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HEALTH CARE AND HUMAN SERVICES POLICY, RESEARCH, AND CONSULTING—**WITH REAL-WORLD PERSPECTIVE.**

An Evaluation of the Impact of Medicaid Expansion in New Hampshire

Phase II Report

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- New Hampshire Department of Corrections
- New Futures, Inc.
- New Hampshire Bureau of Behavioral Health
- New Hampshire Community Behavioral Health Association
- New Hampshire Hospital
- New Hampshire Insurance Department
- New Hampshire Medical Society

Table of Contents

Executive Summary

Following the June 2012 United States Supreme Court ruling on the Affordable Care Act (ACA), states now have the option to opt out of the Medicaid expansion provision of the ACA without compromising their current federal Medicaid funding. As a result of this ruling, The Lewin Group is working with the New Hampshire Department of Health and Human Services to explore the potential impacts of expanding versus not expanding its Medicaid program.

Phase I of the analysis, released in November 2012, provides estimates on Medicaid enrollment and costs under the option of not expanding Medicaid compared to the option of expanding Medicaid under various program design options. This report presents Phase II of the study, in which we estimate the impact of Medicaid expansion in areas outside of Medicaid, including other state programs, the uninsured, providers, the state economy, and the commercial health insurance market.

Summary of Phase I Analysis

In Phase I of this study, under a no expansion option, we estimate the state would save between $65.8 and $113.7 million between 2014 and 2020 due to effects of the ACA and depending on options to reduce eligibility levels to 138 percent of FPL for adults beginning in 2014, compared to pre-ACA projections. Under the expansion option, we estimate a cumulative increase in state Medicaid spending between $38.0 and $102.3 million between 2014 and 2020, depending on participation levels in the program, compared to projected pre-ACA spending.

The baseline assumptions that we use in Phase II of the study are outlined in ***Figure E-1***, below. Without Medicaid expansion, we project $65.8 million in savings to the state and $55.8 million in cost to the federal government from 2014 to 2020. Total enrollment would increase by 175 in 2020. Under Medicaid expansion, we estimate an $85.5 million cost to the state and a $2.5 billion cost to the federal government from 2014 to 2020. Total enrollment would increase by about 62,200 by 2020. For both scenarios, it is important to note that additional federal spending becomes designated revenue for the state. These federal dollars will be used to cover the cost of implementing ACA provisions in New Hampshire, and will cover the full cost of insuring the newly eligible population through 2016 under Medicaid expansion.

Figure E-1. Summary of Phase I Baseline Scenarios, 2014-2020, in $1000s

Scenario	Cost to State (2014-2020) in $1,000s	Cost to Federal Government (2014-2020) in $1,000s	Total Change in Enrollment (2020)
No Expansion	($65,779.6)	$55,845.0	175
Expansion	$85,488.0	$2,510,922.3	62,237

Source: Lewin Group estimates using the New Hampshire version of the Health Benefits Simulation Model.

Impact on Other State Programs

Collectively, the total savings realized to other state programs under Medicaid expansion, such as the current state high risk pool and the state corrections department, would equate to $67.1 million over the 2014 to 2020 period, assuming a fee-for-service (FFS) program. Under a managed care program, a Premium Assessment tax totaling $49.4 million from 2014 to 2020 would serve as revenue to the State General Fund. These savings are summarized in ***Figure E-2*** below. Using our baseline assumptions provided in Phase I and our estimated offsets in Phase II, under a FFS program, the cumulative state cost of expanding Medicaid would total $18.4 million from 2014 to 2020, compared to pre-ACA projections (***Figure E-3***); however, costs could be further reduced under alternative design options. If the state opts to expand Medicaid under a managed care program, then the premium assessment tax would add an additional $49.4 million in offsets to the State General Fund, for a total offset of $116.6 million over this period.

Figure E-2. Summary of Total Offsets within Other State Programs Due to Medicaid Expansion, in $1,000s (2014-2020)

	Total Offset
State Employee Health Benefits	$27,429
State High Risk Pool	$0
State Corrections Department	$21,782
State Funding for Cypress Center	$4,725
Increased State Revenue[1/]	$13,200
Total Offsets Under FFS	$67,136
Premium Assessment [2/]	$49,434
Total Offset Under Managed Care	$116,570

1/ See "State Economic Impact" section for detailed analysis and explanation
2/ Premium Assessment only applicable if Medicaid expansion is implemented within a managed care program

Figure E-3. Summary of Total Cost of Expansion with Offsets, in $1,000s (2014-2020)[1/]

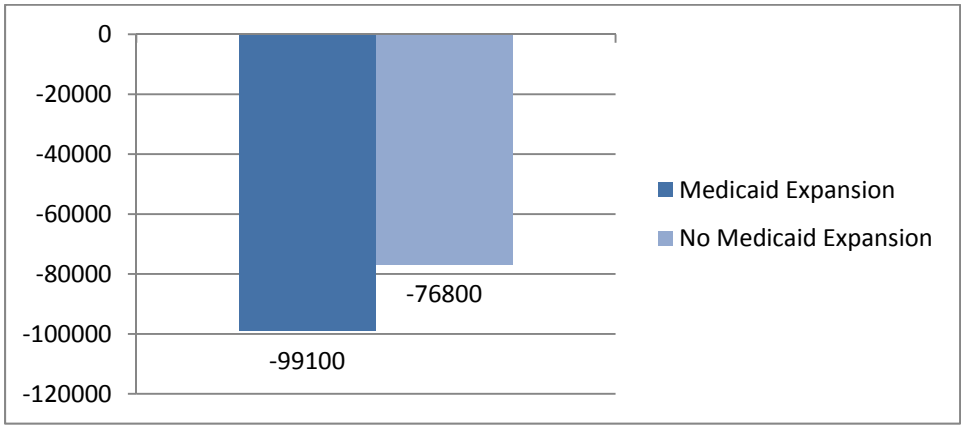
Scenario	Cost to Federal Government (2014-2020) in $1,000s	Cost to State (2014-2020) in $1,000s	Offsets to State Costs (2014-2020) in $1,000s	Net Cost to State (2014-2020) in $1,000s
No Expansion	$55,845.0	($65,779.6)	$0	($65,779.6)
Expansion	$2,510,922.3	$85,488.0	$67,136.0	$18,352.0

Source: Lewin Group estimates using the New Hampshire version of the Health Benefits Simulation Model
1/Assumes a FFS program

Impact on the Uninsured

In considering whether or not to expand the state's Medicaid program, it is important to consider the impact that expanding or not expanding Medicaid may have on individuals and families. Taking into account all other provisions of the ACA, our estimates show that if the state expands Medicaid, the number of uninsured would be reduced by 99,100 (***Figure E-4)*** compared to pre-ACA uninsurance rates. Thus, the number of uninsured in New Hampshire would be approximately 71,000 with Medicaid expansion. Absent an expansion, the number of uninsured would be reduced by 76,800 ***(Figure E-4)*** compared to pre-ACA uninsurance rates, bringing the number of uninsured in New Hampshire to 93,200.

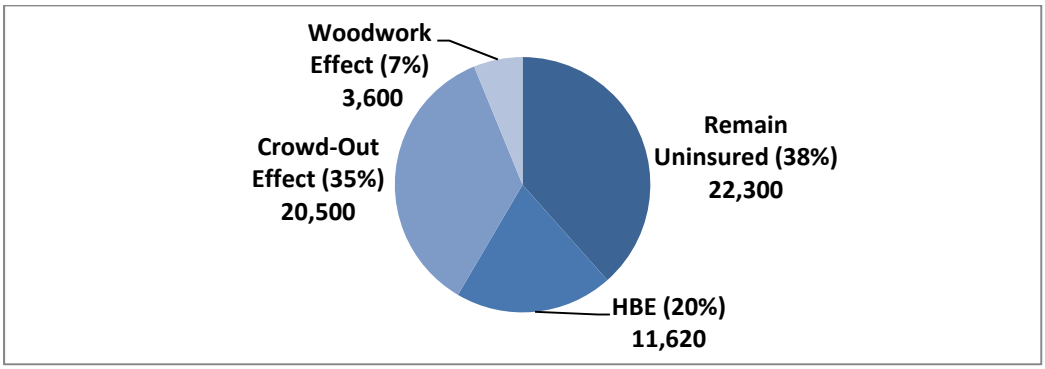
Figure E-4. Reduction in Number of Uninsured under the ACA in New Hampshire in 2014 [1/]



1/ Assumes all provisions of the ACA are fully implemented in 2014.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

Additionally, we estimate that under Medicaid expansion, approximately 58,000 individuals will enroll in Medicaid. In absence of Medicaid expansion, under the ACA, we estimate that 38 percent of these individuals would remain uninsured, 20 percent would go into the Health Benefits Exchange (HBE), 35 percent would remain under private coverage, and seven percent (who were previously eligible but unenrolled) would have enrolled in Medicaid due to the individual mandate(***Figure E-5***).

