care is estimated to be $401.6 million, with hospitals accounting for 60 percent of the total, community providers accounting for $102.1 million, and physicians providing $54.6 million in uncompensated care.

Uncompensated care is inefficient spending on health care. The uninsured are more likely to delay care and to have unmet health needs. The uninsured are also more likely to be hospitalized for medical conditions that can be adequately addressed on an outpatient basis instead of an inpatient basis. The uninsured are also less likely to receive screening and diagnostic tests known to lead to the early detection of cancer, heart disease, and diabetes. Overall, the uninsured receive less preventive and diagnostic care, less therapeutic care even after being diagnosed, and as a result, die earlier and experience greater limitations than similar people with insurance.

Still another consideration is the impact of ACA legislation on hospitals providing care to the medically and financially indigent. The ACA specifies a year-by-year reduction in Disproportionate Share Hospital (DSH) payments on the premise that as the uninsured acquire health insurance, uncompensated care costs should decrease. The DSH allotments to states are reduced regardless of a state's decision to expand Medicaid. Hence, for states that choose not to expand the Medicaid program, hospitals will still face declining DSH payments from the federal government. Medicaid DSH payments to Montana's hospitals provide financial assistance to hospitals providing services to large numbers of low-income patients, including Medicaid and the uninsured. In 2009, Montana received $11.4 million in federal Medicaid DSH allotments.

Four-year average federal DSH allotments to Montana are used to estimate the loss of federal DSH reductions to the state of Montana. Over the FY 2014 to FY 2021 period, Montana hospitals could lose over $18 million in Medicaid DSH payments.

With the Medicaid expansion, over $3.9 billion in uncompensated care will be delivered by Montana's health care providers, compared to $4 billion without the Medicaid expansion. Uncompensated care is a function of the cost of uncompensated care per uninsured, the number of remaining uninsured, and the impact of federal reductions in Medicaid DSH allotments. Over the FY 2014 to FY 2021 period, total uncompensated care associated with the Medicaid expansion would be reduced by $104 million.

The addition of federal dollars to the state economy as a result of the Medicaid FMAP supports many jobs and provides an additional stimulus to the state economy not otherwise available. Medicaid payments are made on behalf of Medicaid enrollees. The primary beneficiaries of these payments are providers, including hospitals, private physicians, nursing homes, and managed care organizations. Other businesses and industries are indirectly affected by this spending. For example, a medical supply firm may be impacted through its business dealings with Medicaid providers. In addition, households are eventually affected through increased employment and income opportunities. These ripple effects reverberate throughout the economy, supporting jobs and labor income, and tax revenues collected by state and local governments. This economic effect of federal Medicaid spending is well-documented in literature and advanced by the Kaiser Family Foundation in particular.

Because of the FMAP, state dollars are matched with a higher federal rate. In Montana, the current FMAP is 66 percent, meaning that if the state were to cut Medicaid spending by $1.00, it would forego the $1.94 federal match. In essence, the state is actually reducing its overall Medicaid spending by $2.94 to save $1.00 in state funds.

The Medicaid expansion comes with a much higher FMPA for newly eligible enrollees. The federal government FMAP is 100 percent during the first three years of the expansion, falling to 90 percent by 2020 and thereafter.

Using a nationally recognized and well-documented model, Impact Analysis for Planning (IMPLAN), the BBER estimated the employment, labor income, and state and federal tax revenues attributable to the inflow of federal dollars supporting the Medicaid expansion. On average, new federal funds create and support 11,500 jobs annually under the lower-cost scenario, and 12,700 jobs annually under the higher-cost scenario. Approximately 60 percent of these jobs are in the health care industry. The average economy-wide job created pays an average wage of $42,000, well above the average wage for private sector jobs in Montana economy-wide, which is $35,000. Over FY 2014 through FY 2021 an estimated $3.8 billion (low-cost scenario) and $4.2 billion (high-cost scenario) in labor income is generated from the flow of federal funds into the Montana economy. This represents an average contribution of $477 million per year in labor income for the low-cost scenario and $529 million per year under the higher-cost scenario.

Further, as a result of the extra economic activity created by introduction of billions of federal dollars, state and local tax revenues may increase $50 to $55 million annually over FY 2014 through FY 2021 for the low-cost and high-cost scenarios respectively. The federal government too benefits from increased economic activity resulting from its support of Medicaid. Taxes paid to the federal government average $98 million and $110 million annually for the low-cost and high-cost scenarios respectively.

In order to estimate the net cost to the state of the Medicaid expansion, reductions in uncompensated care and increased state and local tax revenues are added to the analysis. Under the low-cost scenario, despite the fact that the state is obligated to match federal funds with almost $518 million over FY 2014 through FY 2021, expected reductions in uncompensated care and the addition of state and local tax revenues appear to more than offset the state costs during the early years of the Medicaid expansion. Recall that during the first three years of the expansion, the federal government assumes 100 percent of the cost of delivering care to newly eligible Medicaid recipients. Not until 2018 do state costs exceed expected state and local tax revenues and reductions in uncompensated care. For all fiscal years, FY 2014 through FY 2021, state obligations amount to $34.2 million to support the Medicaid expansion.

Even under the higher-cost scenario, net savings are realized for the state during the first four years of the expansion. Net state costs over the entire period, FY 2014 to FY 2021, amount to $52 million after considering the reductions in uncompensated care and increased tax revenues attributable to the federal FMA.

Absent in this study are other considerations that will influence the costs of the Medicaid expansion. Incarcerated individuals receiving health care off-premises are eligible for the higher federal FMAP in the Medicaid expansion. Other Medicaid enrollees may qualify under the expansion as well. There are over 50 eligibility codes in the Montana Medicaid program. A code-by-code analysis of who may potentially qualify under the Medicaid expansion was beyond the scope of this study.

As the uninsured acquire health insurance, added demands will be placed on the health care infrastructure, particularly the medical provider workforce. Using data provided in the 2007 National Ambulatory Medical Care Survey by the National Center for Health Statistics, the added demands placed on ambulatory care providers was estimated as the uninsured become insured under the Medicaid program. Medicaid enrollees use primary care offices at four times the rate of the uninsured, and hospital emergency departments at twice the rate of the uninsured.

The estimated increase in office visits for primary care services is 261,000 office visits per year. Of this total, the Medicaid expansion accounts for almost half this increase in demand, the remaining increase in demand comes from the uninsured acquiring private insurance either in the Federally Facilitated Exchange or through carriers selling policies outside the exchange. Other ambulatory health care settings will experience increases in demand as well, including surgical and medical specialty offices, hospital outpatient and hospital emergency departments. The Medicaid expansion population will increase the

demand for surgical specialty office visits by almost 11,000 per year, far less than the increase in demand coming from the newly privately insured, 40,000 office visits per year. Similarly for medical specialty offices, the Medicaid expansion population will add 10,000 office visits per year, in addition to the increase in demand from the newly privately insured, 33,000 office visits per year. As the uninsured gain private health insurance, they will actually decrease their use of hospital outpatient and emergency departments. Almost 2,000 fewer visits to hospital outpatient departments are expected as the uninsured reduce their use in this ambulatory setting. The Medicaid expansion population, however, will add 45,000 visits to hospital outpatient departments statewide. Likewise for hospital emergency departments in Montana, as the uninsured acquire private health insurance, their use of the hospital emergency department decreases by almost 20,000 visits per year. The Medicaid expansion population will add 28,000 visits to hospital emergency departments, resulting in a net change of almost 8,000 visits to hospital emergency department per year.

Although it was not possible to estimate the capacity of surgical, medical, hospital outpatient and hospital emergency departments in Montana, it was possible to ascertain the capacity of the primary care system to accommodate the added demands of the Medicaid expansion population. Using BBER survey data on households, complemented by the three-year estimates of health insurance coverage available from the American Community Survey, total statewide demand for primary care office visits could be estimated. Including the added demands placed on primary care by the Medicaid expansion population, total statewide demand for primary care office visits is estimated to be 1.9 million per year. The capacity of the primary care system, determined by the number of primary care physicians and the number of office visits each can accommodate, is estimated to be 2.1 million office visits per year. Hence, the supply of office visits exceeds the demand for office visits by over 81,000 office visits per year. The results, however, are quite different for certain counties depending on the Medicaid expansion population. Flathead, Gallatin, Missoula and Ravalli Counties may face chronic primary care shortages as the uninsured in their service areas gain access to health care coverage.

Estimating the future impact of what can be considered a highly uncertain Medicaid expansion is challenging. Medicaid expansion studies use different time periods and different costs per enrollee. Some studies use inflation factors while others do not. Assumptions about the take-up rates are crucial to any analysis, and recent discussions pursuant to the fiscal cliff have some wondering about the ability of the federal government to meet its future promises on the Medicaid expansion. This study uses data unique to Montana Medicaid and attempts to present the best picture available as to the level of the state's financial commitment should it choose to expand Medicaid. Employer decisions about health insurance could also impact Medicaid enrollment, particularly for Montana's lower wage employers. Given all the uncertainty surrounding the Medicaid expansion, the state's net cost of the Medicaid expansion is most likely to be between $34 million and $52 million over the FY 2014 through FY 2021 period.

Contents

Montana Medicaid 1
Characteristics of Montana Medicaid Population 2
The Medicaid Expansion 3
The Number of Montanans Eligible for Medicaid under the Expansion 5
Budgetary Impact of the Medicaid Expansion 8
Traditional Medicaid Federal Medical Assistance Percentage (FMAP) 8
The Medicaid Expansion Federal Medical Assistance Percentage (FMAP) 10
Montana and Federal Spending by Fiscal Year 10
Potential Advantages to Medicaid Expansion 18
Uncompensated Care 18
Federal Medicaid Disproportionate Share Hospital (DSH) Allotments 22
Impact of Federal Funds on the Montana Economy 24
IMPLAN Modeling Results 27
Net Cost/Savings Attributable to the Medicaid Expansion 28
Impact of Medicaid Expansion on Montana's Health Care Resources 29
Changes in Ambulatory Use by Medicaid Enrollees at the County Level 32
Estimated Current Demand for Primary Care Office Visits 33
Estimated Increase in the Demand for Primary Care Office Visits 34
Primary Care Capacity 36
Summary 37

Montana Medicaid

The joint Federal-State Medicaid program provides health care assistance to certain low-income people and is one of the largest payers for health care in the U.S. The Federal government establishes certain requirements for each state Medicaid program. States then administer their own program, determining the eligibility of applicants, the health services covered, and setting provider reimbursement rates. States also pay a portion of the total program costs and process claims. Although Title XIX of the Social Security Act specifies which groups of people must be eligible for Medicaid, states have the flexibility to extend coverage to additional groups. In addition to income, eligibility is typically based on several other factors, including financial resources (assets), age, disability, other government assistance, and other health or medical conditions such as pregnancy. Beginning in 2014, states have the option to extend Medicaid eligibility to almost all individuals under age 65 in families with incomes below 138 percent of the Federal Poverty Level.

With limited exceptions, such as waivers, demonstration projects, and benchmark benefit plans, states must provide the same benefit package to all Medicaid enrollees. States must also extend eligibility to all mandatory populations and cover all mandatory services defined by Title XIX in order to receive Federal matching funds.

Medicaid coverage is extremely valuable to low-income individuals and families who qualify for the program. It also enables the least-fortunate members of society to obtain needed health care.

Over the next 10 years, Medicaid expenditures are expected to increase at an average annual rate of 8.1 percent, almost twice as fast as growth in the U.S. economy. The expansion of Medicaid eligibility under the Affordable Care Act will broaden Medicaid's role as part of the U.S. health care system.

Current Medicaid eligibility in Montana requires beneficiaries to be either parents or other related adults with dependent children under the age of 19, children, pregnant women, women diagnosed with breast or cervical cancer or pre-cancer, 65 years old or older, or blind or disabled. Medicaid recipients must also meet basic eligibility requirements as well as other specific financial and non-financial requirements. Income limits for Medicaid depend on the type of coverage requested, and vary from no income limits for newborns and transitional family coverage to 200 percent of the federal poverty level for breast and cervical cancer patients.

Understanding the dynamics of the Medicaid population is vital for not only controlling health care costs but also addressing one off the neediest populations with respect to access to health care. Total Medicaid outlays in fiscal year 2010 were $404.1 billion, 68 percent of which represented federal spending. Dual eligibles, those patients covered by both Medicare and Medicaid, present a unique challenge fiscally. Dual eligible comprise

15 percent of the Medicaid population nationally but consume almost 40 percent of total Medicaid spending.

Characteristics of Montana Medicaid Population

Relative to the U.S. Medicaid population, Montana's Medicaid population is generally similar. Although the mean age is similar between the two populations, the composition of the Medicaid population is different. Montana is over represented by children (62 percent of enrollees compared to 49 percent nationally) and the aged (4 percent of enrollees compared to less than 1 percent nationally).

Within the adult population, almost nine in ten are ages 18 to 44. The disabled tend to be older, 37 years old compared to 26 years old for the adult Medicaid population. Although females make up over half the Montana Medicaid population, they account for over 60 percent of the elderly.

