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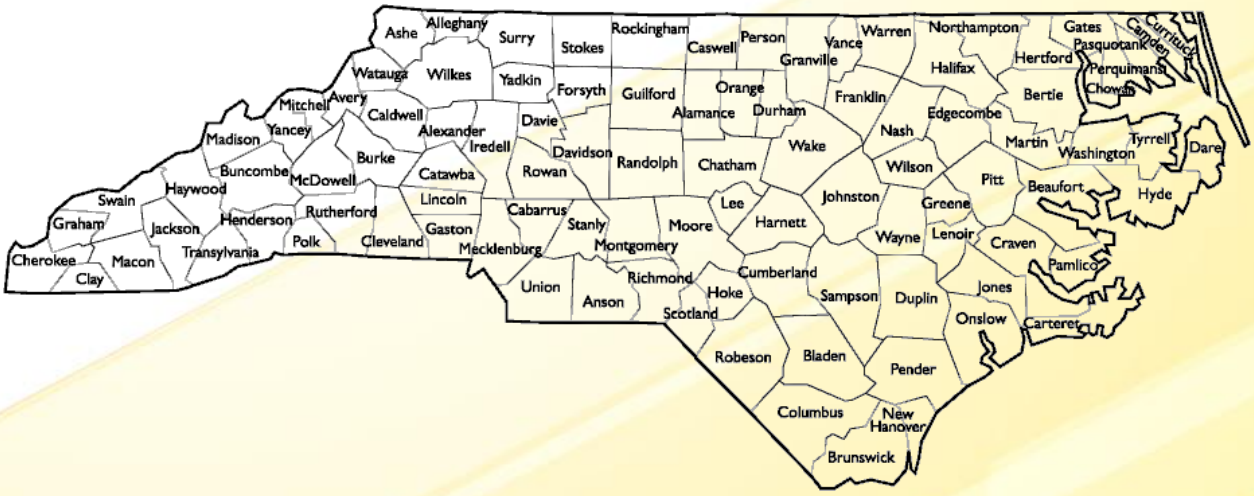
The Economic and Employment Costs of Not Expanding Medicaid in North Carolina: A County-Level Analysis



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Cone Health Foundation's mission is to measurably improve the health of the people in the greater Greensboro area. Founded in 1997, the Foundation is a support organization to Cone Health and is Greensboro's only health-specific philanthropic organization. Since its inception, Cone Health Foundation has awarded more than $71 million to community nonprofit partners. The majority of these grants fall into the Foundation's four focus areas: Access to Health Care, Adolescent Pregnancy Prevention, HIV/AIDS and Substance Abuse and Mental Health.

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The Kate B. Reynolds Charitable Trust was established in 1947 and is now one of the largest private trusts in North Carolina. Its mission is to improve the quality of life and quality of health for the financially needy of North Carolina. The Health Care Division promotes wellness statewide by investing in prevention and treatment. The Poor and Needy Division responds to basic life needs and invests in solutions that improve the quality of life and health for financially needy residents of Forsyth County. Wells Fargo Bank, N.A. serves as sole trustee.

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The Economic and Employment Costs of Not Expanding Medicaid in North Carolina: A County-Level Analysis

Executive Summary

Like many states, North Carolina has been considering whether to expand Medicaid eligibility and, if so, whether to customize an expansion by seeking a federal Section 1115 waiver. North Carolina's Medicaid program currently does not cover parents whose incomes are greater than 50 percent of the federal poverty level (about $10,000 for a family of three) and adults without children who are not elderly or disabled have no coverage at all. The state's Medicaid eligibility levels rank in the bottom quartile of the states. Almost one-fifth (18.1 percent) of North Carolinians below 65 are uninsured, exceeding the national average.

Because North Carolina declined to expand Medicaid in 2014, when this first became possible, the state is already experiencing negative consequences. Since it is unlikely that a Medicaid expansion would be implemented in 2015, the problems will continue to mount.

- North Carolina lost $2.7 billion in federal funding in 2014 and is losing $3.3 billion in 2015, compared to the amounts it would have earned had it expanded Medicaid in 2014.

- As a result, more than 23,000 fewer jobs are being created statewide in 2014 and 29,000 fewer in 2015. For example, 2,500 fewer jobs are being created in Wake County in 2014.

- The state's total economy is about $1.7 billion smaller in 2014 than if Medicaid had expanded, causing the state to lose almost $100 million in potential state tax revenue. Counties also lost ground. For example, Mecklenburg County's gross county product is $236 million smaller in 2014 and the county lost more than $2 million in county revenue because Medicaid was not expanded.

In the coming year, North Carolina has the opportunity to revisit this issue, which could permit implementation of a Medicaid expansion by 2016. Such an expansion could enable more than 300,000 low-income adults to gain coverage in 2016 and almost half a million by 2017. Deciding not to expand Medicaid by 2016 would prolong the harmful consequences for years.

- If North Carolina still declines to expand Medicaid, the state would lose an estimated $21 billion in federal funding between 2016 and 2020, compared to levels earned if an expansion began in 2016.

- As a result, 43,000 fewer jobs would be created by 2020 statewide. About half of the jobs affected would be in the health care sector. North Carolina hospitals, many of which are already struggling, could face more serious problems. But the other half of jobs that could be lost are spread across many sectors, including construction, retail and wholesale, professional/scientific/technical and food and beverage. While Medicaid expansion would directly benefit the health care sector, the economic benefits ripple out when health care providers purchase additional goods and services and as health care workers use new income to pay their mortgages, buy groceries, pay taxes and so on.

- Expanding Medicaid could trigger a substantial reduction in unemployment in North Carolina. North Carolina's current unemployment rate exceeds the national average rate of unemployment.

- Over the five-year 2016 to 2020 period, the potential state gross product would be $14 billion less and total business activity will be $21 billion lower if North Carolina declines expansion. Non-expansion will derail substantial economic gains that could otherwise boost the state economy.

- A Medicaid expansion that triggers additional economic growth in North Carolina would increase state and county tax revenues, without changing tax rates. In comparison, if Medicaid is not expanded, about $860 million in potential state revenue would be lost as well as $161 million in county tax revenue from 2016 to 2020, for a combined loss in excess of $1 billion. These revenues will not be available to help support other services, such as education or public safety.

- At county levels, if Medicaid is not expanded by 2016, Mecklenburg and Wake Counties would create about 4,500 fewer jobs each by 2020, Guilford County would have about 3,000 fewer jobs, and there would be 1,500 fewer jobs in Buncombe County and 600 fewer jobs in Pitt County.

- Rural and urban counties share equally in the losses if Medicaid is not expanded. For example, both rural and urban counties would have about 0.7 percent fewer jobs in 2020 if Medicaid is not expanded. All parts of North Carolina would experience losses.

- Mecklenburg County's total economy (gross county product) from 2016 to 2020 would be almost $1 billion lower. Other North Carolina counties would also experience reduced economic growth, compared to levels if a Medicaid expansion was approved.

Expanding Medicaid by 2016 would empower North Carolina to collect more than $21 billion in federal funds over five years, although the state would have to cover about $1.7 billion in additional state Medicaid costs. The increase in state costs could be fully offset, however, by gains in state tax revenues generated by economic expansion and by potential savings in other health costs, such as uncompensated hospital costs and community mental health costs, since large numbers of uninsured patients would instead be covered by Medicaid. Gains in Medicaid revenue and reductions in uncompensated care triggered by a Medicaid expansion would help hospitals that have struggled due to Medicare and Medicaid payment reductions. The net state savings, including new costs, new revenues and potential offsetting health savings, would equal $198 million in 2016 and about $318 million over the five year period 2016 to 2020. If the state is able to reduce the growth of Medicaid health care costs over the next several years, state savings could be even higher.

Medicaid expansion could be an important engine for economic growth and job creation across the breadth of North Carolina. Expanding coverage for half a million North Carolinians will enable them to get timely, affordable health care, including preventive and primary care that can help keep them healthy, as well as meet their needs when they are ill or injured.

Introduction

Recent Census data reveal that in 2013 almost one in five (18.1 percent) North Carolinians under 65 years old lacked health insurance coverage, exceeding the national average (16.7 percent uninsured).[1] Under the federal Patient Protection and Affordable Care Act (ACA), states have the option to expand their Medicaid programs to provide health insurance coverage for low-income adults with incomes up to 138 percent of the federal poverty line (133 percent plus a 5 percent standard deduction, or about $28,600 for a family of three).[2]

As of November 2014, 27 states and the District of Columbia chose to expand Medicaid. Some states have directly expanded Medicaid eligibility, while others negotiated with the federal government for Section 1115 waivers to shape their state Medicaid expansions in a more customized fashion. Four states are expanding coverage under waivers (Arkansas, Iowa, Michigan and Pennsylvania); at least two more states have applied for waivers (Indiana and Utah) and plan to expand if the waivers are approved. Other states are still considering expansions under waivers. The Arkansas, Iowa and Pennsylvania waivers let the states offer premium assistance subsidies so that Medicaid-eligible adults can purchase Qualified Health Plans under their health insurance marketplaces.

In order to make Medicaid expansions more affordable for states, the federal government is covering 100 percent of the costs of Medicaid eligibility expansions between the years 2014 and 2016. In 2017, the federal matching level will be reduced to 95 percent and the state must finance 5 percent of the costs. The federal matching rate then gradually declines to 90 percent in 2020 and the years following. Even so, these Medicaid expansion matching rates are substantially higher than the regular Medicaid federal matching rate, which is 65.88 percent for North Carolina in 2015. The federal government is covering almost all the costs of Medicaid expansion, with the net result that billions of additional federal dollars flow into states that expand Medicaid. Moreover, the nonpartisan Congressional Budget Office has consistently determined that implementation of the ACA reduces the federal budget deficit and repeal of the Act would increase the federal deficit.[3]

Some critics have questioned whether the federal government will sustain the enhanced federal matching payments for Medicaid expansion. Over Medicaid's half century history, during which Medicaid has almost consistently grown, federal Medicaid matching rates have been modified only three times and in each case on a temporary basis: two times to increase federal matching rates during recessions to provide state fiscal relief (2003-4 and 2008-11) and only once to temporarily lower federal matching rates (1982-84) as part of major deficit reduction package during a severe recession. Even those reductions were relatively small and could be rolled back for states that had high unemployment rates or took steps to control Medicaid costs. Given that a majority of states are expanding Medicaid, it is hard to envision how Congress could lower the enhanced Medicaid matching rates at a time when the economy is improving and the federal budget deficit is shrinking.

This report offers a nonpartisan economic analysis of the effects of decisions on whether to expand North Carolina's Medicaid program. Earlier reports by the North Carolina Institute of Medicine[4] and the Urban Institute[5] have examined the budgetary, economic and/or employment effects of Medicaid expansion in North Carolina. This report builds upon earlier efforts by providing updated information and providing estimates of the effects in each of North Carolina's 100 counties. While the decision to expand Medicaid or not is made in the state capital, the effects are

felt across the state, from the Blue Ridge Mountains to the Coastal Plains. This report sheds light on:

- The level of additional federal funds that North Carolina has lost because it did not expand Medicaid in 2014 and the amount that North Carolina could lose if it does not expand Medicaid by 2016.
- The loss in North Carolina's overall economy (that is, the gross state product) as well as business activity,
- The loss in jobs created,
- The loss of state and county tax revenues,
- Other state or county costs, such as burdens of uncompensated care or mental health service costs that are incurred because Medicaid is not expanded.

The county-level effects depend on the economic and health care characteristics in each area. For example, the number of additional people enrolled in Medicaid and the economic impact is affected by how many uninsured low-income adults reside in each county. The estimates in this report are based on a widely respected economic model. A variety of factors could alter the actual outcomes, including future changes in Medicaid policies or state or local economic conditions. The main body of this report focuses on state-level and selected county-level estimates, while tables in the Appendix provide estimates for every North Carolina county.