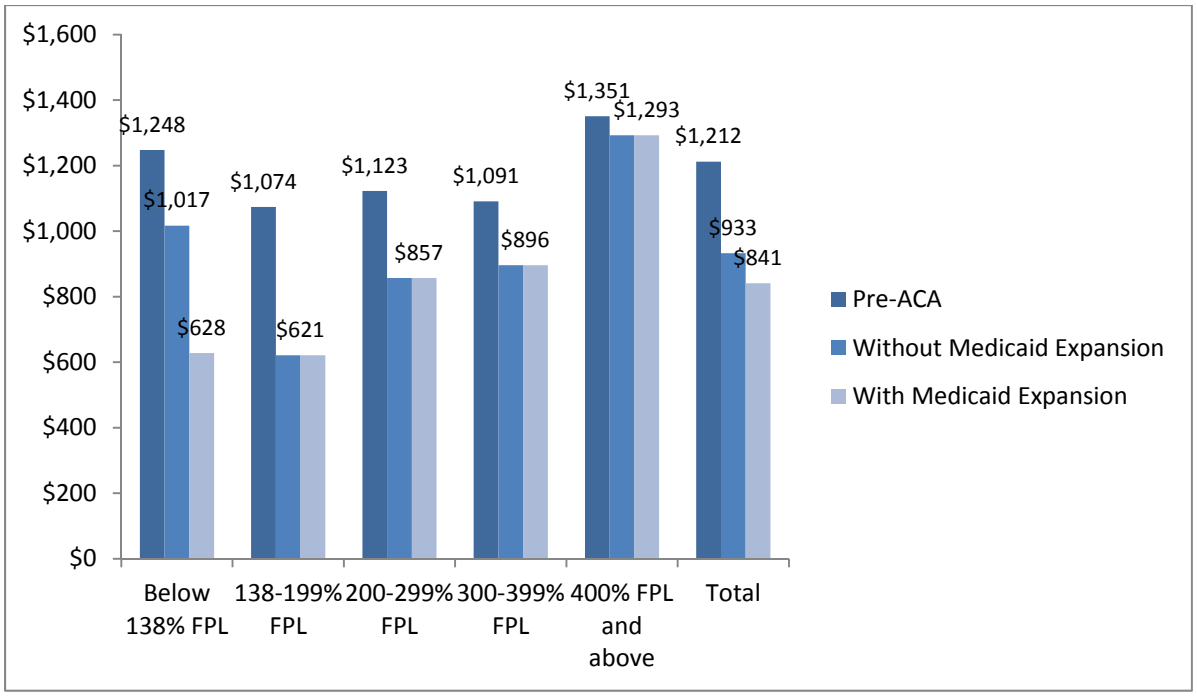
Figure E-5. Insurance Status of the 58,000 Individuals Who Would Enroll under Medicaid Expansion, in the Absence of Expansion (2014-2020)



Under Medicaid expansion, the reduction in number of uninsured will vary by geographic area. Hillsborough and Rockingham Counties will see the largest absolute reductions in the uninsured under Medicaid expansion.

Additionally, without expansion, those remaining uninsured will continue to strain the finances of other public health programs and safety net providers for their care, while likely forgoing or reducing necessary care and risking a drain on personal finances. With Medicaid expansion, the average out-of-pocket spending per uninsured person would decline by $372 to a total of $841, compared to a decline of $219 for a total of $993 under the ACA without Medicaid expansion. This out-of-pocket spending will vary based on family income, as shown in ***Figure E-6***, below.

Figure E-6. Out-of-Pocket Health Spending for Uninsured in New Hampshire in 2014 [1/]



1/ Assumes all provisions of the ACA are fully implemented in 2014.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

Impact on Providers

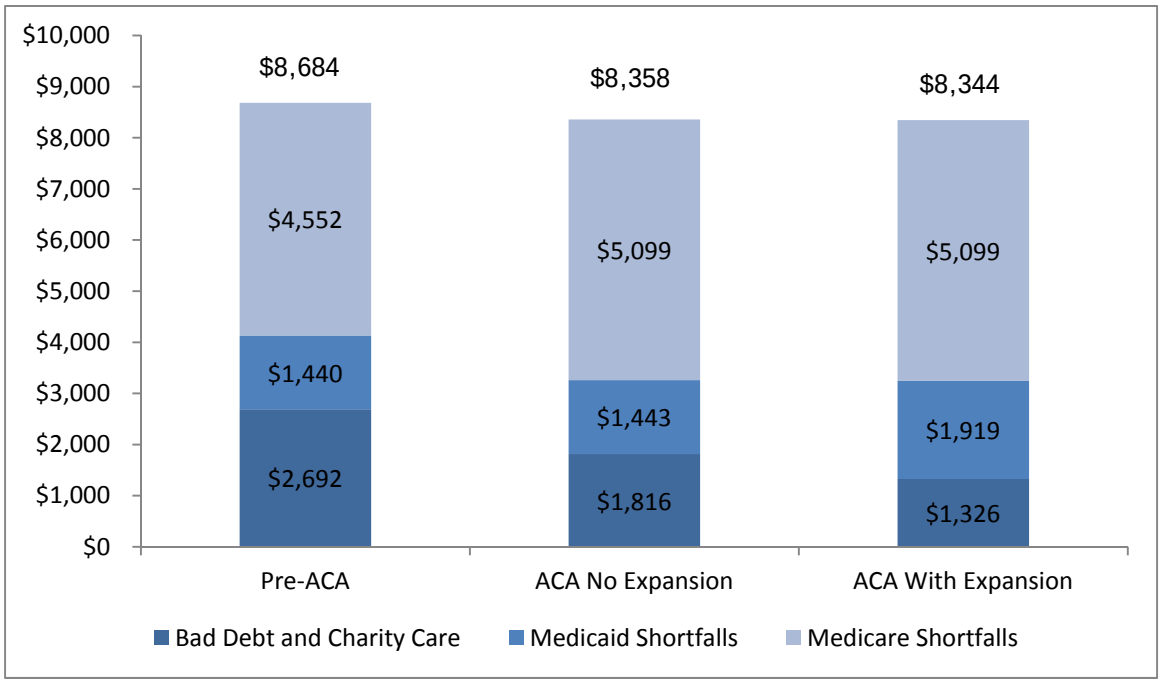
Expanding or not expanding Medicaid will have a measurable impact on a number of provider groups. Much of this will be reflective of reductions in uncompensated care as a result of more people having health coverage.

We estimate that by 2020, Medicaid hospital and Institute for Mental Disease DSH payments will total $101.9 million, $50.9 million of which will be federal funds. We estimate that New Hampshire's federal DSH allotment will drop to $92.0 million in 2020. However, this will still be more than what is needed to match the uncompensated care pool (UCP). Thus, we estimate that

the ACA Medicaid DSH cuts will not affect the Medicaid DSH payments to New Hampshire hospitals assuming that the current payment methodology continues through 2020[1].

Using the Lewin Group Health Benefits Simulation Model for the state of New Hampshire and data provided by the New Hampshire Hospital Association (NHHA), we estimate uncompensated care (bad debt, charity care, and undercompensated care due to below-cost Medicare and Medicaid payments) for New Hampshire health systems, which include the hospital as well as other entities owned by the system, such as physician groups, skilled nursing facilities, freestanding surgical centers and home health agencies. Here, health systems in the state could see uncompensated care reduced by about $340 million (4 percent) under the ACA with or without the Medicaid expansion (***Figure E-7***). This is due to the take-up of commercial coverage anticipated in reaction of the individual mandate.

Figure E-7. Total Uncompensated Care for New Hampshire Health System Under the ACA With and Without the Medicaid Expansion, in Millions (2014-2020)



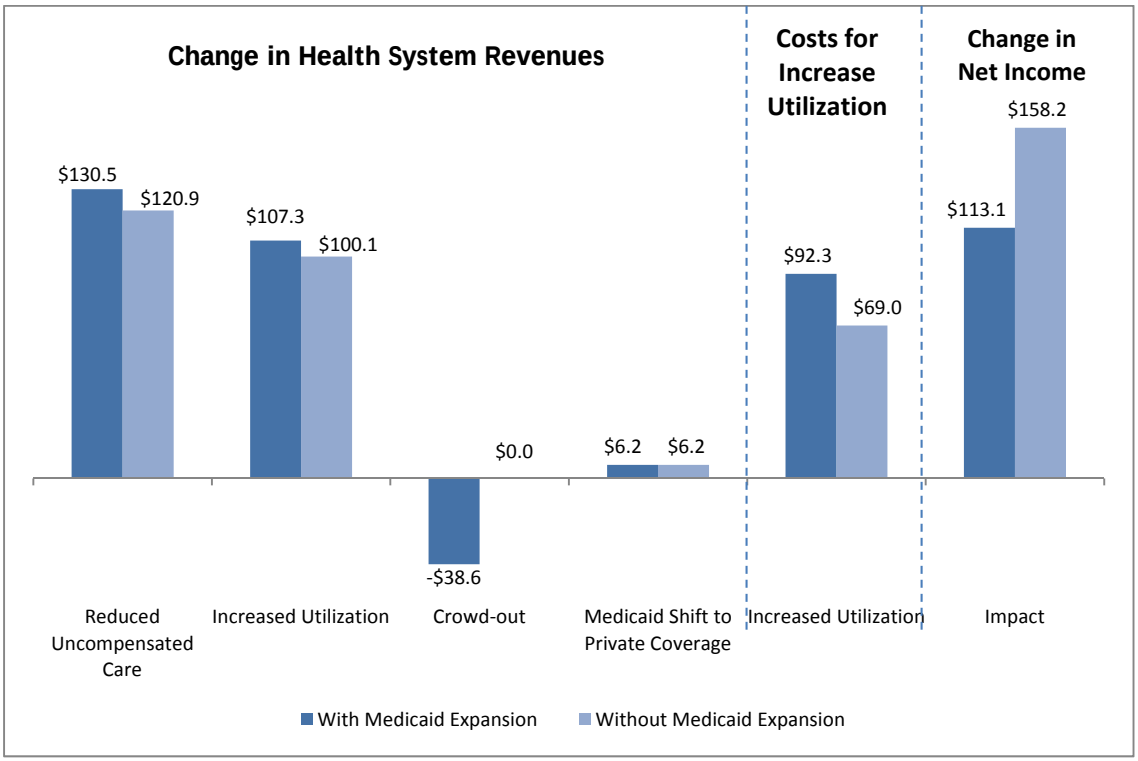
Source: Lewin Group analysis using the New Hampshire version of the Health Benefits Simulation Model (HBSM).

As shown in ***Figure E-8***, we estimate that health systems would see an increase in net income of about $113.1 million under the Medicaid expansion assuming full implementation in 2014, which would represent a 28 percent increase from their current net income. However, due to more people being enrolled in private insurance in the absence of the expansion, we estimate

[1] Current methodology assumes continuation of the Medicaid Enhancement Tax (MET) assessed on net patient service revenue. Thirteen percent of the anticipated MET revenue is placed in the Uncompensated Care Fund (UCF), for which federal matching funds are drawn down up to the state's allotment. Payments from the UCF are distributed to New Hampshire hospitals, with priority given to Critical Access Hospitals.

that health system net income would increase by $158.2 million. Under no Medicaid expansion, although health systems would see more of an improvement in their bottom line net income, they would provide a greater volume of uncompensated care than if Medicaid is expanded. This is under the assumption that current DSH distribution stays as-is.