The BBER and the MAHCP stratified the Montana Medicaid population, weighted by eligible months, by health severity level according to medical claims history for FY 2011. The benchmark used to compare Montana claims history is the U.S. Medicaid population. For three severity level classifications, very low risk, low risk, and moderate risk, the Montana Medicaid population is underrepresented compared to the proportions of the U.S. Medicaid population for these three risk classifications. It follows then that a greater proportion of Montana's Medicaid population must be at higher risk than the proportions nationally. Montana's Medicaid population at very high risk is almost double the proportion at very high risk nationally. Advanced analytics can be used to identify potentially high risk Medicaid enrollees. The Medicaid Health Improvement Program (HIP) uses predictive software to identify Medicaid enrollees who may potentially benefit from enhanced case management efforts.

Based only on age and gender adjustments, the relative risk score for the Montana Medicaid population is 4 percent healthier than the U.S. Medicaid population. But when actual claims data is added, the Montana Medicaid population is 34 percent above the national norm for risk. By far the largest risk score based on clinical data is for the disabled. Montana's disabled population on Medicaid is nearly four hundred percent above the risk scores for the disabled nationally. In contrast, Montana children on Medicaid are healthier than their national counterparts.

Another perspective on relative risk is by using the Montana Medicaid population as the general benchmark instead of the national Medicaid population. Using the Montana Medicaid population as the benchmark, adults are actually healthier than the general Medicaid population when claims data is included. Recall that the overall Medicaid adult population has a risk score comparable to the U.S. Medicaid population when clinical information is introduced. For the disabled and aged, risk scores indicate this sub-population of Medicaid is generally sicker than the overall Medicaid population in Montana.

We now drill down the data from risk scores by eligibility to aggregated health condition by Medicaid eligibility population. This allows a closer examination of the types of health conditions underlying the risk scores.

Comparing the overall Montana Medicaid population to the U.S. Medicaid population, several health conditions are identified as unusually prevalent in the Montana Medicaid population. Health conditions that deviate from the national norm for the adult Medicaid population are musculoskeletal and connective tissue disorders (disorders of the vertebrae and spinal discs), substance abuse (drug and alcohol abuse, without dependence), mental disorders (schizophrenia, depressive, bipolar and paranoid disorders, personality and anxiety disorders), neurological disorders, eye disorders, urinary system disorders (infections), female genital disorders, pregnancy disorders, injury, poisoning and complications (primarily concussions, complications of medical care and trauma), and symptoms, signs, and ill-defined medical conditions. Since it is the adult population that is most likely to enroll in the Medicaid expansion, these health conditions are most likely to be seen by health care providers.

The Medicaid Expansion

In its early summer ruling this year, The Supreme Court held that if a state does not expand Medicaid to all residents with incomes up to 138 percent of the federal poverty level, the U.S. Department of Health and Human Services may not terminate federal funding for the state's entire Medicaid program. In essence, state's now have the *option not* to expand Medicaid without fear of losing all federal funds supporting Medicaid.

The largest, potential new cost for states under the Patient Protection and Affordable Care Act (ACA) is the state option to expand Medicaid eligibility to 138 percent of the federal poverty level. This expansion will increase Montana's Medicaid costs for two groups; newly eligible adults and currently eligible adults. The state's cost for newly eligible adults begins three years after the expansion when the state assumes a greater share of the total cost, capped at 10 percent in 2020 and thereafter. For the first three years of the expansion, the federal government pays 100 percent of the cost for all newly eligible Medicaid beneficiaries. For adults who are currently eligible but not enrolled in Medicaid and who now decide to enroll, the state share of the cost is based on the standard share of Medicaid costs, presently 34 percent in Montana.

There are also potential gains to the state budget as a result of the Medicaid expansion. The addition of federal dollars to the state economy also supports many jobs and provides additional stimulus to the state economy that is paid for by taxpayers all across the country.

In Montana, the uninsured with incomes below 138 percent of the federal poverty level, or $32,000 for a family of four, account for 35 percent of Montana's total uninsured population. But not all Medicaid eligible individuals will enroll. Participation in Medicaid (take-up rate) varies significantly across states. States with the lowest participation rates also have the most Medicaid eligible adults.

The national Medicaid take-up rate is around 63 percent of newly eligible adults. But participation rates vary considerably among states, from a low of 43 percent in Louisiana to a high of 83 percent in Massachusetts. Conservative states in general have lower take up rates (54 percent) relative to more liberal states (61 percent). In Montana, the take-up rate is 50 to 60 percent of newly eligible adults.[1] The vast majority of newly eligible adults are expected to be childless adults. Childless adults have typically been less likely than other beneficiaries to join. [2]

The take-up rates for newly eligible adults are uncertain for two additional reasons. Individuals eligible for Medicaid because of the expansion under the ACA may receive a more restrictive set of benefits, or benchmark coverage, compared to those already in traditional Medicaid. This benchmark coverage should lower the take-up rate for non-enrolled individuals now eligible for Medicaid. Offsetting this affect is the elimination of the asset test for eligibility for newly eligible adults. Removing the asset test lowers a barrier to enrollment, so the take-up rate could be higher for newly eligible adults.

In a study done for the Kaiser Family Foundation in May 2010, the Urban Institute estimated state-by-state Medicaid coverage and spending using two different participation rates. The standard participation scenario assumes moderate levels of participation similar to current experience, while an enhanced participation scenario assumes a more aggressive outreach and enrollment campaign to enroll newly eligible individuals in Medicaid. Using participation rates of 57 percent and 75 percent for the more aggressive participation scenario, total new enrollees are estimated to be between 57,000 and 79,000 Montanans in 2019. The Robert Johnson Wood Foundation, in association with the Urban Institute, in August of 2012 put Montana's Medicaid eligible population at 60,000, and later, in a more comprehensive study of state-by-state Medicaid expansions, estimated Montana's expansion population at 64,000.[3]

Current Medicaid eligibility in Montana requires beneficiaries to be either parents or other related adults with dependent children under the age of 19, children, pregnant women, women diagnosed with breast or cervical cancer or pre-cancer, 65 years old or older, or blind or disabled. Medicaid recipients must also meet basic eligibility requirements as well as other specific financial and non-financial requirements. Income limits for Medicaid depend on the type of coverage requested, and vary from no income limits for newborns and transitional family coverage to 200 percent of the federal poverty level for breast and cervical cancer patients.

---

[1] Benjamin Sommers, M. Tomasi, K. Swartz, A. Epstein, "Reasons for the Wide Variation in Medicaid Participation Rates Among States Hold Lessons for Coverage Expansion in 2014," Health Affairs, Vol. 31, No. 5, May 2012.

[2] Davidoff, A., Yemane, A., Adams, E. 2005. "Health Coverage for Low-Income Adults: Eligibility and Enrollment in Medicaid and State Programs, 2002. Kaiser Commission on Medicaid and the Uninsured. Sommers BD, Epstein AM. 2010. "Medicaid Expansion: The Soft Underbelly of Health Care Reform?" New England Journal of Medicine; 363:2085-7.

[3] John Holahan, Matthew Buettgens, Caitlin Carroll, Stan Dorn, "The Cost and Coverage Implications of the ACA Medicaid Expansion: National and State-by-State Analysis," The Urban Institute, November 2012.

The Number of Montanans Eligible for Medicaid under the Expansion

Estimating the number of Montanans eligible for Medicaid under the expansion is subject to some uncertainty. First and foremost, the target population for the expansion will be the uninsured with incomes below 138 percent of the federal poverty level. The BBER estimates that approximately 69,000 individuals are uninsured and have incomes less than 138 percent of the federal poverty level. Recently released three-year survey data from the American Community Survey has Montana's uninsured population with incomes below 138 percent of the poverty threshold at 68,259, $\pm$ 3,442.[4]

Not all of the 69,000 individuals eligible for the expansion will enroll. Many factors influence the participation rate in Medicaid, including how people enroll. In a 2011 study by Lake Research Partners and presented to the National Children's Health Insurance Summit, enrollment preferences were lowest for government offices and community groups and highest for mail and online enrollment. Sixty-seven percent of the white non-Hispanic sample said they were much or somewhat more likely to apply for Medicaid if it meant enrolling online. Seventy percent of the population with incomes between 100 – 150 percent of the federal poverty level viewed online registration favorably. This is important since the expansion would include a large segment of this population. The intensity of state efforts in outreach will also be a significant determining factor underlying the state's Medicaid expansion take-up rate.

A second consideration in estimating the expansion population in Medicaid is the "bubble population." The bubble population is the population at risk of cycling into and out of Medicaid as their financial circumstances change, and includes individuals with incomes up to 150 percent of the federal poverty level. Including this Medicaid at-risk population would add only another 4,400 uninsured whose incomes are 138 – 150 percent of the federal poverty level. If, however, the bubble population extends to uninsured individuals with incomes up to 200 percent of the federal poverty level, the number of uninsured who are at risk of becoming Medicaid eligible increases substantially. Another 26,000 uninsured Montanans could be at financial risk of becoming eligible for the Medicaid expansion. This again is consistent with survey data released by the American Community Survey. The three-year estimate of the number of uninsured with incomes between 138 percent and 199 percent of the poverty threshold is 34,709, $\pm$ 2,746.[5]

An examination of the Montana Medicaid population reveals that 80 percent of the disabled and elderly population are eligible for Medicaid for all twelve months a year. Only 38 percent of adults, however, are eligible for all twelve months. This indicates that the possible churn among the population most likely to constitute the Medicaid expansion population may be substantial. For adults in Montana Medicaid, the mean months of eligibility are 8.3 months, compared to 11.1 months of eligibility for the disabled and the elderly.

---

[4] American Community Survey, U.S. Census Bureau, 2009-2011.
[5] American Community Survey, U.S. Census Bureau, 2009-2011.

Another complicating factor in estimating the number of Montanans eligible for Medicaid is young adults who may now stay on their parents' health insurance policies. The ACA expands health insurance eligibility through many different pathways. One pathway is requiring insurers to include coverage of young adults up to age 26 on their parents' policies. According to the American Community Survey, U.S. Census Bureau, there are approximately 26,000 eighteen to twenty-four year olds without health insurance in Montana. Using the proportion of 6 – 17 year olds with private health insurance, nearly 17,000 young adults may have coverage provided by their parents' policies. Exactly how many of these young adults have incomes below 138 percent of the federal poverty level is not known. For our analysis, the number of young adults with access to their parent's health insurance coverage is included as part of the crowd-out scenario discussed next.

Two other factors must be considered in estimating the Medicaid eligible population. Some individuals previously eligible for Medicaid may have chosen not to enroll, or were unaware that they qualified for Medicaid and did not enroll in the program. If the enrollment process is simplified and the state aggressively markets the Medicaid expansion, these previously eligible individuals may now choose to enroll. This "woodwork effect" may also exist because the individual mandate may also encourage individuals to enroll rather than face the penalty for having no health insurance.

Nationally, approximately 6 percent of new Medicaid enrollees would have been previously eligible for Medicaid and may now choose to enroll due to the mandate and simplified enrollment eligibility criteria. For Montana, this "woodwork effect" is small. Only 4,000 uninsured with incomes below 33 percent of the federal poverty level could now enroll in Medicaid due to a simplified enrollment process. Using a participation rate of 57 percent, as many as 2,300 new enrollees may have been previously eligible but not enrolled in Medicaid.

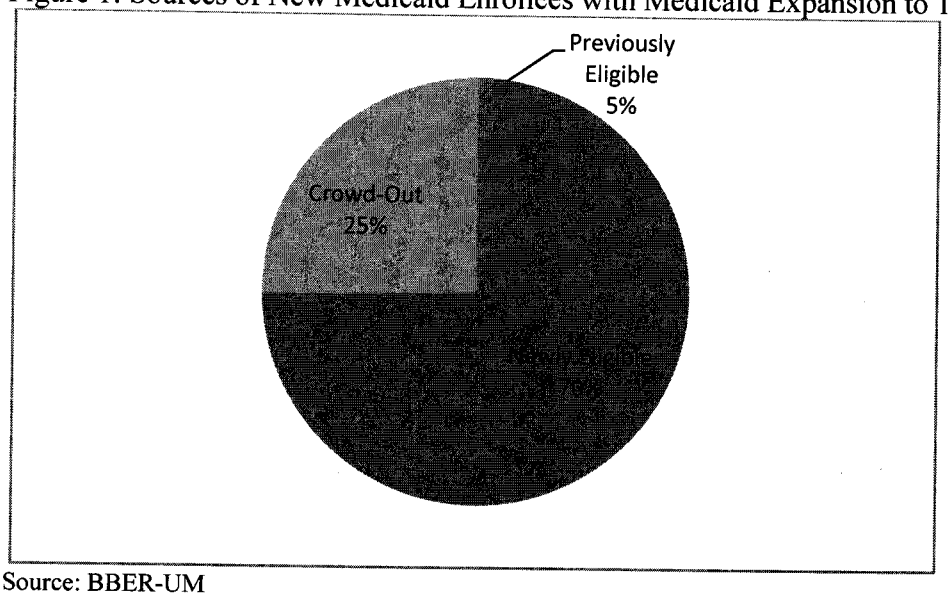
A more demonstrative effect however is the potential for crowd-out. Crowd-out occurs when individuals are forced from private insurance to a cheaper public alternative, or Medicaid. Crowd-out occurs because employers may choose to drop health insurance coverage and instead send their employees into Medicaid for health coverage. In addition, those with other forms of private health insurance coverage may find the Medicaid option a cheaper alternative for health care coverage. The extent of crowd-out is difficult to ascertain. The rate of crowd-out varies significantly in the literature. A recent study estimates crowd-out to be as high as 25.8 percent of newly enrolled Medicaid recipients.