Initial Evidence from Other States

Although the ACA insurance expansions only began in 2014, evidence is already accumulating that Medicaid expansions are decreasing the number of uninsured residents. Data from the Centers for Medicare and Medicaid Services indicate that between July-September 2013 and July 2014, 7.9 million more people enrolled in Medicaid nationwide, including 6.9 million in expanding states (19 percent increase) and 1.0 million in non-expanding states (5 percent increase).[6]

Data from a recent Gallup survey indicated that, nationwide, the percent of adults 19 to 64 who were uninsured fell from 20 percent in 2012-13 to 15 percent by mid-year 2014.[7] States that expanded Medicaid had greater reductions in the percent uninsured than states that did not expand Medicaid. The two states with the largest reductions were southern states: Arkansas, which expanded Medicaid using a waiver, and Kentucky, which had a regular Medicaid expansion.[8] Other surveys, conducted by the Centers for Disease Control, the Urban Institute and the Commonwealth Fund, have reached similar conclusions about the effects of the ACA and of Medicaid expansions.[9] Changes in overall insurance coverage are also affected by other ACA policies, such as the creation of health insurance marketplaces and related federal tax credits to make insurance purchases more affordable, as well as by other economic changes.

Early studies have also identified other effects related to Medicaid expansions. A recent federal report examined the potential effect of the ACA and of Medicaid expansions on uncompensated hospital costs, such as the cost of charity care for the uninsured, and estimated that uncompensated care costs would fall much more in Medicaid expansion states in 2014 than in non-expanding states.[10] The reductions are partly attributable to implementation of health insurance marketplaces, which were introduced in all states, but the Medicaid expansions have a larger effect since they are focused on low-income patients more likely to receive uncompensated and charity care. The Colorado Hospital Association examined early hospital financial data from 25 states and found

that as the volume of Medicaid business grew in Medicaid-expanding states in 2014, the volume of charity care costs and self-pay charges fell. Like the federal study, they found reductions were much larger in Medicaid expanding states.[11] A study of Massachusetts' health reform found that uncompensated care fell about a third after their insurance expansions.[12] The Missouri Department of Economic Development analyzed changes in ten states between the first five months of 2013 and of 2014 and found that employment in the health and social assistance category grew twice as fast in Medicaid expanding states as in non-expanding states.[13]

Research has also demonstrated that Medicaid expansions improve health access and can lead to lower death rates. A randomized experiment in Oregon found that Medicaid expansions strengthened access to care and improved use of preventive services like breast and cervical cancer screening and cholesterol monitoring.[14] Even more significant, research has found that death rates have fallen in states that expanded Medicaid.[15] When low-income people are uninsured, they often delay or skip getting necessary medical care or medications because of the costs. Expanding insurance coverage makes care more affordable and increases access to timely care. This bolsters access to preventive and primary health care and medications that can keep people healthy, so they are less likely to visit emergency rooms or be hospitalized for preventable medical conditions. Equally important, Medicaid assures access to acute medical care when people are injured or experience serious illnesses.

North Carolina's Medicaid Program

North Carolina currently provides Medicaid coverage to parents with family incomes up to 50 percent of the federal poverty line, but does not cover non-elderly, non-disabled adults without dependent children, regardless of their incomes.[16] This places North Carolina in the lowest quartile of states in terms of Medicaid eligibility, below neighboring states of Virginia, South Carolina and Tennessee, although above states like Mississippi, Alabama or Texas.

Since North Carolina is not expanding Medicaid, it earns a federal match rate of 65.88 percent in federal fiscal year 2015 and the state pays 34.12 percent of medical costs in Medicaid. If it had expanded Medicaid in 2014, the federal matching rate would have been 100 percent for parents with incomes above 50 percent of poverty and for all childless adults and North Carolina would retain that rate until 2016. If the state opts to expand Medicaid by 2016, it will still earn the 100 percent matching rate, but only for that year and the rate will decline to 95 percent in 2017 and then to 90 percent by 2020 and subsequent years. (Currently, counties in North Carolina do not contribute for medical benefit costs in Medicaid. In earlier years, counties paid a portion of state Medicaid benefit costs, but this ended in 2009. Counties share Medicaid administrative costs, but they are far smaller. In FY 2012, combined state and county administrative costs were less than 2 percent of state medical benefit costs.)

While North Carolina has not expanded Medicaid, there has nonetheless been some growth in Medicaid enrollment. Data from the North Carolina Division of Medical Assistance indicates that Medicaid enrollment grew by 26,579 between July 2013 and June 2014.[17] A recent report indicates that there will be further growth as the state begins to clear a backlog in Medicaid eligibility determinations.[18] The Medicaid growth that already occurred was among those who were already eligible under existing eligibility rules, earning the regular match rate. If North Carolina had expanded eligibility, then the number of new enrollees would have been much larger and the

federal government would have paid for 100 percent of the medical costs for those enrolled under the new eligibility criteria from 2014 to 2016.

It is likely that much of Medicaid growth that already occurred in 2014 was related to the implementation of North Carolina's health insurance marketplace and the related outreach and enrollment efforts; those applying for coverage through the marketplace may be determined Medicaid eligible if they do not qualify for the marketplace or federal tax credits. As of March 31, 2014, 358,000 people had enrolled in North Carolina's marketplace and selected a health insurance plan.[19] Because North Carolina did not expand Medicaid, federal tax credits are only available to those with incomes between 100 and 400 percent of the poverty line. If, however, North Carolina had expanded Medicaid, then tax credits would only be available to those with incomes over the Medicaid income limit. (This analysis accounts for that shift.)

Like many other states, North Carolina is considering delivery system changes to reform its Medicaid program. A joint subcommittee of the North Carolina General Assembly recently issued Medicaid reform recommendations, including the use of accountable care and shared financial risk, to restrain Medicaid cost growth.[20] Governor McCrory's administration had offered similar proposals for Medicaid reform.[21] Such changes could be combined with Medicaid expansions; they are not mutually exclusive. For example, Colorado, New Jersey and Oregon have all expanded Medicaid and adopted accountable care systems and related delivery system reforms for Medicaid.[22] Also, using federal waivers, some states are using or proposed alternative ways to expand Medicaid, including the use of health insurance marketplaces.

The underlying purpose of this report is to illustrate how declining to expand Medicaid has broad economic and employment consequences for North Carolina's counties. While Medicaid expansion policies first affect the health sector of the state, they have broader economic and employment repercussions, in addition to effects on the state budget.

Since most of the cost of a Medicaid expansion would be borne by the federal government, expansion would result in billions of dollars in additional federal funding flowing into North Carolina. These funds will initially be paid to health care providers, such as hospitals, clinics or pharmacies, as health care payments for Medicaid services. That represents the initial flow of funds. Next, the health care providers distribute these funds as salaries to health care staff, payments for goods and services (such as the costs of rent, equipment, medicine or medical supplies), and as state and local tax payments. This represents the secondary flow of funds. Finally, these funds would flow into the broader state economy as workers and businesses use their income to pay for general goods and services, such as to pay their mortgages or rent, utility bills, food bills, transportation and educational services. In turn, the real estate, grocery and other firms distribute these funds as salaries to their employees and buy other goods and services, as well as paying taxes. Thus, the Medicaid funds multiply through the broader state economy and the total economic impact ends up being larger than the initial amount of Medicaid payments, since the money is recycled through many layers of the state economy. Economists sometimes refer to this phenomenon as the "multiplier effect," although the economic model, developed by Regional Economic Models, Inc. (REMI), uses a more sophisticated approach.

Key Definitions

The methodology for this report and the sources of data are described more completely in the Appendix on Data Sources and Methods at the end of this report. Some key definitions for measures used in this report are:

- Employment: This is the number of jobs that would be added or lost in the county or state related to Medicaid expansion, full-time plus part-time. These include jobs in all sectors, including health-related jobs, construction, retail, professional jobs, state or local government, etc.

- Business Activity (Output): Output is equivalent to the sum of all revenue (public and private) generated by the Medicaid expansion at the state or county levels. For example, if a retail firm buys a product from a wholesaler for $1,000 and a customer pays $1,500 to the retailer for that same product, the increase in business activity is the sum of both levels of purchase, or $2,500. (Business activity, state/county gross product, state and county revenues are all based on constant 2014 dollar estimates, which adjust for inflation.

- Gross State (or County) Product: Gross State Product (GSP) is a subset of output and refers to the "value added" by economic activity. GSP can be thought of as all net new economic activity or output minus the goods and serves used as inputs to production. Effectively, it measures only the final stage of a transaction. In the example above, it would be the $1,500 paid by the customer to the retailer.

- State Revenue: This is the value of additional state government tax revenue related to the Medicaid expansion. For example, if there are more purchases, then state sales tax revenue rises. Our analyses assume that state (and county) tax rates remain at current levels.

- County Revenue: This is the value of additional county/local government revenue related to the expansion, separate from state revenues.

Finally, the report examines state budgetary consequences of not expanding Medicaid, looking at state funds spent to pay for additional Medicaid costs, as well as how these are offset by additional state revenues and by potential savings in other state health care expenditures, such as costs of uncompensated hospital care and mental health-related savings.

Findings

Earlier reports, such as those by the Urban Institute, estimated how much states would lose in federal matching funds if they do not expand Medicaid. This analysis probes further to estimate broader economic and employment effects of not expanding Medicaid at both state and county levels. The lack of Medicaid expansion not only means that hundreds of thousands of low-income North Carolinians will remain uninsured, but also that hospitals, physicians' offices, clinics, pharmacies and other health care providers have less revenue and bear more uncompensated care. Thus, without Medicaid expansion health care providers will employ fewer staff and make fewer purchases, such as those for medical supplies, information technology, professional services (e.g., legal or accounting) and construction. In turn, workers will purchase fewer goods, such as clothing or groceries, and will pay less in rent or mortgages. Reductions in incomes will also lead to lower

state and county tax revenue, which could be used to pay for diverse government services such as education or public safety.

The main body of this report provides estimates of economic and employment effects related to not adopting the Medicaid expansion option and the effects for both at the state level and for five selected North Carolina counties (Buncombe, Guilford, Mecklenburg, Pitt and Wake Counties). (The largest cities in these counties are Asheville, Greensboro, Charlotte, Greenville, and Raleigh, respectively.) These counties were selected because they are larger counties representing different areas of the state. The Appendix Tables present results for each of North Carolina's 100 counties.

Two scenarios are examined:

> (1) What are the consequences of North Carolina's decision to not expand Medicaid in 2014, when it could first be implemented? Effects are already being felt in 2014 and will continue in 2015.
>
> (2) What are the consequences if North Carolina does not expand Medicaid by 2016? The next legislative session will occur in early 2015, so an expansion by 2016 could be adopted, on a delayed schedule.

Consequences of Not Expanding Medicaid in 2014

Since Medicaid was not expanded in 2014, North Carolina is already experiencing economic repercussions. Tables 1 and 2 summarize estimates of amounts lost because North Carolina did not expand Medicaid in 2014. Implementation of a Medicaid expansion in 2014 is no longer possible and, since the North Carolina General Assembly will not meet until January 2015, it seems unlikely that an expansion could begin in 2015. The table presents changes in employment, output, state/county gross products and state/county revenues in 2014 and 2015, compared to what would have happened had North Carolina implemented Medicaid expansion in 2014. (There could be continuing losses in the years 2016 to 2020 if the state still does not expand Medicaid later.) Under existing law, the federal government would have paid 100 percent of the medical costs of newly eligible Medicaid enrollees in 2014 to 2016 and 95 percent in 2017. This analysis assumes that the full impact of Medicaid expansion is felt in three years.

As seen in Table 1, because North Carolina did not expand Medicaid in 2014, the state has lost an estimated $2.7 billion in federal funds in 2014 and will lose another $3.2 billion in 2015, compared to a scenario in which Medicaid was expanded in 2014. The level rises under the assumption that expansions take time to fully ramp up, as experienced in prior Medicaid expansions and as expected by other analysts such as the Congressional Budget Office.

Because North Carolina has not gained these additional federal funds, about 23,000 jobs were not created in 2014 and 29,000 jobs in 2015. (Note: the job levels are the difference in levels estimated with and without Medicaid expansion in each year. They are not cumulative. The number of jobs lost in 2015 is 6,000 more than the number in 2014.) North Carolina's seasonally adjusted unemployment rate in August 2014 was 6.8 percent, above the national average of 6.1 percent.[23] About 315,000 North Carolinians were unemployed in August 2014; the number of unemployed could have been much smaller if Medicaid had been expanded, so the August unemployment rate might have been closer to 6.3 percent if there was a Medicaid expansion. As the national economy

Table 1. State-level Losses in Federal Funding, Employment, Economic Activity and Tax Revenue Because North Carolina Did Not Expand Medicaid in 2014 (Compared to Levels If Medicaid Had Been Expanded).