Figure E-8. Impact on New Hampshire Health System Revenues Under the ACA With and Without the Medicaid Expansion

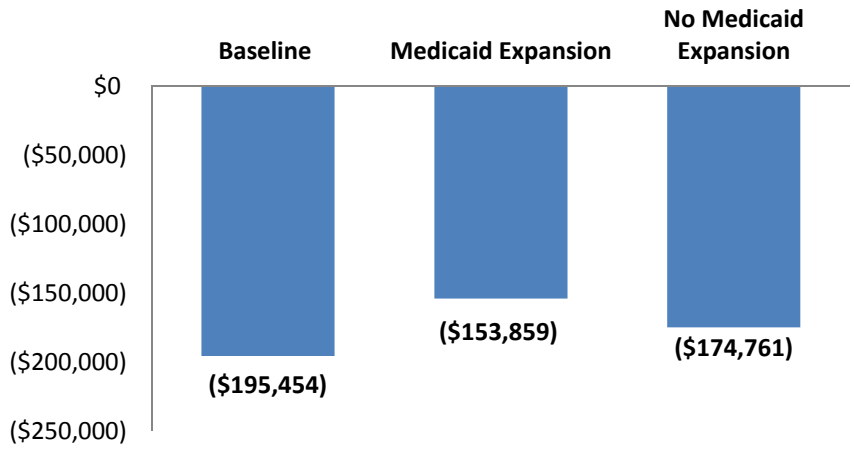


1/ Assumes that all provisions of the ACA are fully phased in, but illustrations in 2011 dollars.
Source: Lewin Group analysis using the New Hampshire version of the Health Benefits Simulation Model (HBSM).

Additionally, because we find that the ACA reductions in federal Medicaid DSH allotments will not affect DSH payments in New Hampshire over the next several years, additional state funds will not be needed to cover costs for the New Hampshire Hospital (NHH)—the primary Institute for Mental Disease (IMD) in the state.

In considering impact on federally qualified health centers (FQHCs), dramatic reductions in uncompensated care would occur with expansion ($9 million reduction) and without expansion ($6 million reduction), in 2011 dollars. From 2014 to 2020, cumulative FQHC shortfalls for uninsured recipients would drop from a baseline of $104.6 million to $26.4 million under the ACA with Medicaid expansion compared to $50.8 million without expansion. Across all payer categories, from 2014 to 2020, cumulative FQHC shortfall would drop from a pre-ACA projected baseline of $195.5 million to $153.9 million under Medicaid expansion, while the shortfall would drop by a lesser amount (to $174.8 million) under no expansion (***Figure E-9***).

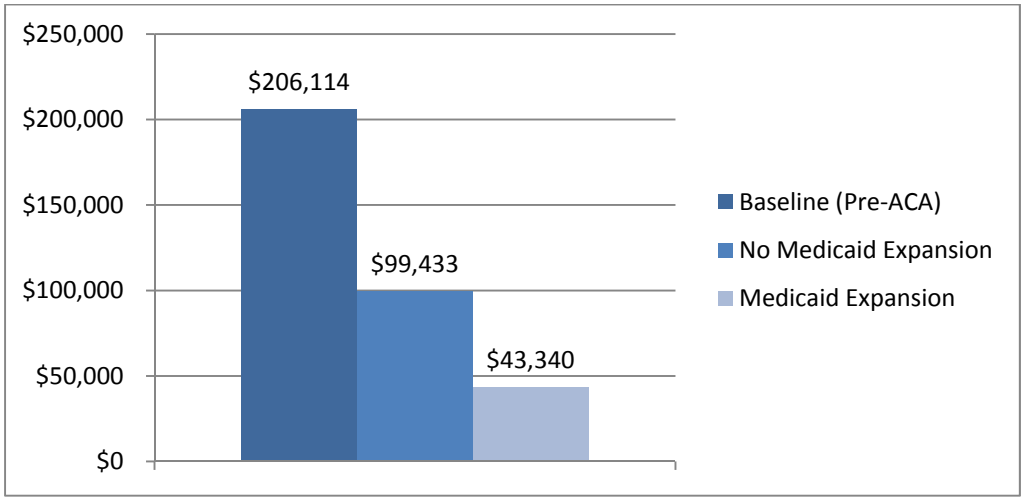
Figure E-9. Cumulative Shortfall for FQHCs Across All Payer Categories 2014-2020 ($1,000s)



Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM) and UDS data.

In considering the impact on the state's ten Community Mental Health Centers (CMHCs), we estimate that CMHCs would see a $162.8 million reduction in uncompensated care during the 2014 to 2020 period (***Figure E-10***). Without an expansion, a smaller reduction ($106.7 million) will occur, largely due to effects of other provisions of the ACA.

Figure E-10. Cumulative Uncompensated Care for CMHCs 2014-2020 ($1,000s)



Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

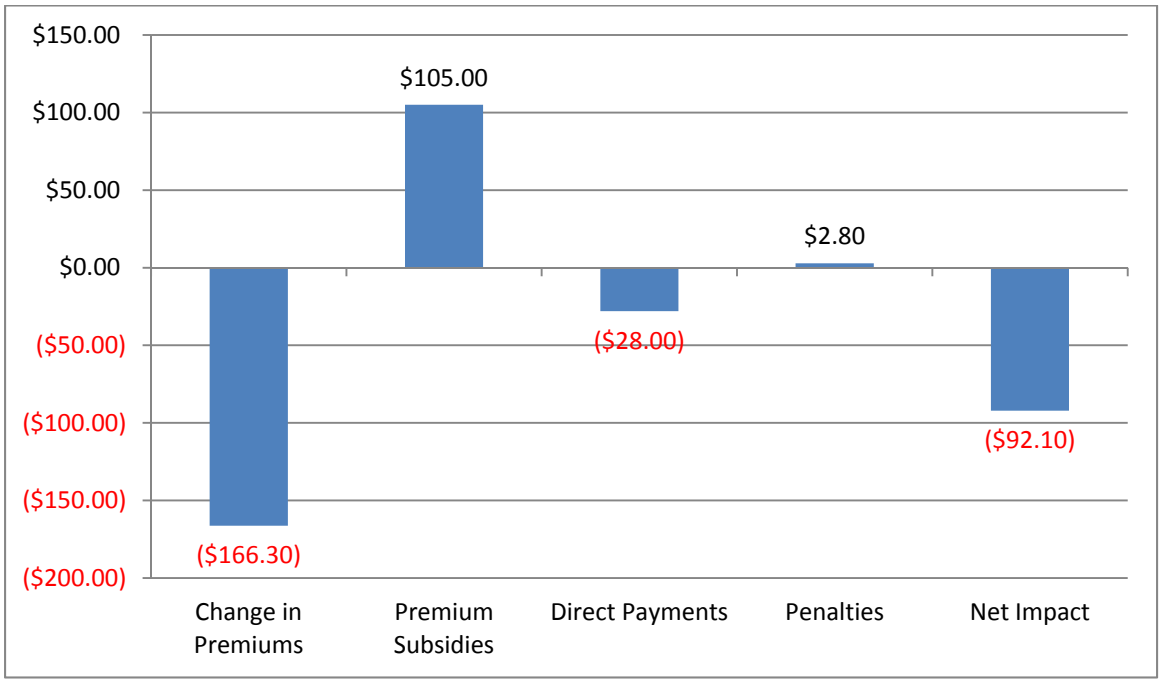
Economic Impact

Both the expansion and no expansion scenarios under the ACA will result in increased revenue for providers in the hospital, physician/clinic, and pharmacy sectors. For hospitals, providers will gain lesser revenue under expansion, while physician, clinic, and pharmacy providers will see greater gains under Medicaid expansion. In total, providers will experience an estimated $3.5 billion gain in revenue under expansion and a $3.3 billion gain in revenue under no

expansion from 2014 to 2020, compared to pre-ACA projections; here, compared to the expansion option, providers would lose $158.3 million in revenue from 2014 to 2020 without expansion.

The decision to expand or not expand Medicaid will also affect household spending in New Hampshire. As shown in ***Figure E-11***, under Medicaid expansion, households will spend less on premiums, but under no expansion, there will be higher subsidies as more individuals obtain coverage through the Health Benefits Exchange (HBE). Also, because private coverage will require higher cost-sharing than Medicaid, without expansion, households will spend more on direct payments to providers. In total, under Medicaid expansion, we estimate that New Hampshire households will save a total of $92.1 million, or about $145 per year, on average.

Figure E-11. Impact of Medicaid Expansion on Household Health Spending, compared to no Expansion (in millions)



Using these inputs, we estimate changes in total employment, gross state product (GSP), personal income, and state revenue under expansion and no expansion, compared to a pre-ACA projected baseline.

Over the 2014 to 2020 analysis period, New Hampshire gains an average of 5,100 jobs under Medicaid expansion compared to a 4,400 gain under no expansion; this translates to about 700 more jobs across all sectors under expansion, compared to no expansion.

Over the same 2014 to 2020 period, we estimate that under Medicaid expansion, the state will see a $2.8 billion increase in GSP, compared to a $2.5 billion increase under no expansion (***Figure E-12***). Personal income will also increase under both scenarios—an increase of $2.3 billion under expansion and an increase of $2.1 billion under no expansion, from 2014 to 2020. In 2014, gains in personal income translate to about $102 per capita under expansion and $91 per capita under

no expansion. Additionally, the state will gain new tax revenues under both scenarios, spurred by economic growth, but will see a greater increase under expansion compared to no expansion ($127 million and $114 million, respectively); this translates into an offset of $13.2 million if the state elects to expand Medicaid.