Using survey data, the BBER estimates that 34,000 individuals below 138 percent of the federal poverty level have some form of private insurance, either through an employer or as an individual policy. However, in the BBER survey, many of these individuals may not have comprehensive medical insurance and instead have limited coverage, such as mini-med policies or dread disease policies. Even though these individuals will likely purchase insurance in the Federally Facilitated Exchange, not all represent true "crowd-out" in the sense of those leaving private coverage for Medicaid. Assuming 57 percent participate in Medicaid, 19,000 Montanans could conceivably enroll in Medicaid.

Another methodology is available to estimate crowd-out that avoids the possible confusion by survey respondents as to what kind of insurance coverage they have. Using BBER survey data, approximately 69,000 Montanans are uninsured that fall below 138 percent of the federal poverty level. Again assuming a take-up rate of 57 percent and a crowd-out rate of 25.8 percent of newly enrolled, approximately 14,000 Montanans may switch from private coverage to Medicaid.

To estimate the Medicaid enrolled population year by year, several assumptions are necessary. First, the potential Medicaid population grows at 1 percent annually over the 2014 to 2021 modeling period. This growth is based on fourth quarter overall Medicaid growth for the period 2010 to 2012, the latest reporting period available. Second, take up rates vary by year as the marketing of the expansion increases awareness and enrollment policies are simplified based on the previous year's experiences. In 2014, the take-up rate is assumed to be 57 percent and increases incrementally year-by-year to eventually 83 percent in 2020. The rationale behind the 83 percent take-up rate in 2020 and thereafter is that it represents the highest take-up rate in the nation in terms of prior state experiences with previous forms of Medicaid expansions. Following this methodology, 56,000 new Medicaid enrollees are expected in 2014, ultimately reaching 78,000 in 2021. Nearly 25 percent are previously insured that enroll in Medicaid as the result of losing their private coverage. The remaining enrollees (42,000) are those who now qualify for Medicaid due to the higher income threshold and those previously eligible but not enrolled under traditional Medicaid.

Figure 1: Sources of New Medicaid Enrollees with Medicaid Expansion to 138% FPL



Source: BBER-UM

Budgetary Impact of the Medicaid Expansion

As is the case with estimating the potential number of new Medicaid enrollees under the expansion, estimating the incremental budgetary impact of expanding the Medicaid program is likewise subject to considerable uncertainty. Medicaid is a health insurance program jointly funded by the federal government and the states. Although states have considerable flexibility in the design and administration of their Medicaid programs, certain groups must be covered for certain categories of services. Generally eligibility has been restricted to low-income children, women who are pregnant, the parents of dependent children, the elderly, and people with disabilities. Recent changes however will now expand eligibility to childless adults.

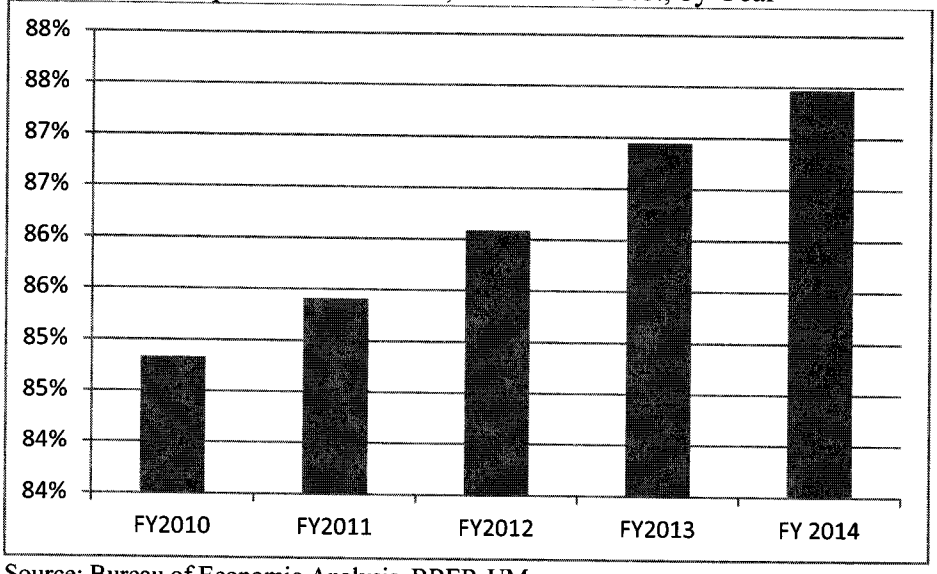
Traditional Medicaid Federal Medical Assistance Percentage (FMAP)

Under the existing, or traditional Medicaid program, the federal government pays a share of the state's Medicaid costs. States are required to pay the balance in order to qualify for the federal funds. The federal government's share for most Medicaid services is determined by the Federal Medical Assistance Percentage (FMAP). The FMAP is computed according to a formula comparing the three-year average of per capita incomes for the state relative to the nation. The formula provides higher federal reimbursement to states with lower incomes and lower reimbursement to states with higher incomes. Statutory requirements limit both upper and lower reimbursements, 83 percent and 50 percent respectively.

Since the Montana economy is rebounding better than the national economy with respect to per capita incomes, the FMAP is declining. If this trend continues, prospective federal reimbursement rates may be lower in the future than they are today for traditional Medicaid. The FMAP can also be adjusted based on unemployment rates, annual revisions, reimbursement for certain services, certain providers, and many other exclusions and exceptions.

The chart below tracks the three-year average per capita income for Montana and the nation. Noticeable is that Montana's per capita income is gaining on national per capita income, now accounting for almost 88 percent of the national three-year per capita income average.

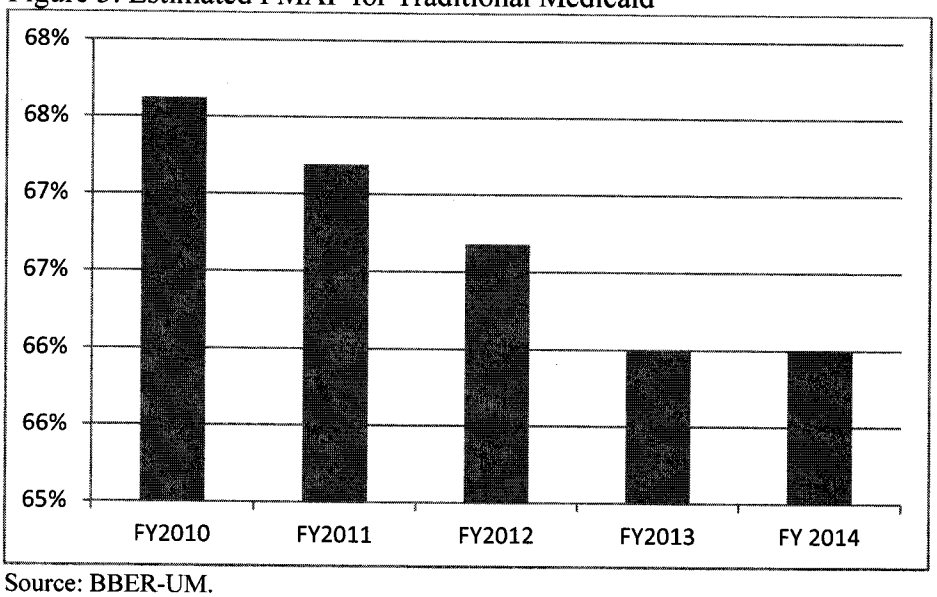
Figure 2: Per Capita Income Ratios, Montana to U.S., by Year



Source: Bureau of Economic Analysis, BBER-UM.

Exactly how this changing ratio of Montana per capita income relative to national per capita income might impact the FMAP is depicted below.

Figure 3: Estimated FMAP for Traditional Medicaid



Source: BBER-UM.

The current FMAP for Montana is 66 percent, which means for every dollar the state contributes to the cost of the Medicaid program, the federal government will contribute $1.94. This FMAP is used to estimate the state's share each year for the previously eligible, or woodwork effect, population.

The Medicaid Expansion Federal Medical Assistance Percentage (FMAP)

For the remaining newly eligible enrollees during the first three years of the expansion, the FMAP is 100 percent, excluding administrative costs. In essence, the federal government will pay for all newly eligible Medicaid enrollees during 2014, 2015, and 2016. The FMAP is gradually reduced down until it reaches 90 percent for the federal share in 2020. In 2017, the federal government's share is 95 percent, 94 percent in 2018, and 93 percent in 2019. Starting in 2020 and thereafter, the state share of the incremental cost for newly eligible Medicaid enrollees is 10 percent.

Montana and Federal Spending by Fiscal Year

There are an estimated 69,000 Montanans without health insurance and whose incomes fall below 138 percent of the federal poverty level. Approximately 60 percent (42,000) of this uninsured population are adults without children, the population most likely to account for the majority of people in the Medicaid expansion. Childless adults are more likely to be healthier on average than the Medicaid population in general. Critical then for estimating the future budgetary impact on state Medicaid finances is the cost per Medicaid enrollee and the rate of cost-inflation per enrollee.

The Kaiser Foundation reports per enrollee Medicaid spending for FY 2009 by type of Medicaid recipient. Although the average spending per Medicaid enrollee is $7,348, it ranges from almost $23,000 per enrollee for the aged to $2,900 per enrollee for children. Spending for adults is 60 percent of the average spending per enrollee for all groups, or $4,382. As a point of comparison, Mathematic Policy Institute estimates the per member per month (PMPM) Medicaid costs for non-disabled adults in Montana during 2006 at $735, or almost $9,000 annually. In-house analysis of Medicaid claims data for adults 18 to 64 years of age, for the period October 2010 to September 2011, indicates PMPM medical costs of $641, and PMPM pharmacy costs of $151, for a total PMPM cost of $792. Annual costs are then $9,504. The Montana Department of Public Health and Human Services (DPHHS) analysis of adult non-disabled Medicaid enrollees for 2009 puts PMPM costs at $825, or $9,900 annually. Since a sizable portion of the Medicaid expansion will be childless adults, the health of this population will be a key driver behind Medicaid utilization and, hence, costs per enrollee. The BBER estimates that of the 42,000 childless adults who may enroll in Medicaid, 25 percent report fair to poor health. It is therefore likely that the sickest of the childless adult Medicaid expansion population will be among the first to enroll. For this reason, the BBER uses per member per year costs documented by BBER analysis, DPHHS analysis, and Mathematica Policy Institute analysis of Montana Medicaid data for non-disabled adults. Also, an examination of Montana Medicaid claims data by the BBER and MAHCP indicates that the Montana Medicaid population in general is less healthy than their national counterparts. An examination of the severity levels of risk for the Montana Medicaid population compared to national Medicaid norms reveals that the Montana Medicaid population is under represented when compared to proportions nationally for three relative risk categories; very low risk, low risk, and moderate risk. It follows then that a

greater proportion of Montana's Medicaid population must be at higher risk than the proportion at higher risk nationally. Montana's Medicaid population at very high risk is almost double the proportion at very high risk nationally. Mental disorders accounted for 25 percent of all Medicaid spending, and health conditions that deviate from national norms by the largest margins include disorders of the eye, developmental disabilities, cardio-respiratory arrest, and other cognitive disorders.

The variation in per member per month costs by Medicaid enrollee subgroups was reported in 2011 for all states by Mathematica Policy Institute. State-to-state variation in overall Medicaid costs by subgroup varied by a factor of two to nine, with the largest difference for subgroups using long-term care. As mentioned earlier, Montana's PMPM cost for non-disabled adults was $735, compared to the U.S. average for non-disabled adults of $249 PMPM. Significant variation in PMPM costs for non-disabled adults was observed, ranging from a low of $215 to a high of $763 PMPM. Overall, the Mathematica Policy Institute analysis found that state costs varied considerably across the subgroups defined by age, disability status, use of long-term care, dual status (Medicare and Medicaid eligibility), and eligibility for limited benefits. Variation in the relative mix of enrollees was found to only explain some of the variation in state PMPM Medicaid costs. Local input prices were found to be an important predictor of state PMPM Medicaid costs, although wide variation in PMPM costs still existed after controlling for geographic differences in the price of medical care.

Two scenarios are modeled, one using 2011 costs of $9,504 per member per year (PMPY) and a second using 2009 Medicaid costs of $9,900 PMPY for non-disabled adults. Since costs escalate each year, all PMPY costs must be escalated over the 2014 to 2021 modeling period. Medical inflation has long outpaced general price inflation. According to the Centers for Medicare and Medicaid Services, Department of Health and Human Services, per capita personal health care spending by Medicaid enrollees in Montana increased 5.9 percent annually from 2004 to 2009. Whether or not this pace of inflation is sustained for any period beyond 2009 is uncertain. An alternative inflation factor is the consumer price index for medical care services. During the 2005 to 2011 period, medical care services prices increased at an annual rate of 3.6 percent. This inflation rate is nearly 45 percent higher than general price inflation for the same period. In this analysis, per member per year enrollee costs are inflated 3.6 percent per year for the 2014 to 2021 modeling period.