Category	2014	2015
Federal Funding Lost (mil $)	$2,730	$3,292
Total Jobs Not Created	23,518	29,113
State Gross Product Lost (mil $)	$1,692	$2,116
Business Activity Lost (mil $)	$2,684	$3,340
State Tax Revenue Lost (mil $)	$99	$129
County Tax Revenue Lost (mil $)	$17	$23

All dollars are in constant 2014 dollars

picked up over the past year, North Carolina's unemployment rate has been falling, but employment gains could have been even stronger.

Statewide, North Carolina's gross state product was lower by an estimated $1.7 billion in 2014 and $2.1 billion in 2015 than it would have been with Medicaid expansion. Expressed in terms of potential business activity, North Carolina lost $2.6 billion in 2014 and is losing $3.3 billion in 2015. (Note: all financial estimates are in constant 2014 dollars, adjusted for inflation.) Given this reduction in the state's economy, state and county tax revenues are also lower than under a Medicaid expansion.

Because Medicaid expansion fuels economic and employment growth, it would generate greater state and county revenues, without assuming any changes in current tax rates. Although many health care facilities (particularly hospitals) are nonprofit and do not directly pay taxes, they purchase goods from other businesses that pay taxes and employ staff who also pay taxes, including sales and property taxes. In 2014, total state revenue was lower by $99 million and is expected to be $129 million lower in 2015 because Medicaid was not expanded in 2014, compared to a scenario in which an expansion was adopted. Statewide, county tax revenues are $17 million lower in 2014 and $23 million lower in 2015. These losses will continue to mount if Medicaid is not expanded.

Table 2 illustrates some of these data for five counties and the rest of the state. (Appendix Table A-1 includes estimates for every county). For example, because Medicaid was not expanded from the beginning of 2014:

- There are about 1,700 fewer jobs in Guilford County in 2014 than there would have been if Medicaid had expanded.
- Gross county product (total value of the county economy) is $236 million lower in Mecklenburg County than with Medicaid expansion.
- Buncombe County has $92 million less in business activity in 2014, compared to levels with Medicaid expansion.
- Wake County is losing $2.7 million in potential county tax revenues.

Table 2. Examples of Economic and Employment Losses in Selected North Carolina Counties Because Medicaid Was Not Expanded in 2014 (Compared to Levels If Medicaid Expanded)

County	Category	2014	2015
Buncombe	Total Jobs Not Created	807	1,004
	Gross County Product Lost (mil $)	$60	$75
	County Business Activity Lost (mil $)	$92	$115
	County Tax Revenue Lost (thou $)	$575	$775
Guilford	Total Jobs Not Created	1,762	2,156
	Gross County Product Lost (mil $)	$156	$193
	County Business Activity Lost (mil $)	$252	$310
	County Tax Revenue Lost (thou $)	$1,255	$1,665
Mecklenburg	Total Jobs Not Created	2,592	3,155
	Gross County Product Lost (mil $)	$236	$294
	County Business Activity Lost (mil $)	$372	$461
	County Tax Revenue Lost (thou $)	$2,262	$2,905
Pitt	Total Jobs Not Created	322	401
	Gross County Product Lost (mil $)	$25	$31
	County Business Activity Lost (mil $)	$40	$50
	County Tax Revenue Lost (thou $)	$272	$378
Wake	Total Jobs Not Created	2,508	3,199
	Gross County Product Lost (mil $)	$232	$302
	County Business Activity Lost (mil $)	$364	$469
	County Tax Revenue Lost (thou $)	$2,677	$3,636
All other counties	Total Jobs Not Created	15,527	19,199
	Gross County Product Lost (mil $)	$983	$1,221
	County Business Activity Lost (mil $)	$1,564	$1,935
	County Tax Revenue Lost (thou $)	$10,100	$13,686

All dollars are in constant 2014 dollars. County tax revenues are in thousands of dollars. For example, the level of "$1,255 thousand" in Guilford County is the same as "$1.255 million".

Because Medicaid was not expanded in 2014, North Carolina has already lost billions in federal funding, which has led to lower employment, less economic activity and lower tax revenues across the state, than if Medicaid was expanded in 2014.

What Would Be the Effects of Not Expanding Medicaid Beginning in 2016?

Medicaid expansion could be approved in the next legislative session in early 2015. An expansion could be approved and begin in 2016. This report assumes that the Medicaid expansion begins in 2016 and enrollment continues to grow in 2017. About 319,000 more adults would enroll in Medicaid in 2016 and about 159,000 more in 2017, for a total of 478,000. After that period, enrollment would stabilize, rising or falling slightly depending on economic conditions. The 100 percent federal matching rate only applies in 2016, however, and would decline to 95 percent in

Table 3. State-level Losses in Federal Funding, Employment, Economic Activity and Tax Revenue If North Carolina Does Not Expand Medicaid by 2016 (Compared to Levels If Medicaid Is Expanded).

Category	2016	2017	2018	2019	2020	2016-20
Federal Funding Lost (mil $)	$2,677	$4,131	$4,418	$4,725	$5,054	$21,005
Total Jobs Not Created	22,170	36,245	38,965	40,886	43,314	n/a
State Gross Product Lost (mil $)	$1,622	$2,688	$2,930	$3,114	$3,335	$13,689
Business Activity Lost (mil $)	$2,553	$4,231	$4,610	$4,889	$5,223	$21,507
State Tax Revenue Lost (mil $)	$94	$161	$184	$202	$221	$862
County Tax Revenue Lost (mil $)	$16	$28	$34	$39	$44	$161

All dollars are in constant 2014 dollars.

2017. Analyses estimate the effects of not expanding Medicaid, compared to adopting an expansion in 2016:

- If North Carolina does not expand Medicaid by 2016, it will lose an estimated $2.7 billion in federal revenue in 2016 and $4.1 billion in 2017, compared to the amounts gained with an expansion (Table 3). These levels would continue to rise and reach $5.0 billion in lost federal funding by 2020. In total, North Carolina would lose $21 billion in federal funds from 2016 to 2020.

- Not expanding Medicaid by 2016 would cost the state more than 22,000 jobs in 2016 and 36,000 in 2017. By 2020, 43,000 fewer jobs would have been created. (Estimates of job not created are the number of jobs lost in each year compared to the number that would exist had Medicaid been expanded. The job losses are not cumulative, so they are not summed over the 2016 to 2020 period.) Medicaid expansion could substantially reduce unemployment in North Carolina, which is currently above the national average.

- North Carolina's gross state product would be $1.6 billion lower in 2016 and $2.7 billion less in 2017 than it would have been had Medicaid been expanded. Between 2016 and 2020, the state's cumulative gross product would be $13.7 billion lower.

- Total business activity would be $2.6 billion less in 2016 and $4.2 billion lower in 2017. Over the total 2016 to 2020 period, the amount of potential business activity lost would exceed $21 billion.

- State revenues would be $94 million lower in 2016 and about $161 million lower in 2017 because of reduced economic activity in North Carolina. Cumulative state revenues would be $862 million lower over the 2016-2020 period.

- County tax revenues would be $16 million lower statewide in 2016 and $28 million lower in 2017. From 2016 to 2020, cumulative county tax revenues would be reduced by $161 million, compared to amounts collected if Medicaid is expanded in 2016.

Under the ACA, the federal matching rate for newly eligible enrollees is 100 percent only in 2016, then falls to 95 percent in 2017, 94 percent in 2018, 93 percent in 2019 and 90 percent in 2020. Because of the decline in federal contributions, growth in the amount of federal funding flowing into North Carolina to cover the costs of eligibility expansions slows after 2016 and the amount the state contributes must rise.

Employment and Economic Impacts by County. Table 4 presents estimates of the losses in five North Carolina counties that would result from not expanding Medicaid in 2016 (compared to the scenario in which Medicaid expands). Data for every North Carolina county, including estimated growth in Medicaid enrollment, are in Appendix Tables A-2 and A-3. Examples include the following:

- In Mecklenburg County, not expanding Medicaid leads to 2,400 fewer jobs created in 2016 and 4,500 fewer in 2020. Pitt County would have about 300 fewer jobs in 2016 and 600 less in 2020, compared to the number that would be created if Medicaid expanded.

- County gross product in Guilford County would be $149 million lower in 2016 and the cumulative reduction would be $1.2 billion from 2016 to 2020.

- In Buncombe County, the cumulative business activity lost would be $745 million from 2016 to 2020.

- Wake County's tax revenue would be reduced by $2.5 million in 2016 and the county would lose $25 million over the 2016 to 2020 period.

Appendix Table A-2 also provides estimates of the number of people who would not gain Medicaid coverage in each county in 2016 and 2017.

Figures 1 and 2 illustrate the overall statewide distribution of employment changes due to Medicaid expansion as county-specific maps. Figure 1 illustrates the number of jobs that would not be created in 2020 if Medicaid is not expanded. Not surprisingly, the counties with the largest impact in terms of the number of jobs are North Carolina's largest counties.

- Durham, Wake, Mecklenburg, Guilford, Forsyth, Buncombe and New Hanover Counties would each have more than 1,000 fewer jobs created in 2020 if Medicaid is not expanded. Durham County alone would have over 5,000 fewer jobs in the absence of a Medicaid expansion.

- But reductions in the number of jobs created would be felt across all counties. Thirteen counties would have 500 to 999 fewer jobs, 42 would have 100 to 499 fewer jobs and the remaining 38 counties (generally very small counties) would have 3 to 99 fewer jobs.

Figure 2 illustrates these data as a percentage of the expected total number of jobs in 2020 in each county. That is, this indicates the impact in each county, relative to the pool of total jobs in each county.

Figure 1. Map of the Number of Jobs Not Created in Each County by 2020 If Medicaid Is Not Expanded (Ratio of Jobs Not Created Due to Medicaid Expansion Over Total Jobs in the County)