Figure E-12. Cumulative Change in GSP, Personal Income, and State Revenue from baseline, 2014-2020, in millions

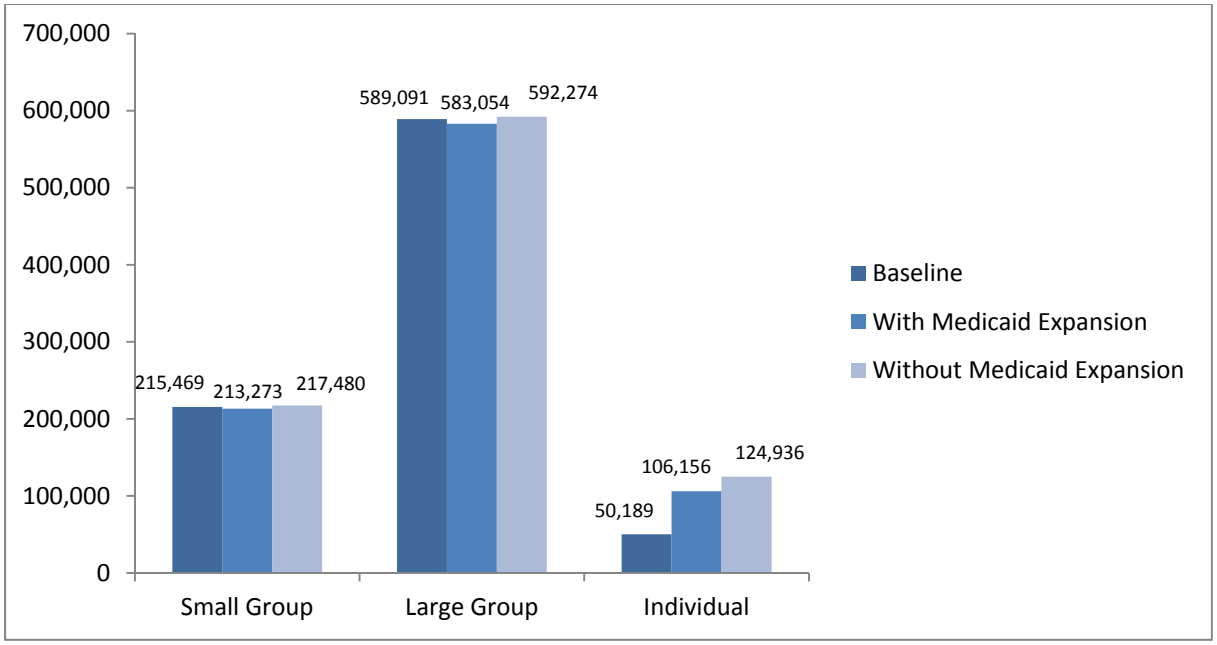
	Change in GSP	Change in Personal Income	Change in State Revenue
Expansion	$2,839.05	$2,346.30	$127.32
No Expansion	$2,450.78	$2,069.38	$114.13
Difference	$388.27	$276.92	$13.20

Impact on Commercial Market

Providers must find financial support to cover costs when payment received for services falls short. This phenomenon is often referred to as "cost-shifting," and represents an attempt by providers to offset a portion of unpaid costs of care from one patient population through above-cost charges and revenues from other patient populations. In response to higher charges by providers, insurers may, theoretically, shift a portion of the additional cost burden onto members, which is then reflected through increased premiums. Under either Medicaid expansion or no expansion, we estimate that reduced costs of uncompensated care and undercompensated care to be an insignificant portion of annual total premiums paid by private individual market and employer market insurance holders. Under the assumption that 50 percent of this reduced uncompensated and undercompensated care would have been cost-shifted to private insurance members in the form of an insurance premium increase, we estimate an approximate 0.37 percent decrease to private market premiums under Medicaid expansion. In the absence of expansion, we estimate the effect will even milder, a potential 0.34 percent decrease in private market premiums.

Source of coverage in the commercial market will also be affected by Medicaid expansion, as members shift from small group, large group, and individual coverage to other sources of coverage. Here, small group and large group coverage will see minimal reductions in enrollments under Medicaid expansion. The individual market will see significant growth in enrollment under Medicaid expansion, and even larger growth under no expansion, as fewer people who currently have individual coverage will leave for Medicaid and more uninsured will seek individual coverage since subsidies will be available for those between 100 and 138 percent of FPL.

Figure E-13. Commercial Market Enrollment in 2014 under ACA



Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

In the small and large group markets, average allowed costs will be reduced by small amounts under both Medicaid expansion and no expansion. In the individual market, however, average allowed costs would increase significantly under ACA, from $339 in the current individual market, to $464 under Medicaid expansion and $471 under no expansion (***Figure E-13***).

In sum, expanding or not expanding Medicaid will have impacts beyond the state's Medicaid program itself. A decision to expand Medicaid will offset costs to other state programs, thus reducing the total state cost of implementing Medicaid expansion. The ACA and Medicaid expansion will also have measurable positive impacts on the state economy at large. Additionally, the impact on the uninsured, on providers, and on the commercial market should also be realized, as the decision to expand Medicaid affects these stakeholders and subgroups in very different ways.

I. Introduction

In March 2010, the United States Congress passed the Patient Protection and Affordable Care Act (ACA), a sweeping piece of legislation designed to overhaul the country's health care system and extend health insurance to millions of uninsured Americans. The law includes several approaches to accomplish this goal, including the establishment of Health Benefit Exchanges (HBEs), insurance market reforms, an individual mandate to obtain coverage, subsidized health insurance, and a mandate for large employers to offer health insurance. One of the key provisions of the Act was a mandatory expansion of Medicaid in all 50 states and the District of Columbia.

As originally written, each state was required to expand its Medicaid program to cover all adults under age 65 whose household incomes are less than or equal to 138 percent of the federal poverty level (FPL) or face losing all federal funding for their Medicaid programs. For these newly eligible individuals, the federal government would cover 100 percent of the health care costs between 2014 and 2016. This percentage would gradually decrease from 100 percent to 90 percent between 2017 and 2020.

However, in June 2012, the U.S. Supreme Court ruled that the federal government could not require individual states to expand their Medicaid programs for adults and declared this part of the ACA unconstitutional. States will now have the option to opt out of the Medicaid expansion provision of the Act without compromising their current federal Medicaid funding.

The New Hampshire Department of Health and Human Services contracted with The Lewin Group to explore the financial impacts of Medicaid expansion in the state of New Hampshire. In November, Lewin completed a Phase I report detailing the impact of expanding versus not expanding Medicaid on New Hampshire's Medicaid program and provided estimates on Medicaid enrollment and costs under various program design options.

This report, representing Phase II of The Lewin Group's analysis of Medicaid expansion in New Hampshire, will discuss the secondary effects on other state health programs, health care providers, commercial premiums, and the overall state economy. In particular, we will examine the following:

- ***Impact on State Health Programs***: We will explore the ways in which Medicaid expansion will affect state employee health coverage, the state's high risk pool, the state corrections department, and indigent care funding for behavioral health. Offsets in these areas may reduce the total cost of expansion to the state.
- ***Impact on the Uninsured***: We will explore changes in the numbers of uninsured individuals, including changes at the county-level, shifts in family health spending for the uninsured, and the potential impact on individual bankruptcies.
- ***Impact on Providers***: We will look at the impact of the ACA on Disproportionate Share Hospital (DSH) payment reductions and the effects of expansion on hospitals and health systems, community health centers, community mental health centers, and institutions for mental disease.

- ***Economic Impact***: We will discuss the broader economic impact of choosing to expand versus not expand Medicaid in the state, including the impact on jobs, gross state product (GSP), personal income, and tax revenue.
- ***Impact on Commercial Market***: Lastly, we will explore the impact on commercial insurance markets in the state and the potential impact of cost shifting to private insurance.

The methodology used to produce these impact estimates is described in detail within the final section of the report.

II. Summary of Phase I Analysis

Phase I of this analysis offers details on the aspects of the ACA that will require changes to the state's current program, regardless of the decision to expand or not expand Medicaid, including reforms to the individual insurance markets by eliminating pre-existing condition exclusions, guarantees of coverage and renewability of coverage, the establishment of HBEs, an individual mandate, subsidized health insurance for people between 100 and 400 percent of FPL, and a mandate for large employers to offer health insurance. The ACA also provides states with a 23 percentage point increase to the enhanced Federal Medical Assistance Percentage (FMAP) rate for CHIP beginning in federal fiscal year 2016. We estimated the state would save $61.0 million between 2016 and 2019, assuming that the state would have continued the CHIP program in the absence of the ACA. These savings are incorporated into both expansion and no expansion cost estimates.

Figure 1 provides a summary of the state and federal costs of 11 program design options. Under each scenario, the costs to the federal government largely translate to designated revenues for the state. Under a no expansion option, we estimate the state would save between $65.8 and $113.7 million between 2014 and 2020 due to the other effects of the ACA and depending on options to reduce eligibility levels to 138 percent of FPL for adults beginning in 2014. This is compared to projected spending in the absence of the ACA. Under no expansion, we estimate a baseline option, as well as an option to move those currently eligible above 138 percent of FPL in certain eligibility categories (Medicaid for Employed Adults with Disabilities and poverty-level pregnant women) to the HBE, where they will be eligible for subsidized private insurance coverage. Total enrollment under the latter option would decrease by 913 individuals by 2020, compared to pre-ACA enrollment projections.

Figure 1. Summary of the State and Federal Cost of Various Options for Expanding Medicaid in New Hampshire, Compared to No ACA (2014-2020)

Scenario	Cost to State (2014-2020) in $1,000s	Cost to Federal Government (2014-2020) in $1,000s	Total Change in Enrollment (2020)
No Expansion:			
1. Baseline	($65,779.6)	$55,845.0	175
2. Moving Current Eligibles Above 138 of Percent FPL to HBE (MEAD and Pregnant Women Eligibility Categories)	($113,691.4)	$7,154.1	(913)
Expansion:			
1. Baseline	$85,488.0	$2,510,922.3	62,237
2. Low-Range Participation Assumption	$38,009.2	$1,952,472.0	47,565
3. High-Range Participation Assumption	$102,333.2	$2,709,057.8	67,443
4. Managed Care Rates	$69,470.2	$2,501,073.5	62,237
5. Delay Implementation by One Year	$79,384.2	$2,158,931.0	62,237
6. Delay Implementation by Two Years	$71,165.5	$1,797,367.2	62,237

Scenario	Cost to State (2014-2020) in $1,000s	Cost to Federal Government (2014-2020) in $1,000s	Total Change in Enrollment (2020)
7. Move Current Eligibles Above 138 of Percent FPL to HBE (MEAD and Pregnant Women Eligibility Categories)	$37,576.1	$2,462,231.5	61,149
8. Option 7 plus Transition Enrollees out of Breast and Cervical Cancer Program Eligibility Category	$24,021.2	$2,475,786.4	61,149
9. Option 8 plus Transition of Pregnant Women Below 138 Percent of FPL into "Newly Eligible" Category	($26,181.6)	$2,525,989.2	61,149

Source: Lewin Group estimates using the New Hampshire version of the Health Benefits Simulation Model.