One additional modification to the data was necessary. In order to report all findings in terms of fiscal year costs (July 1 through June 30), data were split between the two calendar years to more accurately reflect all Medicaid expansion effects on the state fiscal year basis.

The incremental cost to Montana in providing Medicaid services to individuals with incomes below 138 percent of the federal poverty level is estimated below by fiscal year for the two cost per enrollee scenarios. All costs are exclusive of administrative costs associated with the Medicaid expansion. Costs are for all previously eligible who now enroll in Medicaid and the newly eligible population for the Medicaid expansion.

Table 1 below assumes the per member per year cost is $10,384 in 2014, the lower per enrollee cost scenario. Costs are incurred during the first three years due to the woodwork population, those previously eligible who now enroll in the Medicaid expansion program. Total costs to the state of Montana are $363.1 million, over the FY 2014 to FY 2021 period.

Table 1: State Medicaid Expansion Costs FY 2014-FY 2021, Low Cost Scenario

	Total State Obligation	Cumulative State Cost
FY 2014	$ 3,530,633	$ 3,530,633
FY 2015	$ 7,315,473	$ 10,846,106
FY 2016	$ 7,578,830	$ 18,424,936
FY 2017	$ 26,194,305	$ 44,619,240
FY 2018	$ 52,175,319	$ 96,794,559
FY 2019	$ 65,135,859	$ 161,930,418
FY 2020	$ 91,017,191	$ 252,947,610
FY 2021	$ 110,154,458	$ 363,102,068
TOTAL	$ 363,102,068	

Source: BBER-UM

Table 2 depicts the federal responsibility under the lower per enrollee cost scenario. Total federal expenditures are $5.8 billion for the FY 2014 to FY 2021 period.

Table 2: Federal Medicaid Expansion Costs FY2014-FY 2021, Low Cost Scenario

	Total Federal Obligation	Cumulative Federal Cost
FY 2014	$ 285,790,760	$ 285,790,760
FY 2015	$ 626,720,933	$ 912,511,693
FY 2016	$ 685,761,474	$ 1,598,273,167
FY 2017	$ 730,604,327	$ 2,328,877,494
FY 2018	$ 772,494,475	$ 3,101,371,970
FY 2019	$ 832,091,391	$ 3,933,463,361
FY 2020	$ 902,739,110	$ 4,836,202,471
FY 2021	$ 927,544,188	$ 5,763,746,659
TOTAL	$ 5,763,746,659	

Source: BBER-UM

Table 3 summarizes the estimated total costs of the Medicaid expansion program using the lower per enrollee cost scenario. Total estimated costs of the Medicaid expansion program are $6.1 billion over the FY 2014 to FY 2021 modeling period.

Table 3: Total Costs of Medicaid Expansion, Low Cost Scenario, excluding Administrative Costs, FY 2014 to FY 2021

	Total State & Federal Cost	Total Cumulative Cost
FY 2014	$ 289,321,394	$ 289,321,394
FY 2015	$ 634,036,405	$ 923,357,799
FY 2016	$ 693,340,304	$ 1,616,698,103
FY 2017	$ 756,798,632	$ 2,373,496,735
FY 2018	$ 824,669,794	$ 3,198,166,529
FY 2019	$ 897,227,250	$ 4,095,393,779
FY 2020	$ 993,756,302	$ 5,089,150,081
FY 2021	$ 1,037,698,646	$ 6,126,848,727
TOTAL	$ 6,126,848,727	

Source: BBER-UM

As a point of contrast and comparison, a higher cost per enrollee was modeled as well, using the same assumptions discussed earlier in this report (take-up rates, Medicaid population growth, woodwork and crowd out population estimates). This higher cost scenario assumes per member per year costs of $11,610, an increase of $1,226 above the lower cost scenario discussed above. All costs are again exclusive of administrative costs. Administrative costs are added in subsequent analyses.

Table 4 shows the state obligations by fiscal year assuming per enrollee costs are $1,226 higher in 2014. Total state obligations under the higher cost scenario are just under $406 million over the eight fiscal year period 2014-2021.

Table 4: State Medicaid Expansion Costs FY2014-FY2021, High Cost Scenario

	Total State Obligation	Cumulative State Cost
FY 2014	$ 3,947,307	$ 3,947,307
FY 2015	$ 8,178,820	$ 12,126,127
FY 2016	$ 8,473,258	$ 20,599,385
FY 2017	$ 29,285,669	$ 49,885,054
FY 2018	$ 58,332,876	$ 108,217,931
FY 2019	$ 72,822,976	$ 181,040,907
FY 2020	$ 101,758,737	$ 282,799,644
FY 2021	$ 123,154,520	$ 405,954,164
TOTAL	$ 405,954,164	

Source: BBER-UM

Analyzing the federal component under the assumptions above, total federal obligations are slightly over $6.4 billion (Table 5).

Table 5: Federal Medicaid Expansion Costs FY2014-FY2021, High Cost Scenario

	Total Federal Obligation	Cumulative Federal Cost
FY 2014	$ 319,518,833	$ 319,518,833
FY 2015	$ 700,684,448	$ 1,020,203,281
FY 2016	$ 766,692,758	$ 1,786,896,039
FY 2017	$ 816,827,814	$ 2,603,723,853
FY 2018	$ 863,661,698	$ 3,467,385,551
FY 2019	$ 930,292,043	$ 4,397,677,595
FY 2020	$ 1,009,277,371	$ 5,406,954,966
FY 2021	$ 1,037,009,862	$ 6,443,964,827
TOTAL	$ 6,443,964,827	

Source: BBER-UM

Under the higher per enrollee cost scenario, total state and federal obligations are approximately $6.8 billion, or $723 million higher than the lower cost scenario (Table 6).

Table 6: Total Costs of Medicaid Expansion, High Cost Scenario, excluding Administrative Costs, FY 2014 to FY 2021

	Total State & Federal Cost	Total Cumulative Cost
FY 2014	$ 323,466,140	$ 323,466,140
FY 2015	$ 708,863,268	$ 1,032,329,409
FY 2016	$ 775,166,015	$ 1,807,495,424
FY 2017	$ 846,113,484	$ 2,653,608,908
FY 2018	$ 921,994,574	$ 3,575,603,482
FY 2019	$ 1,003,115,020	$ 4,578,718,502
FY 2020	$ 1,111,036,108	$ 5,689,754,610
FY 2021	$ 1,160,164,381	$ 6,849,918,991
TOTAL	$ 6,849,918,991	

Source: BBER-UM

Administrative costs are estimated according to Mathematica Policy Institute analysis of Medicaid in 2009. Administrative costs are estimated at 6 percent of total costs, consistent with the national average for administrative costs. Total administrative costs are split equally, beginning in 2014, 50 percent state and 50 percent federal.

Table 7: Total Administrative Costs, Low Cost and High Cost Scenarios, FY 2014 to FY 2021

	Low Cost Scenario	High Cost Scenario
FY 2014	$ 17,359,284	$ 19,407,968
FY 2015	$ 38,042,184	$ 42,531,796
FY 2016	$ 41,600,418	$ 46,509,961
FY 2017	$ 45,407,918	$ 50,766,809
FY 2018	$ 49,480,188	$ 55,319,674
FY 2019	$ 53,833,635	$ 60,186,901
FY 2020	$ 59,625,378	$ 66,662,166
FY 2021	$ 62,261,919	$ 69,609,863
TOTAL	$ 367,610,924	$ 410,995,139

Source: BBER-UM

Under the low cost scenario, total administrative costs are estimated to be an additional $367.6 million, and $411 million for the high cost scenario. These costs are split equally between the state of Montana and the federal government.

Total state and federal obligations for the Medicaid expansion inclusive of the administrative costs associated with the Medicaid expansion are presented in Table 8.

Table 8: State and Federal Obligations under the Medicaid Expansion, Low Cost Scenario, FY 2014 to FY 2021

	Total State Cost	Cumulative State Cost	Total Federal Cost	Cumulative Federal Cost
FY 2014	$ 12,210,275	$ 12,210,275	$ 294,470,402	$ 294,470,402
FY 2015	$ 23,166,383	$ 35,376,658	$ 648,912,207	$ 943,382,609
FY 2016	$ 24,912,337	$ 60,288,995	$ 710,028,385	$ 1,653,410,994
FY 2017	$ 45,114,271	$ 105,403,266	$ 757,092,279	$ 2,410,503,273
FY 2018	$ 72,792,064	$ 178,195,330	$ 801,357,918	$ 3,211,861,191
FY 2019	$ 87,566,540	$ 265,761,870	$ 863,494,345	$ 4,075,355,536
FY 2020	$ 115,861,099	$ 381,622,969	$ 937,520,581	$ 5,012,876,117
FY 2021	$ 136,096,924	$ 517,719,893	$ 963,863,641	$ 5,976,739,758
TOTAL	$ 517,719,893		$ 5,976,739,758	

Source: BBER-UM

Table 9 summarizes the total costs of the Medicaid expansion for the low cost scenario. Total costs for the Medicaid expansion are almost $6.5 billion over the FY 2014 to FY 2021 period.

Table 9: Total Cost of Medicaid Expansion, Low Cost Scenario, FY 2014 to FY 2021

	Total State & Fed Obligation	Total Cumulative Obligation
FY 2014	$ 306,680,678	$ 306,680,678
FY 2015	$ 672,078,590	$ 978,759,267
FY 2016	$ 734,940,722	$ 1,713,699,989
FY 2017	$ 802,206,550	$ 2,515,906,539
FY 2018	$ 874,149,982	$ 3,390,056,521
FY 2019	$ 951,060,885	$ 4,341,117,406
FY 2020	$ 1,053,381,680	$ 5,394,499,086
FY 2021	$ 1,099,960,565	$ 6,494,459,651
TOTAL	$ 6,494,459,651	

Source: BBER-UM

For the high cost scenario, total state and federal obligations, including administrative expenses, are presented in Table 10. For FY 2014 through FY 2021, total state obligations are almost $579 million and total federal obligations are slightly less than $6.7 billion.

Table 10: State and Federal Obligations under the Medicaid Expansion, High Cost Scenario, FY 2014 to FY 2021

	Total State Obligation	Cumulative State Cost	Total Federal Obligation	Cumulative Federal Cost
FY 2014	$ 13,651,291	$ 13,651,291	$ 329,222,818	$ 329,222,818
FY 2015	$ 25,900,402	$ 39,551,693	$ 725,494,663	$ 1,054,717,480
FY 2016	$ 27,852,408	$ 67,404,101	$ 793,823,568	$ 1,848,541,048
FY 2017	$ 50,438,506	$ 117,842,608	$ 846,441,786	$ 2,694,982,834
FY 2018	$ 81,382,741	$ 199,225,348	$ 895,931,508	$ 3,590,914,343
FY 2019	$ 97,900,852	$ 297,126,200	$ 965,401,069	$ 4,556,315,412
FY 2020	$ 129,534,640	$ 426,660,840	$ 1,048,163,635	$ 5,604,479,047
FY 2021	$ 152,158,629	$ 578,819,469	$ 1,077,615,615	$ 6,682,094,661
TOTAL	$ 578,819,469		$ 6,682,094,661	

Source: BBER-UM

Table 11 summarizes the total estimated costs for the Medicaid expansion under the high cost scenario. Total costs for the Medicaid expansion under the high cost scenario amount to just under $7.3 billion over the FY 2014 to FY 2021 period. This is $766 million more than the lower cost scenario.

Table 11: Total Cost of Medicaid Expansion, High Cost Scenario, FY 2014 to FY 2021

	Total State & Federal Obligation	Total Cumulative Obligation
FY 2014	$ 342,874,109	$ 342,874,109
FY 2015	$ 751,395,064	$ 1,094,269,173
FY 2016	$ 821,675,976	$ 1,915,945,149
FY 2017	$ 896,880,293	$ 2,812,825,442
FY 2018	$ 977,314,249	$ 3,790,139,691
FY 2019	$ 1,063,301,921	$ 4,853,441,612
FY 2020	$ 1,177,698,275	$ 6,031,139,886
FY 2021	$ 1,229,774,244	$ 7,260,914,131
TOTAL	$ 7,260,914,131	

Source: BBER-UM

A study by the Urban Institute projected the cost of the Medicaid expansion in Montana for the period 2014 through 2019. Recall that the state has little to no financial obligation for the newly eligible Medicaid enrollees from 2014 through 2016. Thereafter the state's share rises according to the FMAP phase down. New state spending for the Medicaid expansion, limited in their analysis to 133 percent of the federal poverty level, is estimated to be between $100 million and $155 million for the period between 2014 and 2019. New federal funds are estimated to be $2.2 billion to $2.6 billion, reflecting the 100 percent FMAP during 2014 to 2016.

A more recent analysis by the Urban Institute examined state-by-state Medicaid costs over 2013 to 2022.[6] Participation rates vary based on individual differences such as income, education, previous insurance coverage, and whether an individual is currently eligible for Medicaid or newly eligible under the ACA expansion. Average take-up rates are 60.5 percent for the newly eligible and 23.4 percent among currently eligible but not enrolled individuals. Among currently eligible individuals, the overall take-up rate increases from 64 percent without the ACA to 72.4 percent under the ACA, with all states implementing the Medicaid expansion.