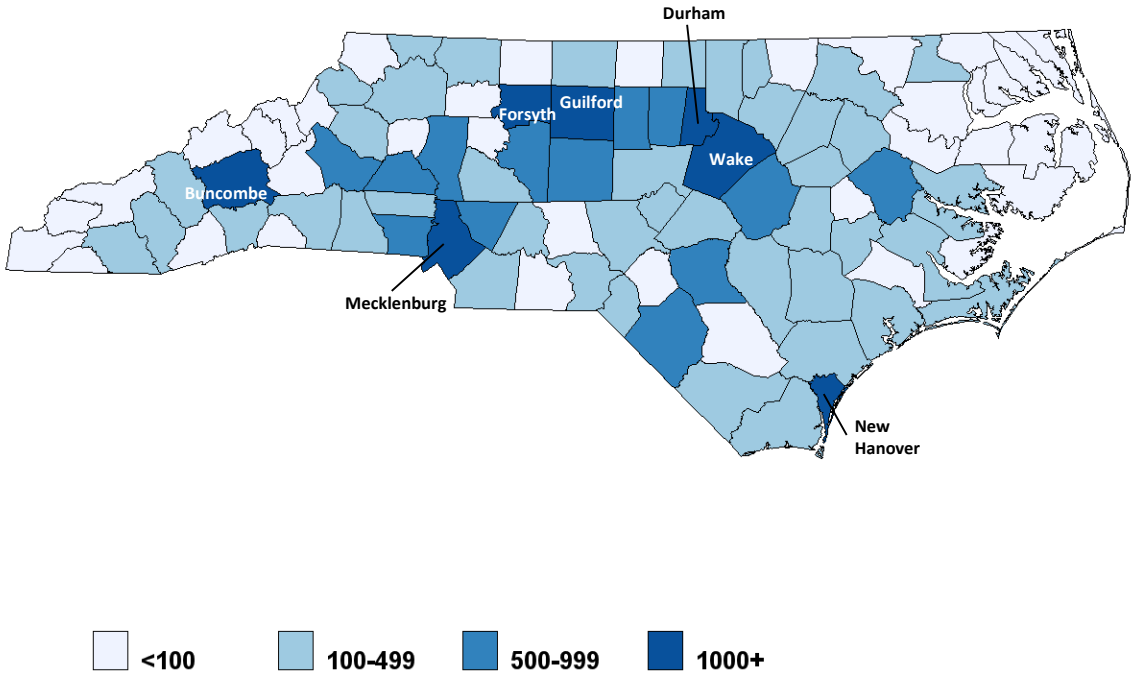
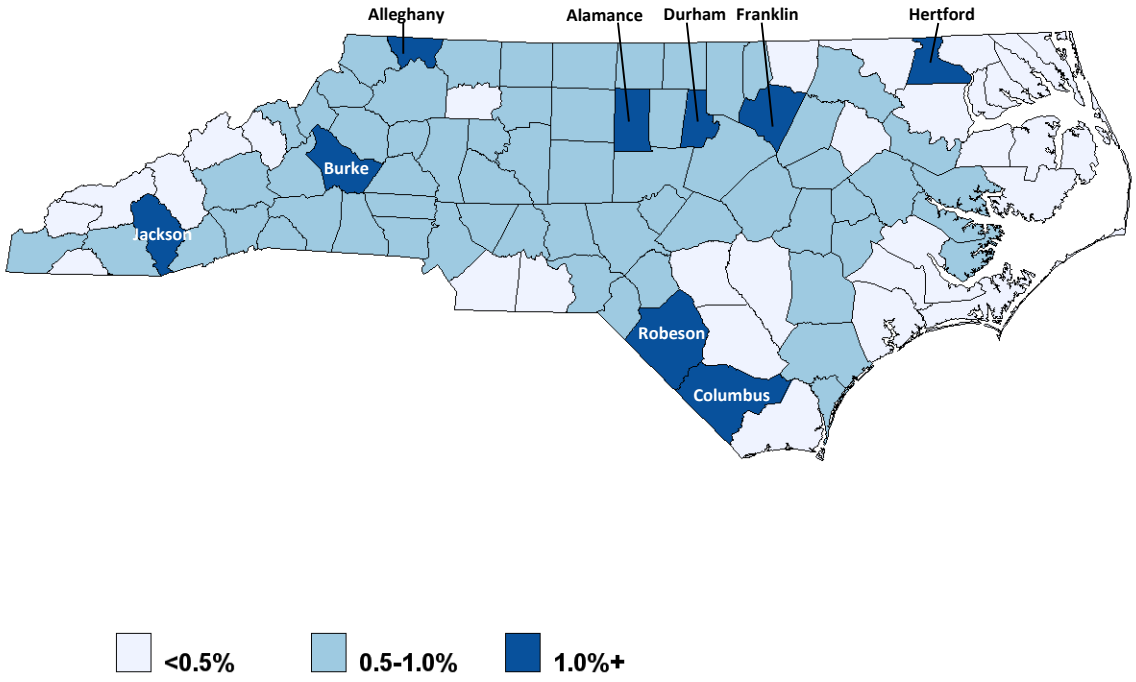


Figure 2. Map of the Percent of Jobs Not Created in Each County by 2020 If Medicaid Is Not Expanded (Ratio of Jobs Not Created Due to Medicaid Expansion Over Total Jobs in the County)



- Alleghany County, a small county in the northwestern corner of the state, has the largest percentage of jobs affected; about 2 percent fewer jobs would exist in 2020 if Medicaid is not expanded. (Sparta is the county seat of Alleghany County.)

- The other eight counties in which the relative impact is greater or equal to 1 percent of the total jobs in the county are: Durham, Jackson, Hertford, Robeson, Franklin, Columbus, Alamance and Burke Counties. As seen in Figure 2, these are broadly distributed across the state.

- In addition, 60 counties would have between 0.5 and 0.99 percent fewer jobs created by 2020 and 31 counties would have between 0.1 and 0.49 percent fewer jobs created.

While the degree of the employment impact varies across the state, it is important to note that the absence of a Medicaid expansion leads to fewer jobs being created in every North Carolina county, large or small, west or east, north or south.

Effects in Rural and Urban Counties. While some might suspect that urban counties are the main beneficiaries of a Medicaid expansion, in reality the employment effects are similar for rural and urban areas. We used criteria for rural counties adopted by the North Carolina Rural Center.[24] Fifteen counties are classified as urban: Alamance, Buncombe, Cabarrus, Catawba, Cumberland, Davidson, Durham, Forsyth, Gaston, Guilford, Mecklenburg, New Hanover, Orange, Rowan and Wake Counties. The remaining 85 counties are classified as rural.

- In 2020, about 15,400 fewer jobs would be created in rural counties, equivalent to about 0.7 percent of the total number of jobs in those areas, if Medicaid is not expanded by 2016.

- About 27,800 jobs would be lost in urban counties, also equivalent to about 0.7 percent of the total jobs in urban areas, in the absence of Medicaid expansion.

A decision to not expand Medicaid depresses employment in both rural and urban areas of the state. While the number of jobs affected is higher in urban counties, this is because more people in those counties. As a percent of total jobs affected, rural and urban counties are similarly undercut.

Employment Effects by Sector. Since Medicaid is a health insurance program, one might imagine that only health care jobs are affected by the decision to expand. This is not the case. While the initial, direct effects are in health care, as funds flow from the health care sector through the rest of state and county economies, most employment sectors are affected. Table 5 summarizes the employment effects statewide of not expanding Medicaid beginning in 2016 by industry sector.

In total, declining Medicaid expansion means that about 22,000 potential jobs would not be created in 2016 and even more would be lost in subsequent years. About half of the jobs lost are in the health care sector: there would be almost 10,000 fewer ambulatory health jobs in 2016 and almost 2,700 fewer hospital jobs. Many North Carolina hospitals have been struggling in the past year

Table 5. Estimated Jobs Not Created in North Carolina by Industry Sector if Medicaid is Not Expanded by 2016 (Compared to Levels If Medicaid Is Expanded)

Industry Sector	2016	2017	2018	2019	2020
Ambulatory health care services	9,849	15,650	16,385	17,129	18,339
Hospitals	2,675	4,243	4,438	4,634	4,954
Construction	1,712	3,473	4,377	4,806	5,017
Retail & Wholesale trade	1,412	2,288	2,439	2,523	2,623
Food services and drinking places	484	833	957	1,062	1,175
Professional, scientific, and technical services	597	996	1,093	1,159	1,233
Social assistance	268	443	487	527	578
State & Local	1,891	3,125	3,413	3,623	3,862
All other sectors	3,282	5,195	5,375	5,421	5,535
Total	**22,170**	**36,245**	**38,964**	**40,886**	**43,314**

due to changes in Medicare or Medicaid hospital payment policies; their inability to balance these losses with increased Medicaid revenue makes it more difficult to support their staff. The health care sector is a key sector of North Carolina's economy, paying for more than 10% of total wages in North Carolina, indicating that it accounts for over 10% of total consumer spending. But almost half of the 22,000 jobs not created would be in other sectors, but they are more broadly distributed, such as jobs in the construction, retail and wholesale, real estate, professional/technical/scientific, food and beverage, social assistance and state/local sectors. By 2017, potential job losses would rise to 36,000 and would continue to climb to 43,000 by 2020.

What Are the Budgetary Effects of Expanding Medicaid by 2016?

To state policy officials, a critical issue is the cost or savings related to a major policy change. Table 6 examines state-level costs and how they are offset by increased state revenues as well as by potentially offsetting health savings if Medicaid is expanded by 2016.

The first issue is the amount the state must pay for its share of Medicaid costs. In 2016 these costs are very low because the federal government pays 100 percent of the costs for those newly eligible. Small initial costs are expected because the Medicaid expansion would attract some more applicants who were eligible under prior criteria (and thus are not eligible for the 100 percent

Table 6. State-Level Estimates of Direct Costs of Expanding Medicaid in 2016, State Revenues and Potential Offsetting Health Savings: Net Impact on the State Budget

	2016	2017	2018	2019	2020	2016-2020
State Medicaid Match Cost (mil $)	$38.7	$302.0	$362.4	$422.8	$604.0	$1,729.8
State Tax Revenues Gained (mil $)	-$94.1	-$161.5	-$184.0	-$201.9	-$221.0	-$862.5
Potential State Health Savings						
Uncompensated Hospital (mil $)	-$31.2	-$49.7	-$52.9	-$56.3	-$60.0	*-$250.1*
State Inpatient Psychiatric (mil $)	*-$9.9*	*-$15.5*	*-$16.1*	*-$16.7*	*-$17.4*	*-$75.5*
Community Mental Health (mil $)	*-$101.8*	*-$166.1*	*-$180.7*	*-$196.6*	*-$213.9*	*-$859.2*
Subtotal, Potential Health Savings (mil $)	-$143.0	-$231.3	-$249.7	-$269.6	-$291.3	-$1,184.9
Potential Net State Costs/Savings (mil $)	**-$198.3**	**-$90.8**	**-$71.3**	**-$48.7**	**$91.7**	**-$317.5**
Federal Revenue Gained (mil $)	**$2,676.7**	**$4,131.1**	**$4,418.2**	**$4,725.4**	**$5,053.9**	**$21,005.2**

Note: In the state-level rows, positive numbers mean a Medicaid expansion increases state costs, while negative numbers mean an expansion reduces state budget costs.

matching rate). In 2017 and later years, state costs would grow as the matching rate for those newly eligible declines to 95 percent in 2017, then to 90 percent by 2020. Over the five year period 2016 to 2020, the state share of Medicaid costs is estimated at $1.7 billion.

About half of that amount, however, would be offset by increased state tax revenues which total $863 million from 2016 to 2020, as discussed earlier. These revenue increases reduce the net impact on the state budget.

There are also potential savings for the state through reduced health care expenses currently borne for uninsured people who would gain insurance if Medicaid was expanded. Together, the analyses indicate that North Carolina would have a net potential budget savings of $198 million in 2016 and a cumulative budget savings of $318 million from 2016 to 2020, although there would be a net cost of $92 million in 2020, when the matching rate finally reaches the 90 percent level.

These budget trends are based on historical budget patterns in North Carolina. The state has been examining changes to its Medicaid program to help reduce cost growth, such as through the use of accountable care organizations or other approaches. If such efforts are successful, then the net cost in 2020 could be eliminated. Even if the state has to bear some additional costs for a Medicaid expansion by 2020, however, it is important to recognize that this is a very small cost relative to the $21 billion in increased federal funds that will flow into North Carolina with a Medicaid expansion from 2016 to 2020 and the total economic impact.

Hospitals provide uncompensated care for uninsured patients; that is they provide care for many needy patients who are uninsured and unable to pay their bills, thereby losing money on their care. A direct savings for the state occurs when care is provided by state-owned hospitals (University of North Carolina Hospital, Caldwell Memorial Hospital, Chatham Hospital, High Point Regional Health and Rex Hospital).[25] About one-third of the uncompensated care costs could be avoided with a Medicaid eligibility expansion. Rather than generating uncompensated care costs, many low-income patients care would instead be paid by Medicaid. This could generate about $250 million in state budget savings. (Many other locally- or privately-owned hospitals also have uncompensated care and could gain revenue and reduce uncompensated care if Medicaid expands, but to be analytically conservative, their reductions in uncompensated care were not counted as state savings). Two other areas of potential savings relate to mental health care. North Carolina supports a variety of mental health programs and they benefit many who are uninsured. Some of these costs could potentially be averted if more adults are covered by Medicaid. One area is community mental health services, which are generally covered by Medicaid. The other is a specific type of inpatient care. North Carolina also funds some inpatient psychiatric care at acute care hospitals (also called "three way contracts") which could be reduced with a Medicaid expansion. (Medicaid does not pay for inpatient care at psychiatric hospitals, however.)

These health savings could potentially offset some of the additional costs of a Medicaid expansion. These are not automatic savings. For example, if Medicaid expansion reduces costs for the uninsured, agencies may instead use those savings to provide additional services. For example, mental health services are often underfunded and savings might be used to increase care for other patients.

County-Level Effects. Counties in North Carolina do not cover any of the costs of Medicaid medical benefits, although they would have to pay for a portion of increased administrative costs.

Estimates of the additional administrative costs for Medicaid expansion are not available, but they should be quite small, relative to the costs of benefits borne by the federal government and state.

Table 7 reviews additional county revenues expected in several counties and potential health savings, described above, but at the county level. The hospital uncompensated care savings and community mental health savings are estimates of the level of potential savings that will occur within each county, but this does not mean that the county or local governments will have budgetary savings.