Under the expansion option, we estimate a cumulative increase in state Medicaid spending between $38.0 and $102.3 million between 2014 and 2020, depending on participation levels in the program, compared to projected pre-ACA spending. This assumes Medicaid is expanded to all adults below 138 percent of FPL beginning January 2014. The expansion would also result in additional federal funding between $1.8 billion and $2.7 billion over this period.

The report discusses baseline, low-range, and high-range participation assumptions. The baseline "midpoint" assumption is estimated to cost the state approximately $85.5 million and result in an increase in enrollment of 62,237 by 2020. New Hampshire also has the option of implementing the expansion under a managed care arrangement, which would cost about $69.5 million with the same increase in enrollment--$16 million less than the baseline participation expansion option.

If the state decides to expand its Medicaid program, it can choose to delay implementation by one or two years and still be eligible for the enhanced federal match. However, 100 percent federal match rates will only be available between 2014 and 2016, and thus, the state would forgo significant federal revenue during this period of delay. By delaying implementation for one year (starting in 2015), the state would spend about $79.4 million, a savings of approximately $6.1 million compared to a January 2014 start date. Delaying implementation for two years (starting in 2016) would save the state about $14.3 million compared to a January 2014 start date.

Finally, the Phase I report explored various options for limiting eligibility for current groups of adults who are above 138 percent of FPL, as these individuals will be eligible to receive subsidized coverage in the HBE. Potential categories include the Medicaid for Employed Adults with Disabilities (MEAD) program and poverty-level pregnant women. The state can also transition enrollees out of the Breast and Cervical Cancer Program, allowing these individuals to be covered under the newly eligible group at enhanced federal matching rates. Under these options, the cost to the state ranges from a savings of $26.2 million to an additional cost of $37.6 million, compared to pre-ACA projections.

III. Phase II Analysis and Results

In our Phase II analyses, we estimate the impact of expanding or not expanding Medicaid across five different areas: other state programs, the uninsured, providers, the state economy, and the commercial market. The results of our analyses are presented below.

A. Impact on Other State Programs

Currently, New Hampshire provides services and/or coverage to many low-income individuals who do not qualify for Medicaid under current eligibility criteria. Most of these individuals will be enrolled in the Medicaid expansion and the cost for these services will be paid by Medicaid, which are counted in Phase I. Thus, other state agencies will no longer need to pay for this care, which will result in a savings to the state and is counted as an offset to the state's cost of the Medicaid expansion.

Programs and areas where the state could see savings include state employee coverage, the state high-risk pool, the state Department of Corrections, and the Cypress Center. Under a managed care arrangement, a premium assessment tax would provide revenue to the State General Fund, which would serve as an offset to the state cost of expansion.

Furthermore, as individuals come forward to take advantage of new coverage opportunities created by the Affordable Care Act, some may learn in the process that they qualify for other public programs, such as the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) or child care assistance.[2] Although enrollment in such programs is not automatic, these programs may experience a boost in enrollment following implementation of a potential expansion as individuals elect to enroll themselves or family members. The fiscal effect of this dynamic, often referred to as the "woodwork effect" or "welcome mat effect," will depend on the funding resources the programs draw upon and whether any additional state funding is required.

1. State Employee Coverage

Our analysis estimates that about 14,600 public and private sector employees and their dependents would become covered under the Medicaid expansion, who would have otherwise been covered by their employers in the absence of the expansion. This includes about 200 state employees who would have been covered under the state's employee health benefits plan. As these employees and their dependents become covered under Medicaid expansion, the state would no longer pay its share of the premium for these workers. As a result, we estimate a savings to the state of $27.4 million between 2014 and 2020 (***Figure* 2**).

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[2] SNAP eligibility is dependent on general and financial requirements based on household income, household resources, and household expenses. SNAP is a predominantly federally-funded program. The state is only responsible for administrative expenses. Child care assistance (NH Child Care Scholarship) may be available to parents who are working, looking for work, or enrolled in a training program. Gross family income is used to determine eligibility, and may not exceed 250 percent of federal poverty guidelines for qualifying parents.

2. State High-Risk Pool

The New Hampshire Health Plan (NHHP) is a high-risk pool that provides health insurance coverage to about 2,800 residents who otherwise may have trouble obtaining insurance. In 2011, the average annual cost per member was $9,800 and was funded through premiums paid by enrollees and assessments on health plans. In 2014, it is anticipated that NHHP members will be enrolled in private health plans in the HBE or in Medicaid expansion, depending on the member's family income. If Medicaid is not expanded, we assume that NHHP members with income below 100 percent of FPL would be enrolled in private health plans in the HBE at a community rated premium but without the aid of federal premium subsidies. This is assuming that this group of individuals will continue to need health insurance coverage, and are willing to acquire coverage at a relatively high cost with respect to income, as they had been prior to 2014. When enrolled in the HBE, however, these individuals will likely enjoy savings if the HBE community rated premiums are lower than in the NHHP. Since all NHHP members will be moved to another source of coverage with or without the Medicaid expansion, we estimate that savings will not be solely attributable to the expansion. .

3. State Corrections Department

In 1997, a federal rule was adopted that permits Medicaid to cover health care costs for inmates admitted to an inpatient facility overnight, assuming that inmate is otherwise eligible for Medicaid. However, few states have taken full advantage of this rule because most inmates, including those in New Hampshire, do not qualify for Medicaid under current eligibility criteria. Thus, these costs are currently endured by the state.

However, in 2014, if New Hampshire elects to expand Medicaid, inmates who leave the prison for over 24 hours and are admitted for inpatient services will become eligible for Medicaid under the new eligibility criteria and Medicaid will cover services for the duration of the inpatient stay. This applies to all inmates "admitted as an inpatient in a hospital, nursing facility, juvenile psychiatric facility or intermediate care facility that is not part of the state or local correctional system."[3] Additionally, as "newly eligibles," the federal government will pay for 100 percent of incurred inpatient costs through 2016, which would gradually decrease until leveling off at 90 percent in 2020 and all years to follow. This will result in significant savings to the state corrections department.

Using FY 2011 prison inmate medical expenditure data provided by the New Hampshire Department of Corrections, we estimate the state corrections department would save $21.8 million over the 2014 to 2020 period as a result of Medicaid now covering these inpatient costs (***Figure 2***).

Also under expansion, as offenders transition out of the prison setting and into the community, former inmates would no longer struggle to gain access to coverage, as most would qualify for Medicaid immediately upon release as a "newly eligible." They then can avoid gaps in

[3] NACO (2012 March). County Jails and the Affordable Care Act: Enrolling Eligible Individuals in Health Coverage. Retrieved from http://www.naco.org/programs/csd/Documents/Health%20Reform%20Implementation/County-Jails-HealthCare_WebVersion.pdf

coverage and care that are commonplace today upon release from incarceration, which can negatively impact successful transition into the community. Under the ACA, mental health and substance use disorder services, including behavioral health treatment, is considered an "essential health benefit," meaning this must be covered under all health plans, including Medicaid for the expansion group. Given that the prison population faces a disproportionate burden of mental illness and substance abuse, access to these health care services may increase use of services and ultimately prevent individuals from future imprisonment. Here, research suggests that as a result of increased access to mental health and substance abuse services, New Hampshire may experience measurable reductions in recidivism as a result of Medicaid expansion and thus, reductions in costs associated with maintaining those prisoners. It is also likely that Medicaid expansion will result in savings from individuals who avert imprisonment all together.

4. State Spending for Behavioral Health

The New Hampshire Bureau of Behavioral Health cited that an annual sum of $675,000 is contributed by the state towards providing indigent care for patients at the Cypress Center, a short-term crisis stabilization facility run by The Mental Health Center of Greater Manchester. These funds are contributed towards providing uncompensated ad hoc and medical services for patients at the facility, and may potentially be eliminated if covered under provisions of the ACA. Assuming that the state will no longer need to contribute this annual allotment between 2014 and 2020, it will save an additional $4.7 million, as shown in ***Figure 2***.

5. Additional Offsets

A two percent premium assessment will be levied on all participating health plans contracted under the state's Medicaid managed care program, if the state chooses to implement Medicaid expansion under a managed care arrangement (Care Management). The premium assessment will be an assessed fee of two percent on premiums borne by the federal government and the state. All revenue from this tax would be paid to the State General Fund, and thus, would serve as an additional offset to the state under Medicaid expansion. ***Figure 2*** summarizes the total additional revenues from the two percent premium assessment under Medicaid expansion, assuming a managed care arrangement, compared to no expansion. From 2014 to 2020, these revenues would equate to a total of $49.4 million.

Additionally, a premium assessment may also be applied to participating health plans in the Health Benefit Exchange. This would be an assessed fee on all commercial premiums and would become a source of incoming revenue for the state Insurance Department regardless of whether the state decides to expand. However, these are not estimated for this report.

6. Total Offsets to State

Collectively, the total savings realized for other state programs under Medicaid expansion would equate to $67.1 million over the 2014 to 2020 period, assuming a fee-for-service program. Under a managed care program, offsets under Medicaid expansion would total $116.6 million when premium assessment tax revenue is included. These savings are summarized in ***Figure 2*** below.