The Urban Institute's average cost per enrollee is only $5,440 in 2016 and increases to $7,399 in 2022. BBER modeling uses a FY 2016 per enrollee cost of $11,145 and $12,461, reaching $13,301 and $14,871 in FY 2021. Comparing Urban Institute per enrollee costs to BBER per enrollee costs results in per enrollee costs that are nearly

[6] John Holahan, Matthew Buettgens, Caitlin Carroll, Stan Dorn, "The Cost and Coverage Implications of the ACA Medicaid Expansion: National and State-by-State Analysis," The Urban Institute, November, 2012.

twice as high as the Urban Institute and escalate at only half the rate of the Urban Institute costs over the comparable time period.

Despite these differences between the BBER modeling and modeling by the Urban Institute, the Urban Institute estimates that the incremental cost of the Medicaid expansion in Montana will cost the state nearly $436 million from 2013 to 2022. This is 84 percent of the BBER estimate under the low cost scenario ($518 million) and 75 percent of the BBER estimate under the high cost scenario ($579 million).

Potential Advantages to Medicaid Expansion

The cost of the Medicaid expansion should be compared to the benefits of providing health insurance to nearly one-third of Montana's uninsured. The Medicaid expansion will reduce the number of Montanans without health insurance from 20 percent to 16 percent of the civilian non-institutionalized population in Montana. Perhaps the most vulnerable population, if the state chooses not to expand Medicaid, is the "donut-hole" population. The donut-hole population is Montanans whose incomes make them too rich for Medicaid (incomes more than 33 percent of the federal poverty level) and too poor for the federal tax credits and cost sharing subsidies in the Federally Facilitated Exchange (incomes less than 100 percent of the federal poverty level). In Montana, the donut-hole population is 19 percent of all Montana's uninsured, or 37,000 uninsured. Without the expansion of Medicaid, these uninsured may remain without health insurance even though the Federally Facilitated Exchange exists.

Uncompensated Care

Uncompensated medical care should be reduced since some of the uninsured will now have Medicaid covered services. Uncompensated care is health care that is not fully paid for directly by individuals as out of pocket payments or by insurance payers. Hospitals, community providers, and physicians all provide care to the uninsured, but hospitals provide 60 percent of the uncompensated care because medical needs requiring hospitalization are the most expensive. Community providers include Veterans Health, Indian Health Service, Community Health Centers, the National Health Service Corps, and others. A substantial portion of uncompensated care is also financed by the taxpayer through public programs including Medicare and Medicaid Disproportionate Share Payments, state and local tax appropriations, federal grants to community health centers, and federal direct care provided by the Department of Veterans Affairs and the Indian Health Service. In a cost-shifting paradigm, prices faced by one group of payers are higher because another group of payers pays less, or none at all. The cost-shift is a shifting of resources across payers of health care. For hospitals, cost-shifting allows them to provide activities associated with the mission of the hospital, such as research, idle capacity, and charity care. These "social goods" are willingly paid by public and private payers through higher taxes and health care insurance premiums. In a study by Dobson, DaVanzo and Sen (2006), the correlation between private payers' payment to cost ratio to the Medicare, Medicaid, and uncompensated care cost shifting burden was statistically

significant at the 95 percent level of confidence.[7] The Medicare, Medicaid, and uncompensated care cost-shifting burden is the ratio of costs that are not covered by Medicare, Medicaid, and uncompensated care relative to total hospital expenses. Overall, the study found that reductions in spending for hospital delivered Medicare and Medicaid covered services shifted the incidence of the burden on taxpayers from explicit general tax revenue to a form of premium tax on the privately insured.

A later study by Hadley, et al (2008) found little evidence that cost-shifting as a result of uncompensated care has significant impacts on private insurance premiums.[8] Focusing on hospitals, where most cost-shifting occurs, the higher payments received from the privately insured result in profits that are used to support other hospital missions. This does not mean however, that hospitals raise charges in response to increased demand for care by the uninsured.

Finally, a 2003 study by Hadley and Holahan suggests that well over 80 percent of total uncompensated care is already being financed by the taxpayer through programs including Medicare and Medicaid Disproportionate Share Payments, state and local tax appropriations, Federal grants to community health centers, and other public health care programs.[9]

A study by Families USA (2005) found that two-thirds of the uncompensated care costs incurred by hospitals was shifted to the privately insured, resulting in additional premiums of $922 for family coverage and $341 for individual coverage.[10]

Uncompensated care in Montana's hospitals alone cost taxpayers nearly $150 million in 2010, excluding all of the free and reduced care provided by Montana's community health centers, physicians, and other medical providers. Unreimbursed Medicaid, the loss created when payments from Medicaid and other public programs are less than the costs of caring for these beneficiaries, was over $22 million for Montana's hospitals in 2010. In 2011, Montana's fifteen community health centers served over 100,000 patients, 63 percent of which had incomes below 100 percent of the federal poverty level. The uninsured accounted for half of all patients, and Medicaid patients accounted for 17 percent of the total. The financial costs for medical care, clinical services, and facility and non-clinical costs were $57 million, with total collections from all sources amounting to $28.5 million, with $9.6 million collected from Medicaid alone. Almost $29 million in federal, state and local grants went to community health centers in Montana during 2011.

The study by Hadley, Holahan, Coughlin, and Miller (2008) estimated that community-based providers are responsible for almost 42 percent of the uncompensated care

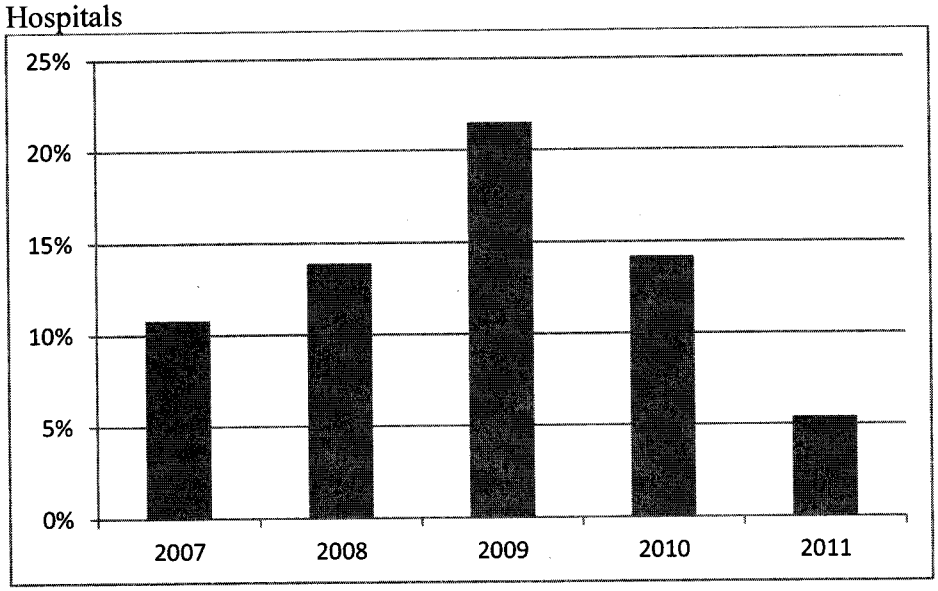
---

[7] Allen Dobson, Joan DaVanzo, and Namrata Sen, "The Cost-Shift Payment Hydraulic: Foundation, History, and Implications," Health Affairs, Vol. 25, No. 1, 2006.
[8] Jack Hadley, John Holahan, Teresa Coughlin, and Dawn Miller, "Covering the Uninsured in 2008: Current Costs, Sources of Payment, and Incremental Costs," Health Affairs, Vol. 27, No. 5, 2008.
[9] Jack Hadley and John Holahan, "How Much Medical Care Do the Uninsured Use and Who Pays for It?" Health Affairs web exclusive, February 12, 2003.
[10] Families USA, "Paying a Premium: The Added Cost of Care for the Uninsured," Washington: Families USA Foundation, June 2005.

provided by hospitals. Office based physicians are responsible for 22 percent of the uncompensated care provided by hospitals. Over 70 percent of physicians provide some reduced-rate or free care.

In order to assess the level of uncompensated care provided in Montana, a six-year average of total hospital charity care and bad debt charges was calculated for 2006 to 2011. The chart below shows the percent change in total charity care plus bad debt charges for Montana's hospitals over the last five years. Immediately noticeable is the great degree of variation year-to-year, ranging from just over 5 percent growth to over 20 percent growth during 2009. Of course, 2009 was the Great Recession year and charges for charity care and bad debt were considerably up from 2008.

Figure 4: Percent Change in Total Hospital Charity Care plus Bad Debt, Montana Hospitals



Source: Montana Hospital Association

Large variation in charity care and bad debt makes estimation of future charges for charity care and bad debt difficult. The six-year average cost of Montana hospital delivered charity care and bad debt is $244.9 million for the period 2006 to 2011. The cost of uncompensated care is assumed to be 50 percent of total uncompensated care charges. Applying the uncompensated care ratios reported by Hadley et al (2008) to the uncompensated care provided by Montana hospitals, total uncompensated care in Montana is estimated to be $401.6 million. Uncompensated care costs could be reduced by over $100 million if the Medicaid expansion was implemented in Montana. Offsetting the reduction in uncompensated care may be a modest increase (less than 7 percent) in bad debt from the newly insured due to the increase in the demand for health care.

Table 12: Estimated Uncompensated Care Provided by Montana Health Care Providers, 2011(millions of dollars)

Health Care Setting	Uncompensated Care Costs
Hospitals	$244.9
Community Providers	$102.1
Physicians	$54.6
Total Estimated Uncompensated Care in 2011	$401.6

Source: Montana Hospital Association, BBER-UM

Uncompensated care is also inefficient spending on health care. Research clearly shows that the uninsured are more likely to delay care and to have unmet health needs. The uninsured are more likely to be hospitalized for medical conditions that can be adequately treated on an outpatient basis instead of an inpatient basis. Twelve percent of the hospitalizations for the uninsured were for preventable conditions, compared to only 8 percent for the privately insured.[11]

Numerous studies have also found that the uninsured are less likely to receive screening and diagnostic tests known to lead to the early detection of cancer, heart disease, and diabetes. Even among the uninsured who know they have hypertension or diabetes, the use of appropriate medications and routine follow-up care is lower than for the insured. Overall, the uninsured receive less preventive and diagnostic care, less therapeutic care even after being diagnosed, and as a result, die earlier and experience greater limitations than otherwise similar people with insurance.

Expanding insurance coverage may also yield greater value than expanding the safety-net on low-income people's access to care. Cunningham and Hadley found that a 10 percent increase in insurance coverage reduced the proportion reporting an unmet need for medical care by 25-30 percent. In contrast, spending a comparable amount on expanding safety-net care for the uninsured reduced unmet need by only one-third to half as much as expanding insurance coverage.

In a New England Journal of Medicine articled published in 2012, state Medicaid expansions to cover low-income adults were significantly associated with reduced mortality, improved coverage, greater access to care, and significant improvements in self-reported health of "excellent" or "very good."[12] The study's findings with respect to reduced mortality are consistent with the Institute of Medicine's estimate that health insurance may reduce adult mortality by 25 percent.[13]

[11] Kozak, L.J., Hall MJ, Owings MF, "Trends in Avoidable Hospitalizations," Health Affairs, March/April, 2001.

[12] Benjamin Sommers, Katherine Baicker, Arnold Epstein, "Mortality and Access to care among Adults after State Medicaid Expansions," New England Journal of Medicine, July, 2012.

[13] "Care without Coverage: Too Little, Too Late," Washington D.C., Institute of Medicine.

Federal Medicaid Disproportionate Share Hospital (DSH) Allotments

There are offsetting impacts of the Medicaid expansion on total uncompensated care delivered by Montana's health care providers. Title II, Subtitle (G), Section 2551 of the ACA specifies the reduction in national Disproportionate Share Hospital Payments (DSH) year-by-year on the premise that as the uninsured become insured, due to the Medicaid expansion and the health care exchanges, uncompensated care should go down at hospitals across the country. Medicaid DSH payments to Montana's hospitals provide financial assistance to hospitals that provide services to a large number of low-income patients, such as people with Medicaid as well as the uninsured. Medicaid DSH payments are the largest source of federal funding for uncompensated hospital care. The federal government distributes federal DSH funds to each state based on a statutory formula. The states, in turn, distribute their portion of the DSH funding among qualifying hospitals. States use their federal DSH allotments to help cover the costs of hospitals that provide care to low-income patients when those costs are not covered by other payers, including Medicare, Medicaid, the Children's Health Insurance Program (CHIP), or other health insurance. In 2009, Montana received $11,397,164 in federal Medicaid DSH allotments. Since Montana is a "low DSH" state, defined as having DSH expenditures between 0 and 3 percent of total (state and federal) Medicaid spending in FY 2000, allotments increased by 16 percent each year from FY 2004 to FY 2008. Beyond 2008, DSH allotments increase by the Consumer Price Index-Urban Consumers.

In the late 1980's, many states started using special funding techniques to leverage federal Medicaid funds since DSH allotments at the time were not capped. Under these funding techniques, donations, provider-specific taxes, and intergovernmental transfers were used as the state share of Medicaid spending. This state share would then be matched with federal Medicaid dollars, and then returned to the taxpayers through higher DSH payments or provider payment rates.