The great majority of North Carolina hospitals are private nonprofit hospitals that provide uncompensated care to uninsured patients using their own resources (the main exception to private status is state-owned hospitals that are part of the UNC Healthcare System). Savings associated with reductions in uncompensated care costs can enable these local hospitals to improve services, modernize systems (e.g., improve health information technology systems), support adequate staffing and strengthen their financial well-being, yielding a broader community benefit. Collectively, North Carolina's hospitals could reduce their uncompensated care costs by $3.5 billion from 2016 to 2020. As noted earlier, North Carolina hospitals have struggled recently in part due to changes in Medicare and Medicaid reimbursement policies. For example, financial data from six major North Carolina hospital systems (Cone Health, Duke University, FirstHealth, Mission Health, UNC, and Wake Forest Baptist) indicated that net operating margins (the difference between operating revenues and operating expenses) fell for each system between 2012 and 2013; this was equivalent to a reduction of more than $300 million in net operating income in one year.[26] Because Medicaid expansions enable hospitals to lower their uncompensated care costs, this would help them rebalance their finances, letting them serve their communities and patients and bolster employment.

The community mental health savings are primarily at the state-level. As noted before, all health savings are potential savings and are not automatic. (Data for all counties are shown in the Appendix Tables A-3 and A-4. Some counties have no hospitals and therefore have no uncompensated care costs.) The size of the potential county savings is, of course, related to the population and economy of each county.

- Wake County could gain $25 million in additional county revenue from 2016 to 2020 if Medicaid is expanded. There are potential savings of about $296 million less in uncompensated hospital costs and $51 million in community mental health costs in the five year period.

- Guilford County would have smaller revenue increases and potential health savings, but they still amount to more than $11 million more in county tax revenue from 2016 to 2020, almost $200 million in lower uncompensated hospital costs and $37 million in reduced community mental health costs.

Table 7. Estimated County Revenue Increases and Potential Health Savings in Selected Counties If Medicaid Is Expanded by 2016 (Compared to Levels Without an Expansion)

County	Category	2016	2017	2018	2019	2020	2016-20
Buncombe	County Tax Revenue Increases (thou $)	$540	$947	$1,134	$1,318	$1,520	$5,460
	Uncompensated Hospital Savings (thou $)	$4,998	$7,954	$8,463	$9,002	$9,598	$40,014
	Community Mental Health Savings (thou $)	$2,901	$4,734	$5,150	$5,602	$6,095	$24,480
Guilford	County Tax Revenue Increases (thou $)	$1,172	$2,035	$2,411	$2,782	$3,184	$11,583
	Uncompensated Hospital Savings (thou $)	$24,855	$39,554	$42,089	$44,767	$47,729	$198,994
	Community Mental Health Savings (thou $)	$4,417	$7,208	$7,841	$8,530	$9,280	$37,277
Mecklenburg	County Tax Revenue Increases (thou $)	$2,050	$3,449	$3,959	$4,437	$4,951	$18,845
	Uncompensated Hospital Savings (thou $)	$48,731	$77,548	$82,518	$87,769	$93,578	$390,145
	Community Mental Health Savings (thou $)	$6,959	$11,356	$12,354	$13,440	$14,622	$58,732
Pitt	County Tax Revenue Increases (thou $)	$258	$460	$559	$655	$761	$2,693
	Uncompensated Hospital Savings (thou $)	$12,820	$20,401	$21,708	$23,090	$24,618	$102,636
	Community Mental Health Savings (thou $)	$2,201	$3,591	$3,907	$4,250	$4,624	$18,574
Wake	County Tax Revenue Increases (thou $)	$2,494	$4,399	$5,284	$6,105	$6,970	$25,252
	Uncompensated Hospital Savings (thou $)	$36,991	$58,866	$62,639	$66,625	$71,034	$296,156
	Community Mental Health Savings (thou $)	$6,040	$9,857	$10,723	$11,666	$12,691	$50,978
All other counties	County Tax Revenue Increases (thou $)	$9,692	$16,864	$20,231	$23,433	$26,889	$96,939
	Uncompensated Hospital Savings (thou $)	$302,545	$481,458	$512,313	$544,913	$580,974	$2,422,202
	Community Mental Health Savings (thou $)	$79,288	$129,385	$140,757	$153,128	$166,587	$669,145

Conclusion

Economic and employment conditions in North Carolina counties have already been damaged because the state did not expand Medicaid when it was first possible in 2014. The state has lost about $6 billion in federal funds in 2014 and 2015 that it would have gained had Medicaid been expanded. This results in 23,000 fewer jobs being created in 2014 and 29,000 fewer in 2015. Counties across the state had fewer jobs and diminished economic growth.

North Carolina has another opportunity to expand Medicaid in the spring 2015 legislative session. Declining expansion yet again will continue the mounting losses. About $21 billion in potential federal revenue will be lost from 2016 to 2020. This loss would mean that by 2020, 43,000 fewer jobs will have been created and the total state economy would be significantly smaller than it could be, as well as almost half a million people will not gain health insurance coverage. If Medicaid is expanded, over the 2016 to 2020 period the state budget would have a net savings of $318 million and counties would gain more than $160 million in additional revenue due to the additional economic and job growth.

Expanding Medicaid would strengthen the economy and bolster job growth in counties all across North Carolina, as well as improve health access for almost half a million North Carolinians.

Appendix Tables

County-Specific Tables about the Effects of Not Expanding Medicaid in North Carolina

Table A-1. Estimates of Losses in North Carolina Counties in 2014 and 2015 Because Medicaid Was Not Expanded in 2014 (Compared to Levels If Medicaid Was Expanded).

	Jobs Not Created		Gross County Product Lost (mil. 2014 $)		Business Activity Lost (mil 2014 $)		Tax Revenue Lost (thou 2014 $)	
County	2014	2015	2014	2015	2014	2015	2014	2015
Alamance	491	613	$35.7	$44.6	$55.2	$68.7	$362.3	$495.0
Alexander	47	58	$1.7	$2.2	$2.8	$3.4	$32.5	$45.5
Alleghany	69	86	$1.8	$2.3	$2.8	$3.5	$12.4	$19.6
Anson	27	33	$1.7	$2.1	$2.7	$3.3	$12.9	$18.0
Ashe	46	62	$2.8	$3.6	$4.3	$5.6	$30.7	$45.7
Avery	32	42	$1.6	$2.1	$2.5	$3.2	$15.2	$22.8
Beaufort	83	102	$4.5	$5.5	$7.8	$9.4	$35.4	$47.6
Bertie	17	21	$1.2	$1.5	$1.9	$2.3	$14.2	$19.5
Bladen	38	47	$2.5	$3.1	$4.9	$5.9	$20.6	$28.0
Brunswick	132	168	$9.2	$11.7	$13.8	$17.5	$96.6	$134.2
Buncombe	807	1,004	$59.9	$74.6	$92.5	$114.7	$574.7	$774.7
Burke	288	354	$17.1	$20.8	$26.4	$32.0	$188.8	$256.8
Cabarrus	333	432	$21.3	$27.7	$33.1	$42.9	$309.9	$471.8
Caldwell	120	149	$7.7	$9.5	$11.9	$14.7	$80.2	$111.4
Camden	2	3	$0.1	$0.2	$0.2	$0.3	$4.8	$6.5
Carteret	81	105	$5.5	$7.0	$8.3	$10.6	$64.7	$88.4
Caswell	22	29	$1.1	$1.4	$1.8	$2.3	$34.8	$48.3
Catawba	339	413	$27.1	$33.3	$42.1	$51.5	$262.9	$340.7
Chatham	136	178	$5.9	$7.7	$9.7	$12.6	$222.4	$305.8
Cherokee	45	56	$2.4	$3.0	$3.6	$4.5	$17.7	$25.9
Chowan	16	20	$1.0	$1.3	$1.6	$2.0	$9.0	$12.7
Clay	9	11	$0.5	$0.6	$0.7	$0.9	$5.7	$8.5
Cleveland	238	295	$14.9	$18.6	$23.5	$29.1	$132.0	$184.4
Columbus	143	175	$7.3	$8.9	$11.7	$14.1	$59.0	$81.5
Craven	102	124	$7.7	$9.5	$11.5	$14.1	$64.2	$84.6
Cumberland	428	520	$30.3	$37.5	$45.4	$55.9	$197.9	$270.5
Currituck	6	8	$0.4	$0.6	$0.6	$0.8	$0.3	$3.9
Dare	31	39	$2.4	$3.1	$3.5	$4.5	$17.4	$24.8
Davidson	342	435	$16.2	$20.6	$26.0	$32.9	$243.5	$348.2
Davie	48	63	$2.9	$3.8	$4.5	$5.9	$80.6	$114.0
Duplin	80	100	$4.6	$5.7	$7.4	$9.2	$47.9	$67.0
Durham	3,021	3,568	$135.8	$158.9	$225.7	$262.8	$732.8	$818.9
Edgecombe	63	79	$4.3	$5.5	$6.9	$8.7	$38.3	$56.2
Forsyth	1,139	1,392	$96.0	$118.8	$152.5	$187.4	$854.9	$1,123.6
Franklin	143	186	$6.6	$8.4	$10.5	$13.4	$91.2	$144.2
Gaston	511	640	$36.5	$45.5	$57.2	$70.9	$387.2	$546.1
Gates	3	4	$0.2	$0.3	$0.4	$0.5	$2.4	$3.6
Graham	6	9	$0.4	$0.6	$0.6	$0.9	$4.0	$6.7
Granville	85	106	$6.2	$7.7	$11.1	$13.7	$77.7	$112.5
Greene	32	41	$1.8	$2.2	$2.9	$3.6	$22.0	$34.6
Guilford	1,762	2,156	$155.5	$192.9	$251.6	$309.9	$1,255.0	$1,664.9
Halifax	83	101	$5.5	$6.7	$8.4	$10.2	$43.8	$58.8
Harnett	185	243	$10.1	$13.1	$15.4	$20.0	$163.0	$245.5
Haywood	58	75	$4.2	$5.3	$6.6	$8.3	$77.4	$108.4
Henderson	200	253	$13.3	$16.7	$20.7	$25.9	$170.9	$233.3
Hertford	85	103	$3.4	$4.2	$5.3	$6.5	$19.9	$28.5
Hoke	45	58	$2.4	$3.0	$4.1	$5.1	$80.4	$106.8
Hyde	2	2	$0.1	$0.2	$0.2	$0.3	$1.2	$1.7
Iredell	357	451	$27.0	$34.4	$42.2	$53.8	$268.3	$386.9
Jackson	162	202	$8.3	$10.4	$12.8	$16.0	$67.5	$94.2
Johnston	375	495	$21.7	$28.6	$34.3	$45.0	$306.5	$473.6
Jones	6	9	$0.7	$0.8	$1.0	$1.3	$14.5	$20.5

Table A-1 (continued)