Figure 2. Summary of Total Offsets Within Other State Programs Due to Medicaid Expansion, in $1,000s (2014-2020)

	2014	2015	2016	2017	2018	2019	2020	2014-2020
State Employee Health Benefits	$2,597	$3,188	$3,840	$4,070	$4,314	$4,573	$4,847	$27,429
State High Risk Pool	$0	$0	$0	$0	$0	$0	$0	$0
State Corrections Department	$2,714	$2,877	$3,050	$3,072	$3,222	$3,379	$3,467	$21,782
State Funding for Cypress Center	$675	$675	$675	$675	$675	$675	$675	$4,725
Increased Tax Revenue	$670	$1,540	$1,940	$2,180	$2,250	$2,280	$2,340	$13,200
Total Offsets Under FFS	$6,656	$8,280	$9,505	$9,997	$10,461	$10,907	$11,329	$67,136
Premium Assessment [1/]	$5,404	$6,103	$7,139	$7,359	$7,582	$7,808	$8,037	$49,434
Total Offsets Under Managed Care	$12,060	$14,383	$16,644	$17,356	$18,043	$18,715	$19,366	$116,570

1/ Premium Assessment only applicable if Medicaid expansion is implemented within a managed care program.

The combined results of the Phase I and Phase II analyses show that the net savings to the state without Medicaid expansion will range from a $65.8 million to $113.7 million, depending on the design option. Under expansion, inclusive of Phase II offsets, the state may see savings of up to $93.3 million or may contribute up to $35.4 million towards the cost of expansion, depending on the design option it selects ***(Figure 3).***

Figure 3. Summary of Total Offsets Within Other State Programs Due to Medicaid Expansion, in $1,000s (2014-2020)

Scenario	Cost to Federal Government (2014-2020) in $1,000s	Cost to State (2014-2020) in $1,000s	Offsets to State Costs (2014-2020) in $1,000s [1/]	Net Cost to State (2014-2020) in $1,000s
No Expansion:				
1. Baseline	$55,845.0	($65,779.6)	$0	($65,779.6)
2. Moving Current Eligibles Above 138 of Percent FPL to HBE (MEAD and Pregnant Women Eligibility Categories)	$7,154.1	($113,691.4)	$0	($113,691.4)
Expansion:				
1. Baseline	$2,510,922.3	$85,488.0	$67,136.0	$18,352.0
2. Low-Range Participation Assumption	$1,952,472.0	$38,009.2	$67,136.0	($29,126.8)
3. High-Range Participation	$2,709,057.8	$102,333.2	$67,136.0	$35,197.2

Scenario	Cost to Federal Government (2014-2020) in $1,000s	Cost to State (2014-2020) in $1,000s	Offsets to State Costs (2014-2020) in $1,000s [1/]	Net Cost to State (2014-2020) in $1,000s
Assumption				
4. Managed Care Rates	$2,501,073.5	$69,470.2	$116,570.0[4]	($47,100)
5. Delay Implementation by One Year	$2,158,931.0	$79,384.2	$44,028.0	$35,356.2
6. Delay Implementation by Two Years	$1,797,367.2	$71,165.5	$37,925.0	$33,240.5
7. Move Current Eligibles Above 138 of Percent FPL to HBE (MEAD and Pregnant Women Eligibility Categories)	$2,462,231.5	$37,576.1	$67,136.0	($29,559.9)
8. Option 7 plus Transition Enrollees out of Breast and Cervical Cancer Program Eligibility Category	$2,475,786.4	$24,021.2	$67,136.0	($43,114.8)
9. Option 8 plus Transition of Pregnant Women Below 138 Percent of FPL into "Newly Eligible" Category	$2,525,989.2	($26,181.6)	$67,136.0	($93,317.6)

1/ Equal offsets are applied across all design options, except for the Delayed Implementation options. However, offsets may vary slightly by scenario.

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

B. Impact on the Uninsured

In considering whether or not to expand the state's Medicaid program, it is important to consider the impact that expanding or not expanding Medicaid may have on individuals and families. It will affect the number of individuals and families who remain uninsured, which will vary by geographic region. It will also affect individual and family spending on health care, particularly for those families who would be covered under the expansion option. Potential impact on individual bankruptcy is also a worthwhile consideration, though we find the impact under expansion to be limited.

1. Change in Number of Uninsured

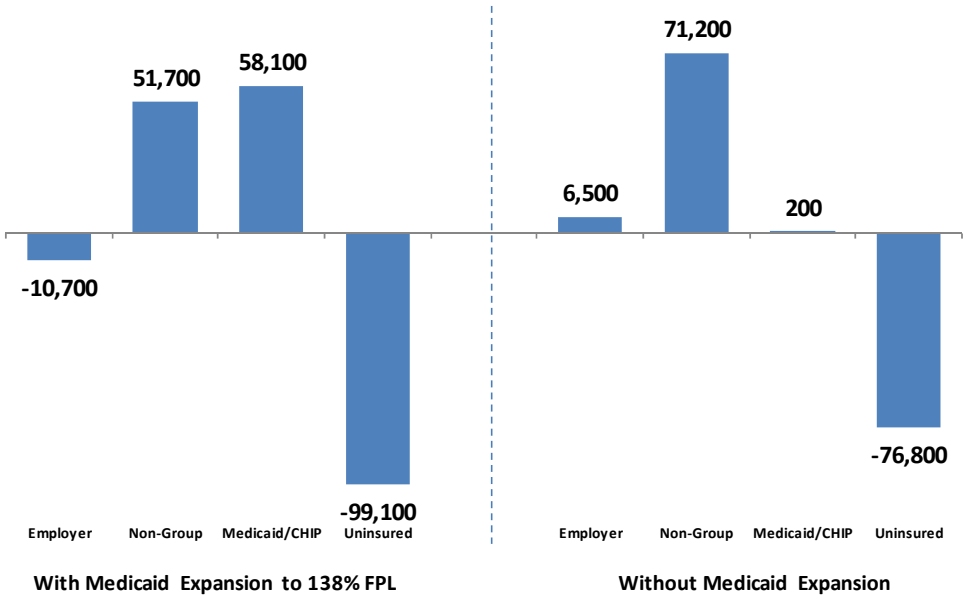
The coverage provisions in the ACA will dramatically change health insurance coverage in New Hampshire when it is fully implemented in 2014. These provisions include reforming the individual insurance markets by eliminating pre-existing condition exclusions, guaranteeing coverage and renewability of coverage, establishing Health Benefit Exchanges, an individual

4 Includes premium assessment tax revenues, paid to the State General Fund($49.4 million)

coverage mandate, subsidizing health insurance for individuals between 100 and 400 percent of FPL, and a mandate for large employers to offer health insurance.[5]

We estimate that there will be about 170,000 uninsured in New Hampshire in 2014 in the absence of the ACA. Taking into account all other provisions of the ACA, our estimates show that if the state expands Medicaid, the number of uninsured would be reduced by 99,100 (***Figure 4***) compared to pre-ACA uninsurance rates. Thus, the number of uninsured in New Hampshire would be approximately 71,000 with Medicaid expansion ***(Figure 5).*** However, if the state decides not to expand Medicaid, then the ACA will have a lesser impact on the number of uninsured. Many of the lowest income adults (below 100 percent of FPL) will not have access to subsidized coverage because premium subsidies through the HBE are only available for individuals between 100 and 400 percent of FPL. Thus, the Medicaid expansion would cover an additional 22,300 people in New Hampshire who are below poverty, who would otherwise be uninsured without Medicaid expansion.

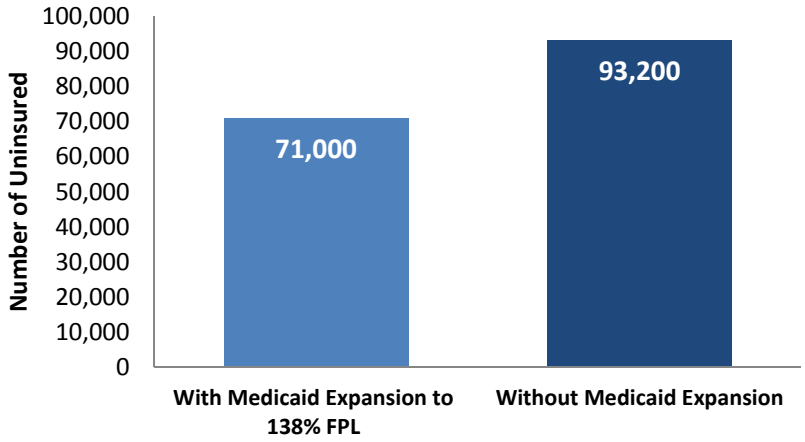
Figure 4. Change in Coverage Under the ACA in New Hampshire in 2014 [1/]



1/ Assumes all provisions of the ACA are fully implemented in 2014.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

[5] Under the ACA, states have the option of establishing a fully state-based exchange, a state-federal partnership exchange, or default into a federally-facilitated exchange. In June, 2012, New Hampshire passed HB 1297, which prohibits the state from establishing a state-based exchange. Given this, the federal government will run the exchange in New Hampshire.

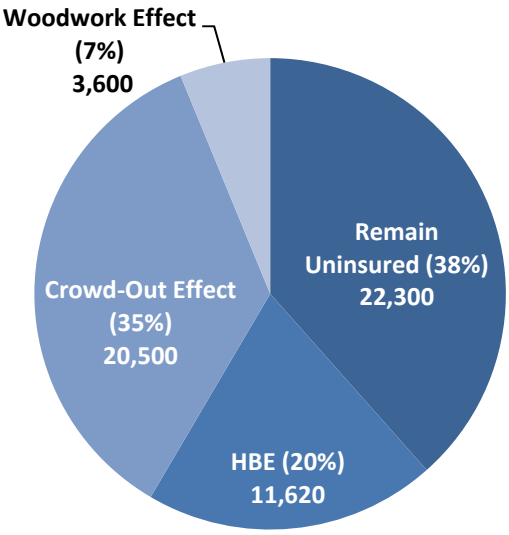
Figure 5. Number of Uninsured under ACA[2/]



1/ Assumes all ACA provisions are fully implemented and reach ultimate enrollment in 2014
2/ Without Medicaid expansion assumes subsidized coverage in the Exchange is available for families between 100% and 400% of FPL

We estimate the net change in Medicaid enrollment to be 58,000 individuals under expansion. As depicted in ***Figure 6***, we estimate that out of the 58,000 individuals who would have enrolled in Medicaid under expansion, 20,500 of these individuals would have enrolled due to a crowd-out effect, or the substitution of private coverage for Medicaid. Without a program expansion, this group would remain under private coverage. An estimated 11,620 individuals, who are between 100 percent and 138 percent of FPL, would seek subsidized coverage in the Health Benefits Exchange. Approximately 3,600 currently eligible individuals would have enrolled in Medicaid under an expansion, propelled by the requirements of the individual mandate. This is commonly referred to as the "woodwork effect." Finally, this leaves about 22,300 individuals uninsured in the absence of an expansion, or 38 percent of the original 58,000 people who would have gained coverage under Medicaid expansion.