Since 1991, the federal government has enacted numerous laws to control federal DSH spending. One law established upper bounds on DSH hospital payments and limited the use of donated funds and provider taxes for the purpose of claiming federal matching payments. This policy has led to federal allotments based on historical spending levels and not current need, which has led to per capita DSH payments favoring just a handful of states.

The ACA specifies the aggregate reductions in DSH allotments nationally, and is depicted below in Table 13.

Table 13: Aggregate Reductions in DSH Allotments for All States, by Year

Fiscal Year	Aggregate Reduction in DSH Allotment
FY 2014	$500,000,000
FY 2015	$600,000,000
FY 2016	$600,000,000
FY 2017	$1,800,000,000
FY 2018	$5,000,000,000
FY 2019	$5,600,000,000
FY 2020	$4,000,000,000
TOTAL	$10,800,000,000

Source: Title II, Subtitle (G), Section 1203, Affordable Care Act

Total federal Medicaid DSH allotments to all states in 2011 were $11.3 billion. Based on the aggregate DSH payments to all states in 2011 and the aggregate reductions reported in Table 13 above, estimated reductions in DSH payments to Montana are presented in Table 14. The four-year average of federal Medicaid DSH allotments in Montana was used to estimate DSH reductions in Montana. Total federal Medicaid DSH reductions to Montana over the FY 2014 to FY 2020 period amount to $18.1 million.

Table 14: Estimated Reductions in Federal Medicaid Disproportionate Share Hospital Allotments, Montana, FY 2014 to FY 2020

Fiscal Year	Estimated Federal Medicaid DSH Reductions in Montana
FY 2014	$501,000
FY 2015	$601,000
FY 2016	$601,000
FY 2017	$1,803,000
FY 2018	$5,008,000
FY 2019	$5,609,000
FY 2020	$4,006,000
TOTAL	$18,128,000

Source: BBER calculations

It is unclear what will happen to DSH allotments after 2020. Within the ACA is a provision that requires the Secretary of Health and Human Services to develop a methodology that imposes the largest percentage reductions on states that have the lowest percentage of uninsured, do not target their DSH payments to hospitals with high volumes of Medicaid inpatients, or hospitals that have high levels of uncompensated care. Important for Montana is that the reform methodology is supposed to impose a smaller percentage reduction on low DSH states. To date, these regulations have not been finalized.

In states that do not expand Medicaid, the number of uninsured will still be reduced since many of the other provisions of the ACA will encourage individuals to acquire health insurance, including the individual mandate and the lure of tax credits and cost-sharing reductions in Montana's Federally Facilitated Exchange. However, the reduction in the uninsured rate will be considerably less than the reduction that can be expected with the

expansion of Medicaid. This has important implications for hospital financing. Reductions in the federal DSH allotments are not contingent on a state's decision to expand Medicaid. Hence, for states that choose not to expand Medicaid, reduced federal DSH allotments will still occur.

Table 15 shows estimated total uncompensated care costs by fiscal year with and without the Medicaid expansion. Total uncompensated care costs by fiscal year are a function of the take-up rate, the estimated cost of uncompensated care per uninsured, the number of remaining uninsured, and the impact of reductions in federal Medicaid DSH allotments. For modeling purposes, the number of uninsured is reduced each year per the take-up rates used earlier for FY 2014 to FY 2021. Since the ACA is unclear on what happens to federal Medicaid DSH allotments in 2021, they are assumed to be zero. Over the total fiscal year period, FY 2014 through FY 2021, total uncompensated care costs are reduced by $104 million relative to no expansion of the Medicaid program.

Table 15: Total Uncompensated Care Costs with and Without Medicaid Expansion, Montana

Fiscal Year	Total Uncompensated Care Costs with Federal DSH Allotment Reductions (millions of current dollars)	
	with Medicaid Expansion	without Medicaid Expansion
FY 2014	$392.3	$439.3
FY 2015	$447.7	$455.1
FY 2016	$463.6	$471.5
FY 2017	$481.4	$489.7
FY 2018	$501.6	$510.4
FY 2019	$519.9	$529.2
FY 2020	$532.6	$546.5
FY 2021	$560.2	$562.0
TOTAL	$3,899.3	$4,003.7

Source: BBER-UM.

Impact of Federal Funds on the Montana Economy

There are potential gains to the state economy in general as a result of the Medicaid expansion. The addition of federal dollars to the state economy supports many jobs and provides additional stimulus to the state economy that is paid for by taxpayers all across the country. In essence, federal Medicaid funds are similar to income earned from products made in Montana and exported all over the world. Federal funds are "outside dollars" brought into the state's economy, and hence, are basic in nature. Basic industries in Montana, or those who export their products or services for consumption elsewhere, are the economic drivers behind new job creation.

Economists and academics most often utilize input-output models to reflect the overall effect on local, state, or regional economies that result from a change in policy or spending. One such model, IMPLAN, was used to conduct a multiplier analysis of how

added federal funds impact the Montana state economy in terms of tax revenues, jobs, labor income, and business sales. Currently, IMPLAN is used by more than 1,500 entities in academia, the private sector, and government to model economic impacts.

IMPLAN draws on a mathematical input-output framework originally developed by Wassily Leontief, the 1973 Nobel laureate in economics, to study the flow of money through a regional economy. Input-output economic models account for the relationships between various sectors of an economy and allow for the estimation of the effects of changes in expenditures on state industries and the economy as a whole.

Economic impact can be defined as the net change in the economy resulting from an event such as an increase or decrease in government spending. New spending can create a larger impact than the amount of new spending alone through multiplier effects, the successive rounds of spending that occur when money is injected into a state economy. For instance, state businesses and residents spend their earnings on purchases from other businesses or residents in the state, who in turn make other purchases and so on. Conversely, multipliers can work in reverse when spending is reduced. Economic impact is generally quantified in terms of employment, income, tax revenue and overall economic output (also referred to as business activity, gross state product or value added). The effects are typically categorized into direct, indirect, and induced impacts.

First, while Medicaid payments are made on behalf of enrollees, the direct recipients are providers, including hospitals, private physicians and nursing homes, or managed care organizations. Therefore, Medicaid funding *directly* impacts health care service providers, supporting the jobs, income, and purchases required to deliver health care services.

Through the multiplier effect, other businesses and industries are *indirectly* affected due to the direct impact. For example, a medical supply firm may be affected through its business dealings with Medicaid providers. Fluctuations in Medicaid funding may affect a Medicaid provider's supply order which then may affect the medical supplier's purchases from its vendors, and so on. Lastly, both the direct and indirect effects *induce* changes in household consumption and tax collection primarily due to household income fluctuations. Employees of Medicaid health care providers that are directly impacted or the employees of businesses that are indirectly impacted may change their spending patterns according to increases or decreases in income. These changes in income trigger the household to increase or decrease spending on consumer goods. Due to changes in personal income and, subsequently spending, sources of government revenue, including income and other taxes, would be affected as well.

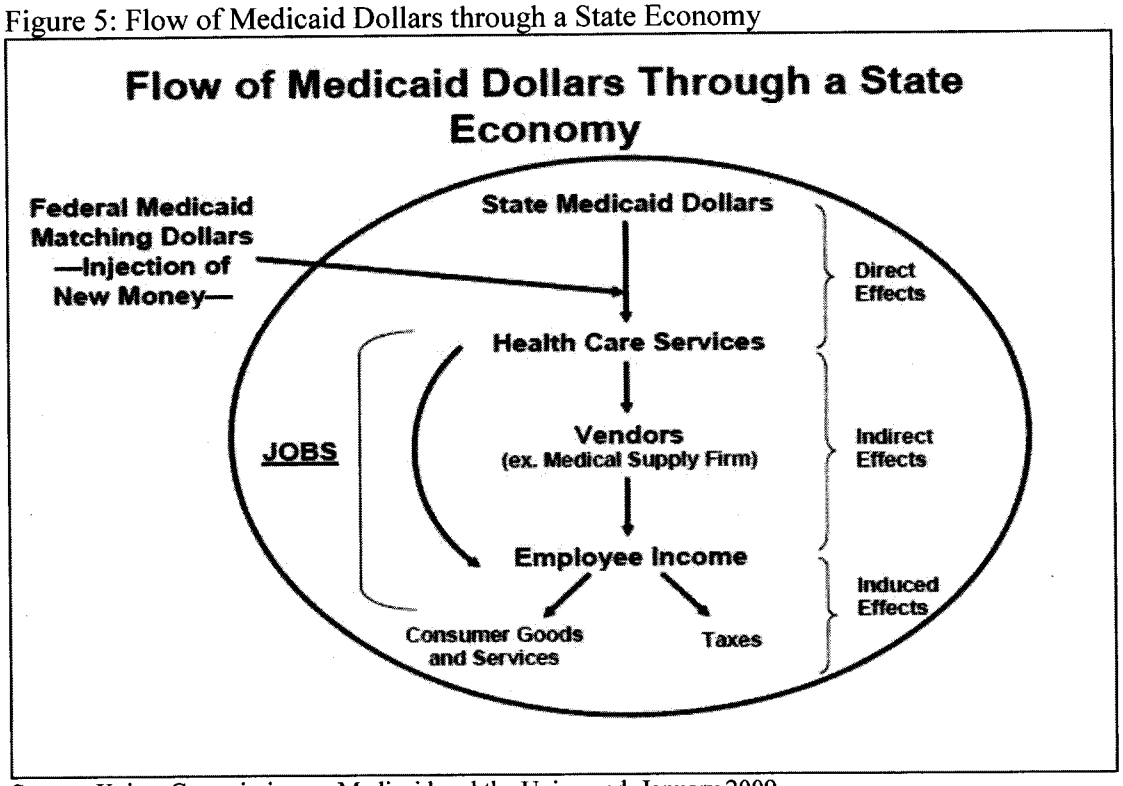
Both state and federal Medicaid spending have a multiplier effect. State spending alone yields multiplier effects as money is injected into the state's economy and used to conduct business, make purchases and support salaries. However, because of the matching arrangement, the economic impact of Medicaid spending is intensified by the infusion of new dollars from the federal government that would otherwise not exist in the state. Thus, the total impact multiplier, relative to the multiplier of the state dollar alone,

is considerably larger. Not including any temporary federal fiscal relief, the Federal Medical Assistance Percentage (FMAP) ranges from 50 to 76 percent among states, meaning that for every dollar a state spends on Medicaid, the federal government contributes at least one dollar. Higher federal matching rates create stronger financial incentives for states to participate in the Medicaid program. For example, in Montana, the current Federal Medical Assistance Percentage (FMAP) is 64 percent. This means that for every dollar the state contributes to Medicaid, the federal government will contribute $1.94 in federal funds. Conversely, for every $1 that the state cuts in Medicaid spending, it will forgo the $1.94 match from the federal government. Therefore, the state is actually reducing its overall Medicaid spending by $2.94 to save $1 in state funds.

During the first three years of the Medicaid expansion, the federal government FMAP is 100 percent. It slowly phases down thereafter, eventually reaching a FMAP floor of 90 percent in 2020 and beyond.

The flow diagram below illustrates how federal Medicaid spending works its way through an economy and demonstrates how the relationships within an economy can generate impacts greater than the original spending alone.

Figure 5: Flow of Medicaid Dollars through a State Economy



Source: Kaiser Commission on Medicaid and the Uninsured, January 2009

IMPLAN Modeling Results

The impact of federal dollars flowing into the Montana economy was modeled according to the low cost and high cost scenarios discussed previously. Only the federal dollars in excess of the state match were modeled for each fiscal year. The state match is presumed to mainly come out of the pockets of Montanans, either as tax obligations or cost-shifting to individuals with private health care insurance. Modeling only those federal dollars above and beyond the state obligation reduces the amount of federal dollars flowing into the economy, and represents more closely "new" funds relatively free from taxpayer obligation. Obviously, however, taxpayers all across the nation share in the federal funds flowing into each state.

Federal funds were allocated to nine different health care sectors in the IMPLAN model based on Medicaid appropriations, as reported by the Office of the Actuary, Centers for Medicare and Medicaid Services. As a result, most job creation will accrue to the health care sector. The IMPLAN model captures the ripple effects on the state economy as a result of the additional stimulus to the health care sectors.

Table 16 summarizes the impact of new federal funds coming into Montana as a direct result of the Medicaid expansion for both the low cost and high cost scenarios.

Table 16: Statewide Impact Resulting from new Federal Funds to Support Medicaid, by Fiscal Year

	Employment		Labor Income		State and Local Tax Revenue		Federal Tax Revenue	
			millions of current dollars					
	Low	High	Low	High	Low	High	Low	High
FY2014	5,300	5,900	$201.9	$225.7	$21.0	$23.5	$41.7	$46.6
FY2015	11,300	12,600	$443.0	$495.3	$46.3	$51.7	$91.4	$102.2
FY2016	12,000	13,400	$480.2	$536.8	$50.1	$55.9	$99.2	$110.9
FY2017	12,100	13,500	$494.0	$552.3	$51.4	$57.5	$102.0	$114.1
FY2018	12,700	13,400	$529.5	$559.7	$54.7	$58.3	$108.9	$115.5
FY2019	12,500	14,000	$533.2	$596.1	$55.5	$62.1	$110.0	$123.1
FY2020	13,000	14,500	$564.6	$631.3	$58.9	$65.7	$116.6	$130.4
FY2021	12,900	14,400	$568.9	$636.0	$59.3	$66.3	$117.5	$131.3
TOTAL	Na	Na	$3,815.3	$4,233.2	$397.2	$441.0	$787.3	$874.1

Source: IMPLAN, BBER-UM

On average, new federal funds create and support 11,500 jobs annually under the low cost scenario and 12,700 jobs annually under the high cost scenario. Approximately 60 percent of these added jobs are in the health care industry. The statewide job created by the flow of new federal funds into Montana pays an average wage of $42,000, well above the statewide average wage for private sector jobs in Montana during 2011, $35,000. Over the fiscal years 2014 through 2021, a cumulative $3.8 billion (low cost scenario) and $4.2 billion (high cost scenario) in labor income is generated from the flow of new

federal dollars into the economy. This represents an average contribution of $477 million per year in labor income for the low cost scenario to $529 million per year for the high cost scenario.