County	Jobs Not Created		Gross County Product Lost (mil. 2014 $)		Business Activity Lost (mil 2014 $)		Tax Revenue Lost (thou 2014 $)	
	2014	2015	2014	2015	2014	2015	2014	2015
Lee	186	228	$13.8	$16.9	$23.8	$28.9	$101.2	$136.4
Lenoir	124	154	$9.0	$11.4	$14.2	$17.9	$59.0	$86.2
Lincoln	78	103	$5.6	$7.3	$9.2	$12.0	$106.7	$151.6
McDowell	58	72	$3.8	$4.8	$6.7	$8.3	$35.0	$47.5
Macon	35	47	$2.1	$2.7	$3.3	$4.2	$20.5	$30.6
Madison	30	38	$1.9	$2.3	$3.1	$3.8	$18.9	$27.2
Martin	45	56	$3.0	$3.7	$4.6	$5.6	$25.3	$34.1
Mecklenburg	2,592	3,155	$235.7	$293.9	$372.3	$461.3	$2,261.6	$2,904.6
Mitchell	29	36	$1.7	$2.2	$2.7	$3.3	$12.9	$17.5
Montgomery	42	52	$2.1	$2.7	$3.4	$4.3	$26.2	$35.8
Moore	264	327	$19.9	$24.8	$31.0	$38.4	$206.0	$274.3
Nash	176	218	$13.4	$16.7	$21.7	$26.9	$116.4	$159.1
New Hanover	550	689	$42.1	$53.5	$65.0	$82.4	$432.8	$582.6
Northampton	11	14	$0.6	$0.8	$1.0	$1.3	$10.2	$14.8
Onslow	95	115	$6.4	$7.9	$9.5	$11.6	$35.7	$43.7
Orange	397	490	$31.8	$39.9	$49.4	$61.7	$628.3	$848.3
Pamlico	21	26	$0.9	$1.1	$1.4	$1.8	$11.6	$16.2
Pasquotank	46	56	$3.3	$4.0	$5.0	$6.1	$21.5	$29.1
Pender	67	86	$4.6	$5.8	$7.4	$9.3	$52.0	$75.2
Perquimans	6	7	$0.3	$0.3	$0.4	$0.5	$3.8	$5.3
Person	72	91	$4.5	$5.7	$7.0	$8.9	$57.2	$83.7
Pitt	322	401	$24.8	$31.2	$40.1	$50.1	$272.2	$377.6
Polk	26	33	$1.3	$1.6	$2.0	$2.5	$15.7	$22.3
Randolph	312	395	$20.7	$26.5	$32.9	$41.9	$254.0	$360.6
Richmond	82	100	$5.5	$6.8	$8.9	$10.8	$42.8	$58.8
Robeson	373	462	$21.8	$26.9	$34.0	$41.7	$179.3	$255.7
Rockingham	168	208	$9.9	$12.3	$15.7	$19.6	$110.6	$151.3
Rowan	223	234	$16.1	$17.6	$26.9	$29.5	$123.6	-$52.7
Rutherford	130	161	$7.8	$9.7	$12.0	$14.8	$68.1	$94.2
Sampson	58	72	$4.4	$5.5	$7.3	$9.1	$57.2	$79.0
Scotland	75	92	$5.0	$6.1	$8.0	$9.8	$36.2	$50.0
Stanly	122	155	$7.8	$9.9	$12.4	$15.6	$85.1	$123.6
Stokes	45	61	$2.4	$3.1	$3.8	$4.9	$89.9	$122.6
Surry	134	182	$9.6	$13.0	$15.4	$20.9	$129.8	$196.1
Swain	21	25	$0.9	$1.1	$1.4	$1.7	$7.0	$9.5
Transylvania	42	53	$2.6	$3.2	$4.0	$5.0	$27.7	$39.2
Tyrrell	1	2	$0.1	$0.1	$0.1	$0.2	$1.0	$1.5
Union	203	272	$14.2	$19.2	$25.2	$33.8	$244.2	$370.8
Vance	91	111	$6.5	$8.0	$10.0	$12.3	$62.7	$84.8
Wake	2,508	3,199	$232.4	$301.6	$363.6	$469.4	$2,677.4	$3,635.7
Warren	13	16	$0.9	$1.1	$1.5	$1.8	$11.4	$15.8
Washington	8	9	$0.4	$0.5	$0.6	$0.7	$2.8	$3.2
Watauga	172	215	$11.6	$14.5	$17.9	$22.3	$101.4	$138.5
Wayne	231	289	$16.4	$20.9	$25.8	$32.9	$140.4	$201.7
Wilkes	91	114	$6.3	$7.8	$9.8	$12.2	$77.9	$108.3
Wilson	167	210	$13.3	$16.8	$22.9	$28.8	$96.7	$138.5
Yadkin	32	42	$2.1	$2.8	$3.6	$4.7	$41.3	$60.5
Yancey	18	24	$1.0	$1.3	$1.5	$1.9	$11.8	$17.4

Table A-2. Estimated Number of People Who Would Not Get Medicaid Coverage and Number of Jobs Not Created if North Carolina Does Not Expand Medicaid by 2016 (Compared to Levels If Medicaid Expands).

	Number Who Would Not Gain Medicaid Coverage		Number of Jobs Not Created		
County	2016	2017	2016	2017	2020
State Total	**318,667**	**478,000**	**22,170**	**36,245**	**43,314**
Alamance	5,242	7,863	463	761	917
Alexander	1,190	1,785	44	72	84
Alleghany	513	769	67	109	133
Anson	840	1,260	25	41	49
Ashe	1,152	1,727	44	76	98
Avery	708	1,061	31	52	67
Beaufort	1,616	2,424	79	128	152
Bertie	613	919	17	27	33
Bladen	1,525	2,288	37	60	71
Brunswick	3,472	5,209	125	206	253
Buncombe	8,485	12,727	761	1,248	1,502
Burke	3,320	4,980	272	442	527
Cabarrus	5,166	7,750	311	520	641
Caldwell	2,631	3,946	114	187	226
Camden	223	334	2	4	4
Carteret	2,057	3,086	76	128	162
Caswell	688	1,033	21	36	44
Catawba	4,966	7,449	320	518	608
Chatham	1,846	2,769	128	217	270
Cherokee	932	1,398	43	70	86
Chowan	437	656	16	25	31
Clay	393	590	8	14	17
Cleveland	3,237	4,856	227	371	446
Columbus	2,020	3,030	137	222	266
Craven	2,876	4,313	98	158	191
Cumberland	9,276	13,914	411	664	802
Currituck	644	965	5	9	11
Dare	1,030	1,545	29	48	60
Davidson	4,966	7,449	323	537	656
Davie	1,105	1,658	45	75	91
Duplin	3,023	4,535	77	126	154
Durham	10,474	15,711	2,896	4,575	5,106
Edgecombe	1,914	2,871	60	99	120
Forsyth	12,809	19,214	1,074	1,741	2,058
Franklin	2,153	3,230	136	230	289
Gaston	6,823	10,235	481	793	973
Gates	318	477	3	5	6
Graham	307	461	6	11	14
Granville	1,672	2,509	80	131	157
Greene	802	1,203	29	50	64
Guilford	17,693	26,539	1,653	2,681	3,160
Halifax	1,748	2,622	79	128	152
Harnett	4,174	6,260	175	297	390
Haywood	1,719	2,579	54	92	115
Henderson	3,447	5,171	189	313	381
Hertford	827	1,240	82	133	158
Hoke	2,096	3,143	43	72	90
Hyde	219	328	2	3	4
Iredell	4,887	7,331	336	553	665
Jackson	1,659	2,488	154	252	305
Johnston	6,327	9,490	353	602	773
Jones	372	558	6	10	14

Table A-2 (continued)

County	Number Who Would Not Gain Medicaid Coverage 2016	2017	Number of Jobs Not Created 2016	2017	2020
Lee	2,329	3,493	177	286	338
Lenoir	2,272	3,408	117	193	234
Lincoln	2,262	3,393	73	124	156
McDowell	1,442	2,163	56	91	110
Macon	665	997	34	57	72
Madison	860	1,290	29	47	56
Martin	1,556	2,334	44	71	86
Mecklenburg	32,316	48,474	2,406	3,883	4,465
Mitchell	442	664	28	45	55
Montgomery	1,213	1,819	40	66	78
Moore	2,382	3,573	249	407	492
Nash	3,156	4,733	166	271	323
New Hanover	6,630	9,945	516	849	1,025
Northampton	675	1,012	11	18	22
Onslow	4,869	7,304	92	148	179
Orange	3,647	5,470	367	599	726
Pamlico	340	511	20	33	39
Pasquotank	1,197	1,796	44	71	85
Pender	1,851	2,777	64	107	133
Perquimans	398	597	5	9	11
Person	1,219	1,828	69	114	139
Pitt	6,577	9,865	302	496	612
Polk	611	917	25	41	50
Randolph	5,447	8,170	295	490	596
Richmond	1,858	2,787	78	126	152
Robeson	6,911	10,367	356	582	706
Rockingham	2,939	4,408	160	262	313
Rowan	4,868	7,302	217	355	425
Rutherford	2,417	3,626	124	203	244
Sampson	2,761	4,141	55	91	111
Scotland	1,309	1,964	71	116	138
Stanly	1,708	2,562	116	192	237
Stokes	1,295	1,943	43	73	92
Surry	2,854	4,281	126	219	286
Swain	555	833	20	32	37
Transylvania	997	1,495	40	66	82
Tyrrell	163	245	1	2	3
Union	4,848	7,271	190	328	421
Vance	1,748	2,622	86	140	168
Wake	22,578	33,867	2,320	3,876	4,780
Warren	759	1,139	12	20	24
Washington	409	613	7	12	15
Watauga	2,211	3,316	163	268	325
Wayne	4,597	6,896	220	361	443
Wilkes	2,814	4,220	87	143	173
Wilson	3,207	4,810	157	260	314
Yadkin	1,276	1,914	30	51	64
Yancey	596	894	17	29	37

Table A-3. Estimated Reductions in Gross County Product, County Business Activity and County Tax Revenues in 2016, 2017 and 2016-2020 If North Carolina Does Not Expand Medicaid by 2016 (Compared to Levels If Medicaid Expands).

	Reduction in Gross County Product (mil 2014 $)			Reduction in County Business Activity (mil 2014 $)			Reduction in County Tax Revenue (thou 2014 $)		
County	2016	2017	2016 - 2020	2016	2017	2016 - 2020	2016	2017	2016 - 2020
State Total	**$3,638.0**	**$4,704.6**	**$13,688.9**	**$4,569.3**	**$6,248.4**	**$21,506.7**	**$18,052**	**$30,171**	**$160,772**
Alamance	$34.4	$56.9	$290.3	$52.7	$87.4	$445.4	$343	$606	$3,506
Alexander	$1.7	$2.7	$13.8	$2.6	$4.4	$21.9	$31	$55	$306
Alleghany	$1.8	$2.9	$14.9	$2.7	$4.5	$22.8	$12	$24	$154
Anson	$1.6	$2.7	$13.4	$2.6	$4.2	$21.3	$12	$22	$123
Ashe	$2.7	$4.6	$23.5	$4.2	$7.0	$36.4	$29	$55	$340
Avery	$1.6	$2.7	$13.9	$2.4	$4.1	$21.3	$14	$27	$173
Beaufort	$4.4	$7.1	$35.5	$7.4	$12.0	$60.0	$33	$57	$322
Bertie	$1.2	$1.9	$9.6	$1.8	$2.9	$14.8	$14	$24	$139
Bladen	$2.4	$4.0	$19.9	$4.6	$7.5	$37.4	$19	$34	$193
Brunswick	$8.8	$14.8	$76.4	$13.1	$22.0	$113.7	$90	$161	$917
Buncombe	$57.7	$95.2	$485.7	$88.3	$146.1	$744.6	$540	$947	$5,460
Burke	$16.5	$26.8	$135.4	$25.3	$41.2	$207.4	$178	$313	$1,826
Cabarrus	$20.4	$34.4	$178.0	$31.3	$53.0	$274.5	$285	$513	$2,997
Caldwell	$7.4	$12.2	$62.3	$11.5	$18.9	$96.2	$77	$136	$789
Camden	$0.1	$0.2	$1.1	$0.2	$0.4	$1.9	$5	$8	$39
Carteret	$5.3	$8.8	$46.2	$7.9	$13.4	$69.9	$60	$106	$613
Caswell	$1.1	$1.8	$9.4	$1.8	$2.9	$14.9	$34	$59	$334
Catawba	$26.1	$42.8	$216.4	$40.2	$65.9	$332.3	$248	$422	$2,311
Chatham	$5.7	$9.6	$50.1	$9.3	$15.8	$81.9	$210	$369	$2,088
Cherokee	$2.3	$3.8	$19.4	$3.5	$5.7	$29.2	$17	$31	$193
Chowan	$1.0	$1.6	$8.3	$1.5	$2.5	$12.8	$9	$15	$91
Clay	$0.5	$0.8	$4.1	$0.7	$1.2	$6.0	$5	$10	$62
Cleveland	$14.4	$23.8	$120.7	$22.5	$37.2	$188.4	$124	$223	$1,311
Columbus	$7.1	$11.5	$57.6	$11.2	$18.2	$91.2	$56	$99	$584
Craven	$7.5	$12.3	$63.0	$11.0	$18.1	$92.9	$60	$104	$586
Cumberland	$29.4	$48.5	$248.9	$43.8	$72.1	$369.4	$183	$327	$1,902
Currituck	$0.4	$0.7	$3.4	$0.6	$1.0	$4.9	$0	$3	$7
Dare	$2.3	$3.9	$20.7	$3.4	$5.7	$30.0	$16	$30	$181
Davidson	$15.7	$26.1	$134.3	$24.9	$41.6	$213.2	$229	$414	$2,409
Davie	$2.8	$4.7	$24.0	$4.3	$7.3	$37.6	$76	$133	$741
Duplin	$4.5	$7.4	$37.7	$7.2	$11.8	$59.7	$45	$81	$479
Durham	$130.7	$205.7	$964.4	$215.4	$339.3	$1,594.9	$671	$1,020	$4,486
Edgecombe	$4.2	$7.0	$36.2	$6.6	$11.1	$57.2	$36	$68	$411
Forsyth	$92.4	$152.1	$773.2	$145.6	$239.5	$1,214.3	$806	$1,388	$7,787
Franklin	$6.4	$10.7	$55.2	$10.0	$16.9	$87.4	$87	$171	$1,119
Gaston	$35.1	$57.9	$296.1	$54.6	$90.1	$460.1	$364	$658	$3,973
Gates	$0.2	$0.4	$1.9	$0.4	$0.6	$3.1	$2	$4	$23
Graham	$0.4	$0.7	$3.8	$0.6	$1.1	$6.0	$4	$8	$54
Granville	$5.9	$9.8	$49.7	$10.4	$17.2	$87.0	$73	$135	$802
Greene	$1.7	$2.8	$14.5	$2.7	$4.5	$23.5	$21	$40	$269
Guilford	$149.1	$245.9	$1,250.2	$239.1	$393.7	$1,994.9	$1,172	$2,035	$11,583
Halifax	$5.3	$8.7	$43.6	$8.1	$13.2	$66.2	$41	$72	$404
Harnett	$9.7	$16.6	$87.8	$14.7	$25.2	$133.7	$152	$290	$1,863
Haywood	$4.1	$6.8	$35.1	$6.3	$10.6	$54.5	$73	$131	$767
Henderson	$12.9	$21.4	$109.0	$19.8	$32.9	$168.1	$161	$284	$1,612
Hertford	$3.4	$5.5	$27.8	$5.1	$8.4	$42.4	$19	$35	$212
Hoke	$2.3	$3.8	$19.7	$3.9	$6.5	$33.6	$76	$132	$762
Hyde	$0.1	$0.2	$1.2	$0.2	$0.4	$1.9	$1	$2	$13
Iredell	$26.0	$43.4	$222.5	$40.2	$67.4	$345.8	$250	$447	$2,584
Jackson	$8.0	$13.2	$67.4	$12.3	$20.3	$103.8	$65	$116	$668
Johnston	$20.9	$35.8	$188.6	$32.7	$56.2	$295.6	$290	$563	$3,603
Jones	$0.7	$1.1	$5.6	$1.0	$1.6	$8.4	$14	$25	$156