Figure 6. Insurance Status of the 58,000 Individuals Who Would Enroll under Medicaid Expansion, in the Absence of Expansion in 2014



1/ Assumes all provisions of the ACA are fully implemented in 2014

2. *County-Level Impact on the Uninsured*

Under expansion, the reduction in number of uninsured will vary by geographic area. As shown in ***Figure 7,*** Hillsborough and Rockingham Counties will see the largest absolute reductions in the uninsured under Medicaid expansion.

Figure 7. Change in the Number of Uninsured Coverage Under the ACA in New Hampshire [1/]

County	Number Uninsured Pre-ACA	Change in Uninsured Post ACA	
		With Medicaid Expansion	Without Medicaid Expansion
Belknap County	8,232	-4,856	-3,715
Carroll County	7,410	-4,371	-3,344
Merrimack County	16,962	-10,007	-7,655
Cheshire County	13,386	-8,572	-6,579
Sullivan County	7,540	-4,828	-3,705
Coos County	6,500	-4,198	-3,294
Grafton County	14,301	-9,237	-7,247
Hillsborough County	48,270	-26,272	-20,851
Rockingham County	33,814	-18,404	-14,606
Strafford County	13,901	-8,340	-5,800
Total	170,315	-99,085	-76,798

1/ Assumes all provisions of the ACA are fully implemented in 2014.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

3. Health Spending by the Uninsured

Without expansion, those remaining uninsured will continue to strain the finances of other public health programs and safety net providers for their care, while likely forgoing or reducing necessary care and risking a drain on personal finances. This is because single adults falling below poverty level may not have access to subsidized coverage via the HBE, nor would they be eligible for Medicaid.

We estimate that uninsured New Hampshire residents would have spent about $1,212 annually per person out-of-pocket for health care in 2014 in the absence of the ACA (***Figure 8***). However, with Medicaid expansion, the average out-of-pocket spending per uninsured person would decline by $372 to a total of $841, compared to a decline of $219 for a total of $993 under the ACA without Medicaid expansion.

The change in out-of-pocket spending per uninsured person would be most dramatic for residents who are below 138 percent of FPL. We estimate that uninsured New Hampshire residents who are below 138 percent of FPL will likely spend about $1,248 per person out-of-pocket for health care in 2014 in the absence of the ACA, representing a significant portion of their income. Under the ACA with the Medicaid expansion, the average out-of-pocket spending per uninsured person below 138 percent of FPL would decline by $620 to a total of $628, a nearly 50 percent reduction compared to pre-ACA spending. However, without the expansion, the average reduction for this group would only be $230. Thus, on average, uninsured individuals below 138 percent of FPL would pay significantly more out-of-pocket for health care services than other lower- and middle-income individuals who were uninsured prior to the ACA. This analysis does not include the premium costs for newly insured individuals purchasing coverage in the HBE or through their employer's health plan.

Figure 8. Change in Out-of-Pocket Health Spending for Uninsured in New Hampshire in 2014 [1/]

Family Income as a Percent of FPL	Out-of-Pocket Spending Per Person Pre-ACA	With Medicaid Expansion		Without Medicaid Expansion	
		Out-of-Pocket Spending Per Person Post-ACA	Change from Baseline	Out-of-Pocket Spending Per Person Post-ACA	Change from Baseline
Below 138% FPL	$1,248	$628	-$620	$1,017	-$230
138-199% FPL	$1,074	$621	-$452	$621	-$452
200-299% FPL	$1,123	$857	-$267	$857	-$267
300-399% FPL	$1,091	$896	-$195	$896	-$195
400% FPL and above	$1,351	$1,293	-$57	$1,293	-$57
Total	$1,212	$841	-$372	$993	-$219

1/ Assumes all provisions of the ACA are fully implemented in 2014.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

4. Individual Bankruptcies

From 2007 to 2010, total individual bankruptcy filings for nonbusiness debts increased by 89 percent in New Hampshire, from about 2,650 in 2007 to about 5,000 in 2010.[6] In 2011, total New Hampshire individual bankruptcy filings for nonbusiness debts began to decrease, for a total of about 4,300. At the time of filing, the median current monthly income for these individuals was $3,696, equivalent to annual earnings of $44,352.[7] New Hampshire does not collect data on reasons for bankruptcy filing. However, recent research at Harvard suggests that about 62 percent of all bankruptcies are medically related, mostly due to unpaid medical bills.[8] In New Hampshire, this would amount to about 2,666 medically-related individual bankruptcies in 2011. The majority (about 75 percent) of these individuals filing for medically-related bankruptcy have some health insurance. Gaps in coverage, including uncovered services and high levels of cost sharing, drive out-of-pocket expenses.[9] This translates to about 667 uninsured New Hampshire residents who had medically-related bankruptcy filings in 2011. Though New Hampshire income data are unavailable, it is likely that many of these individuals would qualify for insurance subsidies in the Exchange, given the median income for this group. Some of these individuals would likely qualify for Medicaid under Medicaid expansion; however, that does not necessarily translate into averted bankruptcy. For instance, evidence from a 2008 Oregon health insurance experiment, in which a group of low-income adults were selected by lottery to receive Medicaid benefits, showed that enrolling in Medicaid did not have a statistically significant effect on bankruptcy, compared to a comparable group who was not selected for the lottery. However, the study did show a "decline in the probability of having any unpaid bills sent to collection," about a 10 percent relative difference from the control mean.[10] This implies that Medicaid expansion to all adults at or below 138 percent of FPL would have limited impact on medically-related bankruptcies.

C. Impact on Providers

Expanding or not expanding Medicaid will have a measurable impact on a number of provider groups. Much of this will be reflective of reductions in uncompensated care. Here, we first estimate the impact of the ACA on Medicaid DSH payments—a change that will occur with or without Medicaid expansion. We then compare the impact of expanding versus not expanding across four types of providers—health systems (including hospitals), Institutes for Mental Disease (IMD), Federally Qualified Health Centers, and Community Mental Health Centers. Our analyses are presented below.

1. DSH Reductions and Uncompensated Care

Disproportionate Share Hospital (DSH) payments, or DSH payments, are made to qualifying hospitals to offset costs associated with caring for a "disproportionate share" of uninsured and underinsured patients. The state receives federal matching funds for these payments to

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6 American Bankruptcy Institute (2011). Annual Business and Non-business Filings by State (2007-11).

7 Administrative Office of the United States Courts (2012). 2011 Report of Statistics Required by the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005. Washington, D.C.

8 Harvard CITATION Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/19501347

9 Ibid.

10 Oregon study citation

hospitals and New Hampshire Hospital, an Institution for Mental Disease (IMD)[11]. The maximum annual amount of federal matching funds that New Hampshire may use to make Medicaid DSH payments was capped at $160.3 million in 2011[12], but the state has not utilized its full allotment, drawing only $42.0 million in federal funding across its 26 hospitals and hospital systems and $9.0 million to its state-operated psychiatric facility, New Hampshire Hospital, thus leaving $109.0 million of its federal allotment unspent.

The ACA reduces federal funding for the Medicaid DSH program beginning in 2014. The reduction will occur over time and will be dependent upon whether the state is designated as a "high" or "low" DSH state.[13] As a "high" DSH state, DSH allotments will be reduced by 51 percent.[14] The methodology of implementing this reduction is currently being developed by the federal government. The rationale for reducing Medicaid DSH funding is that the new coverage options provided under the ACA will reduce the number of uninsured and in turn the amount of uncompensated care that hospitals currently provide to the uninsured. Medicaid DSH payments were used to help pay hospitals for a portion of the uncompensated care they provided. Thus, as uncompensated care levels decline under health reform, the ACA requires a reduction in DSH payments as the need for them goes down. However, without the Medicaid expansion as originally designed in the ACA, the policy rationale is blunted if the state does not expand Medicaid. This apparent schism has not been addressed in the wake of the Supreme Court decision that deemed Medicaid expansion optional for states.

The provisions in the ACA that specify federal reductions in DSH funding are separate from the Medicaid expansion provisions, and were untouched by the Supreme Court decision that concluded that the Medicaid expansion was optional for states . Thus, DSH funding will be reduced whether or not the state expands Medicaid. However, the reductions will be tied to the number of uninsured in the state and how the state treats hospitals with high Medicaid and uncompensated care levels.

Additionally, since 1991, New Hampshire, like other states, has levied a provider tax on hospitals to help fund its uncompensated care. This tax, known as the Medicaid Enhancement Tax (MET), is assessed at 5.5 percent of hospitals' net patient service revenue.[15]

In 2010, however, significant changes to the state DSH methodology occurred in response to findings from an Office of Inspector General audit. The new methodology resulted in some non-Critical Access Hospitals receiving smaller DSH payments based upon a lessor amount of uncompensated care provided. During the SFY 2012 and 2013 budget process, the decision was made to significantly reduce the amount of MET revenue available for DSH payments. The

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11 Terminology used here is based on current federal terminology for the designation of these facilities.

12 Kaiser Family Foundation State Health Facts

13 New Hampshire is designated as a "high" DSH state on the basis that DSH expenditures are above 3 percent of total (state and federal) Medicaid spending. According to the New Hampshire Department of Health and Human Services Office of Business Operations, in state fiscal year 2010, Disproportionate Share payments to general hospitals and New Hampshire Hospital comprised 16.6 percent of total Medicaid expenditures in the state.