As a result of additional economic activity created by the introduction of new federal dollars, state and local tax revenues average $50 million and $55 million annually over the FY 2014-2021 period for the low cost and high cost scenarios respectively. Taxes paid to the federal government, as a result of business profits and increased labor earnings, average from $98 million for the low cost scenario to almost $110 million under the high cost scenario.

Net Cost/Savings Attributable to the Medicaid Expansion

Under the low cost scenario, despite the fact that the state is obligated to match federal funds with almost $518 million over the fiscal year periods 2014 through 2021, expected reductions in uncompensated care and state and local tax revenues appear to more than offset these costs during the early years of the expansion. Even ignoring the impact of uncompensated care and reduced federal Medicaid DSH allotments, state and local tax revenues more than offset the costs to the state during the early years of the expansion. This is primarily due to the much lower state obligation during the initial years of the Medicaid expansion and the generous match by the federal government for newly eligible Medicaid enrollees. Particularly for the period FY 2014 through FY 2016, the federal matching assistance percentage is 100 percent. Not until FY 2018, do state costs exceed expected state and local tax revenues associated with the flow of federal matching dollars.

Including the impact of reduced uncompensated care, along with falling federal Medicaid DSH allotments, the state realizes a net savings during the first four fiscal years. Overall during the life of the Medicaid expansion, at least until FY 2022, total state costs are $34 million to support the Medicaid expansion (Table 17).

Table 17: Net Cost (+) or Savings (-) to the State of Montana, FY 2014 to FY 2021, Low Cost Scenario (millions of current dollars)

	State Obligation to Medicaid Expansion	Reduction in Uncompensated Care including Reduced DSH Payments	Additional State & Local Tax Revenue	Net Cost (+) Net Savings (-) to State
FY2014	$12.2	$46.4	$21.0	-$55.2
FY2015	$23.2	$6.9	$46.3	-$30.0
FY2016	$24.9	$7.3	$50.1	-$32.5
FY2017	$45.1	$6.5	$51.4	-$12.8
FY2018	$72.8	$3.8	$54.7	+$14.3
FY2019	$87.6	$3.7	$55.5	+28.4
FY2020	$115.9	$9.9	$58.9	+47.1
FY2021	$136.1	$1.8	$59.3	+75.0
TOTAL	$517.7	$86.3	$397.2	+34.2

Source: BBER-UM

Assuming per enrollee costs are higher than expected, net savings may still be realized during the first four years of the expansion. Table 18 replicates Table 17 for the higher per enrollee cost scenario. Again during the first four fiscal years, the state realizes a savings when uncompensated care, DSH payments, and state and local tax revenues are considered. During the life of the Medicaid expansion, FY2014 through FY 2021, total state costs are almost $52 million. In FY 2018 and beyond, tax revenues generated from the addition of new economic activity lag behind the state's cost of providing insurance to newly eligible Medicaid enrollees.

Table 18: Net Cost (+) or Savings (-) to the State of Montana, FY 2014 to FY 2021, High Cost Scenario (millions of current dollars)

	State Obligation to Medicaid Expansion	Reduction in Uncompensated Care including Reduced DSH Payments	Additional State & Local Tax Revenue Collected	Net Cost (+) Net Savings (-) to State
FY2014	$13.7	$46.4	$23.5	-$56.3
FY2015	$25.9	$6.9	$51.7	-$32.7
FY2016	$27.9	$7.3	$55.9	-$35.4
FY2017	$50.4	$6.5	$57.5	-$13.6
FY2018	$81.4	$3.8	$58.3	+$19.3
FY2019	$97.9	$3.7	$62.1	+$32.1
FY2020	$129.5	$9.9	$65.7	+$53.9
FY2021	$152.2	$1.8	$66.3	+$84.1
TOTAL	$578.8	$86.3	$441.0	+$51.5

Source: BBER-UM

Absent in this analysis are other considerations that will financially impact the state's cost of expanding Medicaid. Incarcerated individuals who receive health care off-premises are eligible under the Medicaid expansion. In addition, there may be numerous eligible clients that may be switched from state funded to the Medicaid expansion, such as mental health services to the financially indigent. There are over 50 eligibility codes in the Montana Medicaid program, and a code by code analysis was simply beyond the scope of this project. Certain, however, is that other Medicaid enrollees may qualify under the expansion, and these populations should be identified as a cost-saving strategy for the state.

Impact of Medicaid Expansion on Montana's Health Care Resources

The use of health care resources in Montana will be affected by the proportion of uninsured who become insured, as well as the changes in the payer mix, such as uncompensated care, self-pay, privately insured and the publicly insured. Empirical findings indicate that health care resource use by the uninsured is less than use by the insured.[14] The extent of the increase in health care resource use, however, is controversial. Some studies indicate that resource use increases to the level of the

[14] J. Hadley, J. Holahan, T. Coughlin, and D. Miller, "Covering the Uninsured in 2008: Current Costs, Sources of Payment, and Incremental Costs," Health Affairs Web Exclusive, August, 2008.

insured, while other studies suggest use increases above levels of use by the insured.[15] The Congressional Budget Office believes the newly insured will increase their use of the health care system by 25 to 60 percent while reaching a level of resource use only 75 to 90 percent of that of the previously insured.[16]

The change in the number of uninsured will have an impact on community health centers, which typically serve as safety-net health care providers for the uninsured. Massachusetts witnessed a significant increase (31 percent) in the use of safety-net facilities while the proportion of uninsured decreased by 44 percent. Half of the patients seen by Montana's community health centers in 2011 did not have insurance, accounting for almost 400,000 clinic visits. The strain on community health center resources will be felt on two levels, continued use by the uninsured and increased use by the newly insured.

Table 19 shows the estimated change in the number of visits per 100 persons by health care setting and by insurance status as one goes from being uninsured to insured. The Medicaid expansion population will add to the demand for primary care substantially as their utilization increases almost four-fold.

Table 19: Visits to Ambulatory Care Settings, by Insurance Status

	Combined Health Care Settings	Primary Care Offices	Surgical Specialty Offices	Medical Specialty Offices	Hospital Outpatient	Emergency Department
Change in visits per 100 persons compared to Baseline						
Baseline: No Insurance	173.2	65.3	17.2	30.1	19.2	41.5
Private Insurance	+175.2	+126.7	+37.9	+31.4	-1.9	-19.0
Medicaid/CHIP	+326.5	+189.4	+15.9	+14.8	+65.7	+40.6
Medicare	+523.3	+190.9	+156.3	+146.0	+20.5	+9.5

Source: National Ambulatory Medical Care Survey, 2007.

Visits per 100 persons are higher for the insured than for the uninsured, with one exception. The privately insured have about the same number of visits per 100 persons as the uninsured with respect to hospital outpatient settings. The privately insured however use the emergency department far less than the uninsured, instead relying more on

[15] L. Ward, and R. Franks, "Changes in Health care Expenditures Associated with Gaining or Losing health Insurance," Annals of Internal Medicine, 146: 768, 2007, and J.M. McWilliams, A.M. Zaslavsky, and J.Z. Ayanian, "Use of Health Services by Previously Uninsured Medicare Beneficiaries," New England Journal of Medicine, 357: 143-153, 2007.

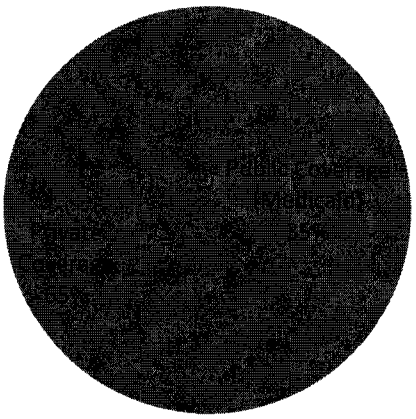
[16] Congressional Budget Office, Letter to Senator Evan Bayh, November 30, 2009.

primary care, surgical specialty, and medical specialty offices. Medicaid users have more visits per 100 persons across all health care settings when compared to the uninsured.

Approximately 56,000 uninsured are initially expected to end up in the Medicaid expansion, while 17,000 young adults and nearly 87,000 uninsured are expected to obtain private health insurance coverage in the Federally Facilitated Exchange.

Using data from the National Ambulatory Medical Care Survey (2007) and applying it to the proportions of previously uninsured obtaining private and public coverage, the expected increase in the use of ambulatory care can be estimated. For this analysis, it is assumed that the uninsured increase their use of health care resources to that of the insured. Figure 6 depicts the expected breakdown of public and private insurance.

Figure 6: Allocation of Newly Insured to Private and Public Health Insurance Coverage



Source: BBER-UM

Table 20 presents estimates of the net change in the utilization of primary care offices, surgical specialty offices, medical specialty offices, hospital outpatient and hospital emergency departments in Montana that are attributable to the previously uninsured obtaining health insurance coverage.

Table 20: Incremental Changes in Ambulatory Care Utilization, Montana

	Primary Care Offices	Surgical Specialty Offices	Medical Specialty Offices	Hospital Outpatient Departments	Hospital Emergency Departments	Net Incremental Change
Private Coverage	131,768	39,416	32,656	-1,976	-19,760	182,104
Public Coverage	106,064	8,904	8,288	36,792	22,736	182,784
Net Incremental Change	237,832	48,320	40,944	34,816	2,976	364,888

Source: 2007 National Ambulatory Medical Care Survey, BBER-UM

In all, over 360,000 new visits to ambulatory care settings may be expected as the result of the uninsured gaining access to health insurance. By far the biggest increase in health care utilization will be to primary care offices. As expected, visits to emergency departments will experience a slight decline as people gain health insurance coverage. Those with private insurance have 22.5 visits per 100 persons compared to 41.5 visits per 100 persons for the uninsured. Those with Medicaid coverage, however, use the emergency department at nearly twice the rate of the uninsured. Since more of the uninsured will be on private health insurance coverage than on Medicaid coverage, the net change is negative.

Changes in Ambulatory Use by Medicaid Enrollees at the County Level

Three-year data from the American Community Survey is used to model the demand for health care services at the county level. BBER survey data does not allow for statistically valid analysis at the county level due to sampling size.

Approximately 172,000 non-institutionalized Montanans do not have health insurance according to the three-year estimates of the American Community Survey. Exactly how many will gain health insurance either through the Medicaid expansion or the Federally Facilitated Exchange is subject to debate. Montana's health care delivery system will experience an increase in the demand for health services of all types.

The rate of ambulatory care visits by setting type and primary source of payment is provided by the 2007 National Ambulatory Medical Care Survey. The survey is based on office-based physician practices, as well as data from physicians working in Community Health Centers. Data below show the low use of primary care and the high use of hospital emergency departments by the uninsured.

Table 21: Visits to Ambulatory Settings per 100 Persons, by Insurance Status

	Primary Care	Surgical Specialty	Medical Specialty	Hospital Outpatient	Hospital ED
Private Insurance	192	55.1	61.5	17.3	22.5
Medicaid/CHIP	254.7	33.1	44.9	84.9	82.1
No Insurance	65.3	17.2	30.1	19.2	41.5

Source: 2007 National Ambulatory Medical Care Survey, U.S. Department of Health and Human Services, National Center for Health Statistics

Estimated Current Demand for Primary Care Office Visits

One way to estimate the increased demand placed on Montana's ambulatory health care system is to calculate the change in ambulatory use as individuals go from uninsured to insured. Table 22 below is a slightly condensed version of Table 20 and shows the incremental change in ambulatory use by a change in insurance status from uninsured to health care coverage under Medicaid or private insurance coverage. Noticeable in this table is the decline in use of hospital outpatient and hospital emergency department as individuals go from being uninsured to having private health care insurance. As the uninsured become insured through Medicaid, their utilization of primary care services increases substantially, more so than for all other ambulatory care settings. (Table 22)

Table 22: Incremental Change in Ambulatory Care by Setting and Insurance Status

incremental increase in office use per 100 persons					
uninsured to...	Primary Care	Surgical Specialty	Medical Specialty	Hospital Outpatient	Hospital ED
Private Insurance	126.7	37.9	31.4	-1.9	-19
Medicaid/CHIP	189.4	15.9	14.8	65.7	40.6

Source: BBER-UM

Data from the American Community Survey three year estimates (2009-2011) is combined with the estimated visits to primary care offices by type of insurance coverage from the 2007 National Ambulatory Medical Care Survey. Estimations include the current demand for primary care, along with other ambulatory care services, including surgical specialty offices, medical specialty offices, hospital outpatient and hospital emergency department visits.