Table A-3 (continued)

County	Reduction in Gross County Product (mil 2014 $)			Reduction in County Business Activity (mil 2014 $)			Reduction in County Tax Revenue (thou 2014 $)		
	2016	2017	2016 - 2020	2016	2017	2016 - 2020	2016	2017	2016 - 2020
Lee	$13.3	$21.7	$109.1	$22.7	$37.0	$184.6	$95	$166	$941
Lenoir	$8.7	$14.5	$74.5	$13.6	$22.7	$116.8	$55	$102	$638
Lincoln	$5.3	$9.1	$47.5	$8.7	$14.9	$77.4	$100	$181	$1,046
McDowell	$3.7	$6.2	$31.4	$6.4	$10.6	$54.1	$33	$59	$328
Macon	$2.0	$3.4	$17.9	$3.2	$5.3	$27.7	$19	$37	$229
Madison	$1.8	$2.9	$14.6	$3.0	$4.8	$24.2	$18	$33	$196
Martin	$2.9	$4.7	$24.0	$4.4	$7.2	$36.4	$24	$42	$235
Mecklenburg	$223.1	$369.0	$1,868.9	$349.8	$578.0	$2,916.9	$2,050	$3,449	$18,845
Mitchell	$1.7	$2.8	$14.1	$2.6	$4.3	$21.7	$12	$22	$124
Montgomery	$2.1	$3.4	$17.3	$3.2	$5.4	$27.3	$25	$44	$251
Moore	$19.2	$31.7	$162.2	$29.7	$49.0	$250.8	$193	$335	$1,898
Nash	$12.9	$21.3	$108.0	$20.7	$34.2	$173.4	$110	$193	$1,109
New Hanover	$40.2	$67.5	$348.0	$61.7	$103.6	$533.3	$406	$711	$4,049
Northampton	$0.6	$1.1	$5.4	$1.0	$1.7	$8.6	$10	$18	$105
Onslow	$6.3	$10.3	$53.0	$9.2	$15.0	$77.3	$32	$52	$293
Orange	$30.0	$49.6	$255.1	$46.4	$76.9	$395.2	$590	$1,033	$5,799
Pamlico	$0.9	$1.4	$7.4	$1.4	$2.3	$11.6	$11	$20	$113
Pasquotank	$3.2	$5.2	$26.2	$4.8	$7.8	$39.2	$20	$35	$204
Pender	$4.4	$7.4	$38.2	$7.1	$11.8	$61.1	$49	$92	$545
Perquimans	$0.3	$0.4	$2.2	$0.4	$0.7	$3.3	$3	$6	$35
Person	$4.4	$7.3	$37.2	$6.7	$11.2	$57.2	$54	$101	$611
Pitt	$23.8	$39.5	$203.8	$38.2	$63.4	$326.8	$258	$460	$2,693
Polk	$1.3	$2.1	$10.7	$2.0	$3.2	$16.4	$15	$27	$154
Randolph	$20.0	$33.6	$172.7	$31.4	$52.9	$271.4	$240	$436	$2,577
Richmond	$5.4	$8.8	$44.5	$8.5	$13.9	$70.3	$40	$71	$417
Robeson	$21.1	$34.6	$176.3	$32.7	$53.7	$272.9	$170	$311	$1,900
Rockingham	$9.6	$15.8	$80.6	$15.1	$25.0	$126.9	$105	$185	$1,057
Rowan	$15.9	$26.3	$134.4	$26.2	$43.4	$220.7	$148	$263	$1,506
Rutherford	$7.6	$12.4	$63.1	$11.5	$19.0	$96.1	$65	$115	$670
Sampson	$4.3	$7.1	$36.6	$7.0	$11.6	$59.6	$54	$97	$559
Scotland	$4.8	$7.9	$39.7	$7.7	$12.5	$63.1	$34	$61	$355
Stanly	$7.6	$12.6	$64.6	$11.8	$19.8	$101.4	$80	$146	$873
Stokes	$2.3	$3.9	$20.2	$3.6	$6.1	$31.7	$86	$151	$849
Surry	$9.3	$16.2	$86.4	$14.7	$25.9	$137.7	$123	$234	$1,470
Swain	$0.9	$1.4	$7.2	$1.3	$2.2	$11.1	$7	$11	$61
Transylvania	$2.5	$4.1	$21.1	$3.8	$6.3	$32.4	$26	$48	$283
Tyrrell	$0.1	$0.1	$0.7	$0.1	$0.2	$1.1	$1	$2	$10
Union	$13.6	$23.7	$125.3	$23.8	$41.6	$219.2	$231	$439	$2,677
Vance	$6.3	$10.3	$52.1	$9.6	$15.8	$79.9	$59	$104	$591
Wake	$220.8	$375.9	$1,965.6	$343.2	$584.4	$3,049.5	$2,494	$4,399	$25,252
Warren	$0.9	$1.4	$7.1	$1.4	$2.3	$11.6	$11	$19	$107
Washington	$0.4	$0.7	$3.5	$0.6	$1.0	$4.9	$3	$6	$31
Watauga	$11.2	$18.5	$94.2	$17.1	$28.4	$144.6	$98	$172	$982
Wayne	$15.9	$26.7	$138.4	$24.8	$41.7	$216.4	$132	$242	$1,462
Wilkes	$6.1	$10.0	$51.4	$9.4	$15.5	$79.4	$74	$132	$761
Wilson	$12.7	$21.2	$108.3	$21.8	$36.3	$184.6	$91	$166	$992
Yadkin	$2.0	$3.5	$18.2	$3.4	$5.9	$30.3	$39	$72	$431
Yancey	$0.9	$1.6	$8.6	$1.4	$2.5	$13.0	$11	$21	$130

Table A-4. Estimated Potential Health Care Savings That Could Occur within North Carolina Counties If Medicaid Expands by 2016 (Compared to Levels without an Expansion).

	Potential Hospital Uncompensated Care Savings (thou $)			Potential Community Mental Health Savings (thou $)		
County	2016	2017	2016 - 2020	2016	2017	2016 - 2020
State Total	**$432,956**	**$687,797**	**$3,450,146**	**$103,822**	**$168,148**	**$859,185**
Alamance	$5,757	$9,161	$46,090	$1,278	$2,085	$10,785
Alexander	-	-	-	$328	$536	$2,772
Alleghany	$262	$417	$2,100	$174	$283	$1,465
Anson	$538	$856	$4,308	$569	$928	$4,801
Ashe	$668	$1,063	$5,349	$366	$598	$3,091
Avery	$588	$935	$4,705	$155	$252	$1,305
Beaufort	$251	$400	$2,012	$784	$1,279	$6,617
Bertie	$505	$804	$4,044	$338	$551	$2,849
Bladen	$284	$451	$2,271	$562	$917	$4,745
Brunswick	$2,032	$3,233	$16,265	$1,410	$2,302	$11,903
Buncombe	$4,998	$7,954	$40,014	$2,901	$4,734	$24,480
Burke	$2,845	$4,528	$22,780	$1,522	$2,484	$12,845
Cabarrus	$9,270	$14,752	$74,216	$1,110	$1,812	$9,370
Caldwell	$1,455	$2,315	$11,646	$1,054	$1,721	$8,899
Camden	-	-	-	$81	$132	$680
Carteret	$2,754	$4,383	$22,053	$865	$1,412	$7,303
Caswell	-	-	-	$266	$434	$2,246
Catawba	$7,287	$11,596	$58,339	$1,468	$2,396	$12,391
Chatham	$1,073	$1,707	$8,587	$471	$769	$3,977
Cherokee	$727	$1,157	$5,819	$476	$777	$4,018
Chowan	$985	$1,567	$7,882	$212	$346	$1,792
Clay	-	-	-	$150	$244	$1,263
Cleveland	$4,004	$6,372	$32,056	$2,243	$3,660	$18,929
Columbus	$1,267	$2,017	$10,145	$1,065	$1,738	$8,988
Craven	$4,060	$6,461	$32,507	$1,195	$1,950	$10,083
Cumberland	$8,839	$14,067	$70,769	$3,286	$5,362	$27,729
Currituck	-	-	-	$171	$280	$1,446
Dare	$754	$1,200	$6,037	$216	$353	$1,826
Davidson	$4,385	$6,978	$35,107	$1,208	$1,972	$10,197
Davie	$606	$965	$4,853	$394	$643	$3,327
Duplin	$1,688	$2,686	$13,515	$522	$851	$4,404
Durham	$30,178	$48,024	$241,606	$3,270	$5,337	$27,600
Edgecombe	$1,899	$3,022	$15,203	$898	$1,465	$7,576
Forsyth	$40,015	$63,679	$320,368	$3,192	$5,209	$26,939
Franklin	$1,297	$2,065	$10,387	$530	$865	$4,473
Gaston	$5,451	$8,675	$43,644	$3,976	$6,488	$33,552
Gates	-	-	-	$86	$141	$727
Graham	-	-	-	$141	$229	$1,186
Granville	$1,551	$2,468	$12,418	$441	$720	$3,723
Greene	-	-	-	$293	$477	$2,469
Guilford	$24,855	$39,554	$198,994	$4,417	$7,208	$37,277
Halifax	$1,926	$3,065	$15,422	$993	$1,621	$8,383
Harnett	$4,489	$7,143	$35,939	$1,125	$1,837	$9,499
Haywood	$2,334	$3,715	$18,690	$1,164	$1,900	$9,825
Henderson	$4,784	$7,613	$38,299	$1,122	$1,831	$9,467
Hertford	$1,700	$2,705	$13,610	$334	$545	$2,818
Hoke	-	-	-	$451	$736	$3,808
Hyde	-	-	-	$54	$88	$453
Iredell	$5,527	$8,795	$44,248	$1,410	$2,301	$11,902
Jackson	$2,154	$3,428	$17,245	$379	$618	$3,196
Johnston	$6,086	$9,686	$48,728	$1,498	$2,444	$12,639
Jones	-	-	-	$166	$271	$1,400

County	Potential Hospital Uncompensated Care Savings (thou $)			Potential Community Mental Health Savings (thou $)		
	2016	2017	2016 - 2020	2016	2017	2016 - 2020
Lee	$1,083	$1,724	$8,674	$535	$872	$4,512
Lenoir	$2,766	$4,401	$22,144	$1,004	$1,638	$8,473
Lincoln	$2,918	$4,644	$23,362	$1,006	$1,641	$8,488
McDowell	$1,077	$1,713	$8,620	$615	$1,003	$5,188
Macon	-	-	-	$368	$600	$3,104
Madison	$407	$648	$3,261	$277	$453	$2,341
Martin	$2,048	$3,259	$16,394	$471	$769	$3,978
Mecklenburg	$48,731	$77,548	$390,145	$6,959	$11,356	$58,732
Mitchell	$807	$1,285	$6,464	$228	$371	$1,921
Montgomery	$568	$904	$4,549	$295	$481	$2,487
Moore	$5,060	$8,053	$40,513	$765	$1,248	$6,457
Nash	$26,816	$42,674	$214,694	$979	$1,598	$8,266
New Hanover	$11,751	$18,700	$94,079	$3,239	$5,286	$27,337
Northampton	-	-	-	$374	$610	$3,154
Onslow	$4,384	$6,976	$35,097	$1,231	$2,009	$10,388
Orange	$15,073	$23,986	$120,675	$1,427	$2,328	$12,041
Pamlico	-	-	-	$176	$288	$1,488
Pasquotank	$2,691	$4,283	$21,547	$403	$658	$3,404
Pender	$675	$1,075	$5,408	$650	$1,061	$5,489
Perquimans	-	-	-	$143	$233	$1,203
Person	$935	$1,488	$7,488	$591	$965	$4,989
Pitt	$12,820	$20,401	$102,636	$2,201	$3,591	$18,574
Polk	$369	$587	$2,954	$270	$441	$2,283
Randolph	$3,179	$5,059	$25,449	$1,419	$2,315	$11,974
Richmond	$627	$997	$5,017	$1,021	$1,666	$8,618
Robeson	$5,765	$9,174	$46,156	$2,333	$3,807	$19,691
Rockingham	$2,395	$3,811	$19,172	$1,039	$1,695	$8,766
Rowan	$2,457	$3,910	$19,670	$1,429	$2,332	$12,062
Rutherford	$1,868	$2,973	$14,959	$1,015	$1,657	$8,569
Sampson	$1,522	$2,422	$12,187	$660	$1,076	$5,567
Scotland	$1,820	$2,897	$14,575	$773	$1,261	$6,522
Stanly	$2,564	$4,080	$20,528	$703	$1,146	$5,929
Stokes	$823	$1,309	$6,587	$511	$833	$4,309
Surry	$4,088	$6,506	$32,729	$870	$1,419	$7,340
Swain	$468	$745	$3,750	$195	$319	$1,647
Transylvania	$1,141	$1,816	$9,137	$348	$567	$2,934
Tyrrell	-	-	-	$41	$67	$348
Union	$4,843	$7,707	$38,773	$854	$1,394	$7,207
Vance	$1,837	$2,924	$14,710	$680	$1,110	$5,742
Wake	$36,991	$58,866	$296,156	$6,040	$9,857	$50,978
Warren	-	-	-	$294	$480	$2,480
Washington	$451	$718	$3,614	$186	$303	$1,568
Watauga	$1,441	$2,294	$11,539	$272	$444	$2,298
Wayne	$8,505	$13,535	$68,094	$1,635	$2,667	$13,795
Wilkes	$1,412	$2,248	$11,309	$800	$1,306	$6,755
Wilson	$2,833	$4,508	$22,680	$1,015	$1,656	$8,566
Yadkin	$797	$1,268	$6,381	$391	$639	$3,302
Yancey	-	-	-	$294	$480	$2,482

Note: Dashes (-) indicate there was no uncompenated hospital care in that county.

Appendix: Methods and Data Sources

The estimates in this report are based on multiple sources of information and a widely-used regional economic model to estimate the economic and employment effects of Medicaid expansion. The levels of additional state and federal Medicaid expenditures associated with Medicaid expansion are based on state-level estimates of additional expenditures and enrollment levels published by the Kaiser Commission on Medicaid and the Uninsured and the Robert Wood Johnson Foundation, based on the non-partisan Urban Institute's Health Insurance Policy Simulation Model.[27] Based on requirements of the ACA, eligibility for federal tax credits applies to those with incomes between 100 and 138 percent of the poverty line if there is not a Medicaid expansion, but if Medicaid is expanded, the minimum income for tax credits is 138 percent of poverty. Thus, the estimates assume some low-income people shift from exchange coverage to Medicaid so that there is some loss of the value of federal tax credits and a larger increase in Medicaid expenditures. From the recipients' perspective, it should be advantageous for these low-income people to enroll in Medicaid because Medicaid requires much lower out-of-pocket cost-sharing.

These estimates examine the effect of a "regular" Medicaid expansion in North Carolina. They are net of other effects of the ACA, such as changes in insurance coverage due to the creation of health insurance marketplaces, which have already been implemented in North Carolina. The effects might be slightly different if North Carolina expanded Medicaid using Section 1115 waiver authority to modify the structure of the expansion, but since Medicaid waivers must be "budget neutral", economic and employment effects should be roughly equivalent regardless. Changes in delivery systems, such as the use of accountable care organizations might also affect the economic impact, but these would be relatively minor compared to the effect of whether Medicaid is expanded and would likely not have a major impact on the general estimates in this report.

State-level estimates of additional federal funds received from a Medicaid expansion were allocated to each of North Carolina's 100 counties, divided in five sectors: hospital, ambulatory care, nursing home and residential care, social assistance (that is, personal care), and pharmaceutical drugs. Generally, experience in North Carolina for adult beneficiaries indicates that about two-fifths (37 percent) of the funding will be spent on ambulatory care, two-fifths (44 percent) on hospital care (including inpatient, outpatient hospital and emergency care), one-fifth (18 percent) on pharmaceuticals (18 percent) and very small amounts on nursing home or residential care or social assistance (well below 1 percent each). The estimated effect on the number of new people enrolled in each county is related to the number of uninsured individuals with incomes below 138 percent of poverty in each county, as estimated by the Census Bureau's Small Area Health Insurance Estimates for 2012.[28] We allocated the change in federal funding flowing to each county based in part on those enrollment estimates and the county-specific Medicaid expenditures per county.[29] Because of missing data from the county estimates, we aligned these with state-level Medicaid expenditures by service type for non-elderly Medicaid adults in 2011 in North Carolina, as reported in the Medicaid Statistical Information System Data Mart. Non-elderly adult Medicaid enrollees correspond the most closely with the Medicaid expansion population. This provided a basis to estimate the potential level of additional federal funds that would be received for newly eligible Medicaid enrollees in each county in the base year.

These estimates were trended forward to years through 2020, guided by Congressional Budget Office projections in changes in Medicaid expenditures and changes in the federal matching share

for expansion eligible from 100 percent from 2014 to 2016 to 95 percent in 2017, 94 percent in 2018, 93 percent in 2019, and 90 percent by 2020. Historical evidence indicates enrollment increases in Medicaid expansions are not fully implemented in the first year, but take time to ramp up. In our analysis, we primarily focus on the concept that a Medicaid expansion could be implemented by 2016, since it would need to be approved in a 2015 legislative session and time might be needed for federal approval of the state's plans. In a secondary analysis, we ask what would have happened if North Carolina had expanded in Medicaid in 2014, like about half the states. This addresses the question of what benefits North Carolina has already lost by not adopting an expansion earlier.

The economic and employment effects of Medicaid expansion are driven by the additional federal revenue associated with a Medicaid expansion. We do not include changes in state Medicaid expenditures due to Medicaid expansions in the models (although we examine the state budget impact later). If North Carolina did not use state funds to cover expansion costs from 2017 to 2020, these funds would likely have been used for another purpose, with similar economic impacts.

The state- and county-level estimates of federal Medicaid expenditures were then analyzed using regional economic model software, PI$^+$, version 1.6.8, for North Carolina counties, developed by Regional Economic Models, Inc. (REMI).[30] The PI$^+$ model uses a structural macroeconomic model to quantify the impact of a Medicaid expansion on North Carolina's economy and is well-suited to estimate county-specific regional policy impacts. This permits simulation of the state- and county-level fiscal and economic effects of expansion, and assesses the effect of the changes in health care spending along with the direct costs to the state from additional enrollees, while considering the federal contribution both in the short and longer term. REMI software has been used in thousands of national and regional economic studies, including studies of health care reform and health care issues around the United States, including fiscal analyses by the North Carolina General Assembly, demographic analyses by Winston-Salem State University and the North Carolina Institute of Medicine's report on Medicaid expansion. Articles about REMI's model equations and research findings have been published in scholarly journals such as the *American Economic Review*, *Review of Economic Statistics*, *Journal of Regional Science*, and *International Regional Science Review*.

The data in the REMI model on healthcare output and consumption comes from public sources. REMI spreads the output of the healthcare industry at the national level based on compensation at the state- or regional-level, giving a consistent series where areas with large quantities of compensation in the healthcare industry have large industry clusters there. This data comes from the Bureau of Economic Analysis (BEA).[31] REMI also uses data at a regional-level based on consumer income and demographic characteristics like age, where national consumption of healthcare is known and spread between the regions and counties of the United States based on the relative wealth and age of the area. The data for this process comes from the Bureau of Economic Analysis (BES)[32] and the Consumer Expenditure Survey (CES).[33] REMI uses a gravity methodology to account for cross-county purchases of healthcare services, where areas with large outputs in healthcare but minimal demand supply healthcare services to nearby areas with large outputs but smaller quantities demanded.

REMI estimated the revenue effects for counties and the state based on current (2014) effective rates for sales and property taxes at the county-level and income and sales taxes at the state level measured against how the tax bases changed in the model simulation (such as the change in

consumer spending for sales taxes). The model assumes that there are no changes in tax policies, but that additional economic growth leads to the collection of additional state and county tax revenues.

The economic and employment estimates assume that there are some outflows to other states or, in the case of counties, to other counties, particularly neighboring jurisdictions. For example, because of Medicaid expansion, a hospital may receive an additional $10 million, which might be used to increase wages by $6 million and to purchase $4 million more in goods like medical supplies, information systems, construction services or so on. But some of the goods purchased are from another county or state, so some funds flow out of the area. And some of the workers may reside in another county or state or purchase goods that come from another county or state, so some of those funds also flow out. Most health care expenditures are for services, which are typically local or nearby, but others, such as pharmaceutical costs, may flow to another state where manufacturing occurs. The economic models adjust for these outflows.

Similarly, county-level Medicaid expenditure data are based on where enrollees reside, not where they get services. To adjust for this, the model translates the demand for services in one area to the amount of services supplied in other areas. For example, a person in a rural county may need medical care, but receives treatment from a provider or hospital in another county. The model adjusts for the fact that the demand for care is from the rural county, but the care is supplied from the other more urban county. And, as noted above, the economic repercussions may be even further dispersed because workers in the urban county may live in yet another county and goods purchased by the health care provider may come from a different area too.

The source of data about uncompensated and unreimbursed hospital care is Medicare cost reports filed by North Carolina hospitals (Worksheet S-10), projected forward. They are assigned by the county in which the hospital is located; some counties have no hospitals, so there are no uncompensated care costs in those counties. We assigned potential uncompensated care savings from state-owned hospitals that are part of the University of North Carolina Healthcare system as a state savings. State-level data about state- funded community mental health expenditures came from a report by the National Association of State Mental Health Directors Research Institute and were projected, assuming growth rates comparable to historical levels. These were allocated to counties based on the proportion of Medicaid mental health expenditures reported for each North Carolina counties. Based on prior research[34], we assumed that the expansion of Medicaid could lead to a one-third reduction in the uncompensated hospital costs and a one-third reduction in community mental health and inpatient psychiatric funding, with a slightly lower level in 2016, when the expansion is ramping up.

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Endnotes

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