Many medical communities serve as regional trade centers. Hence, estimating demand for medical care based only on county residents will understate true demand. In estimating the existing demand for primary care office visits for the state as a whole, this problem is reduced since Montana residents seldom leave the state for primary care services. Also excluded in this analysis is the increase in primary demand due to visitors, primarily tourists, who through mishaps end up in the offices of Montana primary care providers. Additional study would be needed to include this population in the demand for primary care.

Table 23 summarizes the demand for primary care office visits for Montana and also for the major population centers in Montana. The estimate for Montana is different from Table 20 since the data below is based on a different data source, the American Community Survey three-year estimates of uninsured. Medicaid enrollees account for 8 percent of all visits to primary care providers in Montana.

Table 23: Estimated Visits for Primary Care, Montana and Select Counties

	Source of Expected Payment						Total PC Office Visit Demand
	ESI	Direct Purchase	Medicare	Medicaid/CHIP	Uninsured	Unknown	
Montana	742,310	295,037	415,287	141,863	94,653	47,382	1,736,533
Cascade	57,145	19,173	35,625	13,201	7,520	4,589	137,253
Flathead	64,414	26,243	36,229	9,989	12,281	4,015	153,171
Gallatin	78,021	34,120	23,278	5,901	8,279	4,664	154,264
Lewis & Clark	61,198	15,759	25,354	6,581	4,202	2,504	115,598
Missoula	89,937	33,335	36,019	14,480	12,871	3,298	189,939
Ravalli	26,003	13,709	23,627	7,733	4,088	488	75,647
Silver Bow	27,199	8,963	16,448	7,488	3,185	317	63,599
Yellowstone	120,837	37,503	58,811	22,182	15,857	5,302	260,492

ESI is employer-sponsored insurance
Source: 2007 National Ambulatory Medical Care Survey, American Community Survey, BBER-UM

The eight trade center counties above account for two-thirds of the total statewide demand for primary care services.

Estimated Increase in the Demand for Primary Care Office Visits

The number of uninsured in Montana will decline due to the lure of subsidies and cost-sharing assistance in the exchange, the individual mandate to have insurance, and the Medicaid expansion. In this analysis, utilization rates for primary care office visits are assumed to reach the levels of utilization reported in the ambulatory medical care survey. All "uninsured" are also assumed to obtain health insurance in the first year. Certainly not all uninsured will purchase insurance. Even Medicare doesn't have a 100 percent participation rate. Medicaid participation rates vary from a low of 43 percent of the eligible population in Louisiana to a high of 83 percent in Massachusetts. Nationally, participation rates for Medicaid are 63 percent of the eligible population.

According to the American Community Survey, nearly 68,000 Montanans are uninsured and Medicaid eligible, leaving an estimated 104,000 uninsured who do not qualify for the Medicaid expansion. Assuming all Medicaid eligible participate in the Medicaid expansion and the remaining uninsured purchase health insurance in the Federally Facilitated Exchange, an additional 129,000 primary care office visits are expected statewide due to the Medicaid expansion (Table 24).

Table 24: Estimated Increase in Demand for Primary Care Services, Montana

	Primary Care	Surgical Specialty	Medical Specialty	Hospital Outpatient	Hospital ED	Total Office Visits
Private Coverage	131,768	39,416	32,656	(1,976)	(19,760)	182,104
Medicaid Coverage	128,792	10,812	10,064	44,676	27,608	221,952
Total Change	260,560	50,228	42,720	42,700	7,848	404,056

Source: National Ambulatory Medical Care Survey, American Community Survey, BBER-UM

The decline in hospital outpatient and hospital emergency department visits is the result of the uninsured using these services less as they acquire private health insurance. By far, the greatest impact is on the demand for primary care office visits.

Adding the incremental increases for primary care to existing demand provides a snapshot of the total anticipated demand for primary care office visits that is attributable to the Medicaid expansion. (Table 25).

Table 25: Impact of Medicaid Expansion on the Demand for Primary Care Services, Montana and Select Counties

County	Additional PC Office Visits Attributable to Medicaid Expansion	Total Demand for PC Office Visits with Medicaid Expansion
Montana	128,792	1,865,325
Cascade	9,858	147,111
Flathead	13,362	166,533
Gallatin	7,758	162,022
Lewis & Clark	3,839	119,437
Missoula	17,436	207,375
Ravalli	5,284	80,931
Silver Bow	3,936	67,535
Yellowstone	15,010	275,502

Source: BBER-UM

Primary Care Capacity

The capacity of the primary care system to accommodate additional demand may be modeled by the number of primary care practitioners and the number of office visits that primary care providers can offer each year. In a 2009 study by Davis and Roberts, 495 practicing primary care physicians were identified in the state of Montana. This number includes family practice, internal medicine, and pediatric practitioners. Other studies contrast drastically with this number, and range from 629 primary care providers (Stenseth 2009) to 862 primary care providers (Rivard 2009).

The U.S. Department of Health and Human Services uses a guideline of 4,200 office visits per year for primary care physicians, much lower than the American Medical Association guideline of 5,400 office visits per year for family practitioners. The lower threshold is used in this analysis. Table 26 presents estimates for the primary care capacity of the state and select counties. By comparing primary care capacity to estimated total demand, the ability of the primary care system to accommodate the increased demand for primary care services can be assessed.

Table 26: Estimated Primary Care Capacity to Primary Care Demand, Montana and Select Counties

Locale	Primary Care Supply	Primary Care Demand, including Medicaid and Federally Facilitated Exchange	Visits/Year: Shortage (-) Surplus (+)
Montana	2,079,000	1,997,093	+81,907
Cascade	163,800	155,107	+8,693
Flathead	176,400	181,423	-5,023
Gallatin	71,400	172,895	-101,495
Lewis & Clark	147,000	125,022	+21,978
Missoula	201,600	220,684	-19,084
Ravalli	58,800	86,947	-28,147
Silver Bow	71,400	71,081	+319
Yellowstone	508,200	296,228	+211,972

Source: BBER-UM

Major medical markets, such as Missoula, Great Falls, and Billings, serve areas well beyond the county boundaries. Although primary care is usually delivered locally, it is reasonable to assume that primary care demand is still underestimated to a considerable degree. More illustrative perhaps are the counties with low surpluses of primary care capacity, or in some, shortages of primary care capacity. Gallatin County, in particular, appears to have a severe shortage of primary care capacity given the additional burdens to be placed on their providers. Some of the burden can be minimized by increased use of mid-level practitioners, including nurse practitioners and physician assistants.

Absent in this analysis is the role that payment to the provider serves in seeing certain payer mixes, particularly Medicaid. As payments fall to the marginal cost of providing

services to these patients, doctors will have limited options. Some may decrease the number of Medicaid patients seen, some may simply retire earlier. Many primary care physicians are now employed by local hospitals and federally funded clinics. Hospitals and these clinics receive higher payments from government sources than an independent physician receives for the same services. How this trend affects overall costs is not apparent, but it does provide some support to help keep primary care physicians in Montana communities.

Summary

The Supreme Court ruling on the ACA early in the summer of 2012 made the expansion of Medicaid programs optional for states without penalty while at the same time ruling in favor of the rest of the health care law. While the federal government does pick up the entire cost of newly eligible Medicaid enrollees for the first three years, lots of uncertainty remains as states attempt to weigh the merits of the expansion against the financial strain on their budgets. Clearly the Medicaid expansion represents the single most significant new cost for states under the ACA.

The number of Montanans that take advantage of the Medicaid expansion is not easily assessed. Montana's participation rate in Medicaid is below the national average participation rate of 63 percent, perhaps as low as 50 percent. How many of Montana's 69,000 uninsured who qualify for Medicaid enroll depends in part on how aggressively the state markets the expansion, and how enrollment is conducted. Childless adults have also joined Medicaid programs at much lower participation rates than other demographic groups. Additionally, the benchmark coverage offered to newly eligible Medicaid enrollees may be more restrictive than the benefits provided under traditional Medicaid, reducing the take-up rate for the newly eligible population. On the other hand, elimination of the asset test for eligibility should significantly lower the barrier for enrollment, possibly increasing the take-up rate for newly eligible Medicaid enrollees.

There are also many sizable population groups that must be considered as potential new enrollees. Since Montana's climb out of the Great Recession of 2009 is more of an income recovery than a jobs recovery, people with incomes up to 150 percent of the federal poverty level could cycle into Medicaid eligibility should their financial circumstances unfavorably change. Uninsured, young adults between 18 and 26 years of age may now choose to stay on their parents' health insurance policies due to provisions in the ACA. Uninsured and previously insured individuals could be added to the Medicaid program, as those who were previously eligible but not enrolled now enroll in Medicaid and those with private health insurance drop coverage and instead opt for Medicaid coverage.

A total of 56,000 Montanans in 2014 could be added to Medicaid as a result of the Medicaid expansion. Two factors that could significantly change this estimate are the annual take-up rates and the number of employees who lose health care coverage from their employers and then qualify for Medicaid.

Estimating the budgetary impact of the Medicaid expansion is also subject to risk. Aside from the uncertainties surrounding the potential number of new Medicaid eligible enrollees, changes in per enrollee Medicaid costs, the medical rate of inflation used to project future costs, the health status of new enrollees, and future legislative changes in the Federal Medical Assistance Percentages (FMAP) due to deficit worries could change the cost of the Medicaid expansion.

Mathematica Policy Institute recommends that states need to conduct further research into two areas. First, differences in the health status of Medicaid enrollees should be examined across all subgroups. For the BBER analysis, the self-reported health status of the adult Medicaid population is assessed. Second, the mix and quantity of specific types of medical services, such as hospital emergency room visits, admissions and lengths of stay, visits to specialists, and prescription drug use could also be examined to better understand differences in PMPM costs for Medicaid eligible populations.

The BBER estimates that over three-quarters (42,000) of the Medicaid expansion population are uninsured adults without children. This population is more likely to be healthier than the general Medicaid population and incur much lower per enrollee costs, but at the same time has been historically the least likely to join Medicaid.

The incremental cost attributable to the Medicaid expansion in Montana is projected to be between $6.5 billion and $7.3 billion over FY 2014 through FY 2021. The state's share of the total cost is around 8 percent, or $518 million to $579 million. The balance of these costs is paid by the federal government.

The ability of Montana's primary care health care delivery system may also be challenged. The Medicaid expansion alone is expected to add nearly 129,000 more visits to primary care providers statewide as individuals go from being uninsured to newly enrolled in Medicaid. When joined by other uninsured that may gain health care coverage in the Federally Facilitated Exchange in 2014, another 132,000 visits to primary care providers is expected. Given estimates of Montana's ability to accommodate this additional demand for primary care, Montana primary care providers may be overwhelmed. The major population centers where primary care capacity may be most stained are Flathead, Gallatin, Missoula and Ravalli counties.

The federal funds that flow into Montana as part of the federal obligation to the Medicaid expansion create jobs, income, and additional state and local tax revenues. In addition to the estimated reductions in uncompensated care that result from the uninsured becoming insured, the net costs to the state of Montana are reduced to between $34 million and $52 million over the FY 2014 through FY 2021 period.

The number of Montanans without health insurance will reduce the uninsured rate in Montana from 20 percent of the population to 16 percent of the civilian non-institutionalized population. The population most vulnerable to remaining uninsured without the expansion is those that are too rich for Medicaid and too poor for the federal tax credits to purchase insurance in the Federally Facilitated Exchange in 2014 (incomes

between 33 percent and 100 percent of the federal poverty level). For 37,000 Montanans, the Medicaid expansion could provide badly needed health insurance. Without the Medicaid expansion, 37,000 Montanans will continue to go uninsured even with the Federally Facilitated Exchange that becomes operational in 2014.

Uncompensated care presently provided by Montana's hospitals, community health providers, and office based physicians would be reduced as the uninsured become insured through the Medicaid expansion. The burden to taxpayers of total uncompensated care could be reduced by an average of $11 million per year as more and more Medicaid eligible individuals become insured. When examined from the standpoint of an all or nothing scenario, over $104 million in uncompensated care would vanish relative to the scenario where all of Montana's uninsured remain uninsured.

Numerous studies show that the lack of health insurance and poor health are related. Poor health among adults reduces labor force participation, productivity, and earnings. A person in poor health may earn 15-20 percent less than a person in good health. Poor health among family members also reduces the ability to work. Family caregivers work less and earn less. This lost time from work reduces productivity and contributions to the state economy, as well as tax revenues to localities, the state, and the federal government.

Children in poor health have poor school attendance and lower school achievement and cognitive development. Lack of insurance also increases the probability of disability or major health deterioration for people between 50 and 65 years of age. Disability at this age leads to earlier coverage by Medicare and transfer payments to Disability Insurance and Supplemental Security Income programs.

A more recent study found that states that expanded Medicaid eligibility had significant decreases in mortality, improved health coverage, enhanced access to care, and improvements in the number of Medicaid beneficiaries reporting "excellent" or "very good" health. Other studies also show that health insurance reduces adult mortality.

Although it is difficult to put a dollar value on all the benefits of extending health insurance to low-income adults, it is clear that lack of insurance correlates to poorer health, less educational attainment, lower labor force participation, and lower earnings. This undoubtedly leads to lost tax revenues and higher public expenditures for medical care and income support programs.