14 HHS.gov/Recovery, "Disproportionate Share Hospital," FY 2009, U.S. Department of Health and Human Services, available at *www.hhs.gov/recovery/cms/dsh.html*; and Kaiser Family Foundation, "Federal Medicaid DSH Allotments," available at *http://www.statehealthfacts.org/comparetable.jsp?ind=185&cat=4*

15 New Hampshire Statutes, Chapter 84-A: Medicaid Enhancement Tax

decision resulted in non-Critical Access Hospitals not receiving DSH payments to offset the costs of providing uncompensated care in the last cycle.

Uncompensated care encompasses three components, all of which represent losses incurred by hospitals for a failure to collect payment for services delivered: charity care (also referred to as indigent care or community care), bad debt, and undercompensated care due to below-cost payment for services provided to Medicare and Medicaid patients. Charity care is defined in this report as care for which hospitals do not expect payment because of a determination of patients' inability to pay, while bad debt results from charges that the hospital is unable to collect.

The distinction between charity care and bad debt is not always clear. Different hospitals define and report these components in varying ways for accounting purposes. For example, one hospital may write off charges as bad debt, while another may designate such charges as charity care. Historically, the increase in both charity care and bad debt has been attributed to price increases, increasing insurance deductibles, and economic conditions.

2. *Impact of ACA on Medicaid DSH Payments*

Based on our methodology described below, we estimate that by 2020, Medicaid hospital and Institute for Mental Disease DSH payments will total $101.9 million, of which $50.9 million will be paid by the federal government (***Figure 9***). We also estimate the state's federal DSH allotment through 2020, assuming that New Hampshire is treated like an average state for treatment of the ACA Medicaid DSH reductions. Based on this assumption, we estimate that New Hampshire's federal DSH allotment will drop to $92.0 million in 2020. However, this will still be more than what is needed to match the uncompensated care pool (UCP). Thus, we estimate that the ACA Medicaid DSH cuts will not affect the Medicaid DSH payments to New Hampshire hospitals assuming that the current payment methodology continues through 2020.

Figure 9. Medicaid DSH Payments and Federal DSH Allotments Under the ACA for New Hampshire (2010-2020)

Year	Hospital DSH Payment [1/]	IMD DSH Payment [2/]	Total DSH Payment	Federal DSH Drawdown	Federal DSH Allotment Pre-ACA [3/]	Federal DSH Allotment Post-ACA [4/]	Amount (Under)/ Over Allotment
2010	$182.0	$18.5	$200.5	$100.3	$165.4	$165.4	-$65.2
2011	$205.8	$16.4	$222.2	$111.1	$160.3	$160.3	-$49.2
2012	$48.7	$9.2	$57.9	$29.0	$162.0	$162.0	-$133.0
2013	$57.2	$9.6	$66.8	$33.4	$165.4	$165.4	-$132.0
2014	$61.1	$10.2	$71.3	$35.6	$167.0	$158.5	-$122.9
2015	$64.5	$10.8	$75.3	$37.7	$170.4	$160.4	-$122.7
2016	$68.8	$11.5	$80.3	$40.1	$173.8	$163.7	-$123.6
2017	$72.8	$12.2	$84.9	$42.5	$177.2	$146.9	-$104.4
2018	$77.1	$12.9	$90.0	$45.0	$180.5	$96.2	-$51.3
2019	$81.9	$13.7	$95.6	$47.8	$183.9	$90.3	-$42.5
2020	$87.3	$14.6	$101.9	$50.9	$187.3	$92.0	-$41.0

1/ Assumes 13 percent of MET used to fund UCF and includes federal matching funds.
2/ Based on data reported by New Hampshire hospital for 2010 through 2012 and trended to 2020 based on projected hospital revenue growth for CMS Office of the Actuary.
3/ New Hampshire's DSH allotment for 2011 was trended to 2020 based on national projected federal DSH funding.
4/ Assumes DSH cuts for New Hampshire are made in proportion to national reduction specified in the ACA.
Source: Lewin Group estimates

3. Health Systems

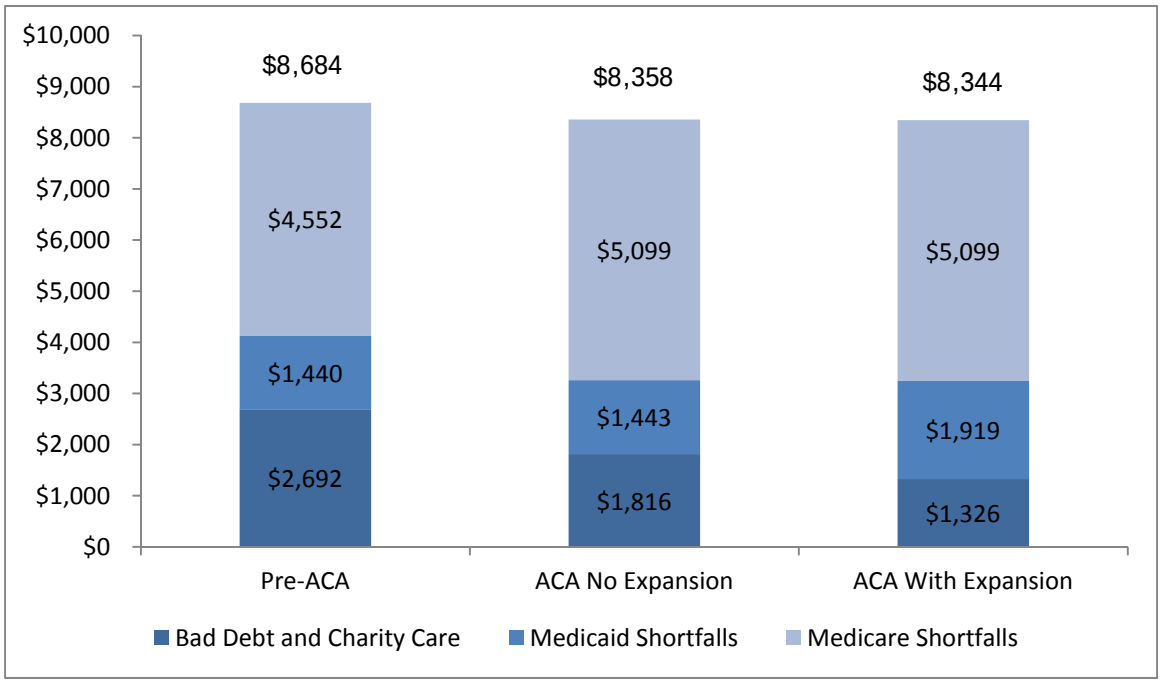
In our analysis, we examine the financial impact to New Hampshire's 26 hospitals and hospital systems, with and without an expansion of the Medicaid program. These hospitals fall into two categories, based on Medicare reimbursement methods from the Centers for Medicare & Medicaid Services (CMS). The 13 larger hospitals use a Prospective Payment System (PPS), while the remaining 13 hospitals are designated as Critical Access Hospitals (CAH). Medicaid reimbursement to New Hampshire hospitals differs significantly for PPS and CAH facilities, largely due to the discrepancies in how the state Medicaid program allots DSH adjustment payments. We emphasize that certain characteristics that are specific to New Hampshire make it difficult to apply national trends to New Hampshire provider systems.

Using the Lewin Group Health Benefits Simulation Model for the state of New Hampshire and data provided by the New Hampshire Hospital Association (NHHA), we estimate uncompensated care (bad debt, charity care, and undercompensated care [16]) for New Hampshire health systems, which include the hospital as well as other entities owned by the system, such as physician groups, skilled nursing facilities, freestanding surgical centers and home health agencies.

We estimate bad debt and charity care to be about $2.7 billion over the 2014 to 2020 period in the absence of the ACA. If the state expands Medicaid, this amount would be reduced by $1.3 billion over this period, compared to an $862.0 million reduction if the state does not expand Medicaid (***Figure 10***). However, because more people will be enrolled in Medicaid under the expansion and Medicaid payments are less than the cost of treating these patients, hospitals will experience greater Medicaid payment shortfalls. The ACA also includes Medicare payment reductions that will add to hospital payment shortfalls for Medicare patients, which were estimated by the American Hospital Association to be $547 million over the 2014 to 2020 period. Overall, we estimate that health system uncompensated care will be reduced by about $340 million (4 percent) under the ACA with or without the Medicaid expansion.

[16] Which includes payment shortfalls for Medicare and Medicaid due to payments that are less than the cost of treating these patients.

Figure 10. Total Uncompensated Care for New Hampshire Health System Under the ACA With and Without the Medicaid Expansion, in Millions (2014-2020)



Source: Lewin Group analysis using the New Hampshire version of the Health Benefits Simulation Model (HBSM).

To estimate the overall financial impact of the Medicaid expansion on New Hampshire health systems, we assume that previously uncompensated costs for patients covered by the Medicaid expansion will be reimbursed at Medicaid rates that are below cost. However, payments for patients newly covered by private insurance are assumed to be made at private payment levels, which are substantially above costs. We estimate there will be more people newly covered by private insurance if the state does not expand Medicaid since those between 100 and 138 percent of FPL will be eligible for subsidized private coverage in the HBE. Although there is a greater reduction in bad debt and charity care if the state expands Medicaid ($131.3 million reduction) compared to not expanding Medicaid ($85.9 million reduction), since hospitals would receive a much higher private payment rate compared to Medicaid, the revenues received by the hospital for this care under the expansion would be $130.5 million with expansion compared to $120.9 million without expansion if no other changes are made to the rate structure (***Figure 11***).

When reviewing these forecasts, it is important to consider the unique characteristics of New Hampshire's health care safety net that affect a Medicaid expansion's impact on hospitals. In particular, New Hampshire has a particularly low uninsured rate for the nonelderly, well below the national average.[17] Additionally, Medicaid payment rates in the state are significantly lower than Medicare and commercial insurance rates and lower than the rates of other Medicaid

[17] According to the Kaiser Family Foundation, the uninsured rate for nonelderly adults in 2011 was 15 percent in New Hampshire, compared to 21 percent nationally.

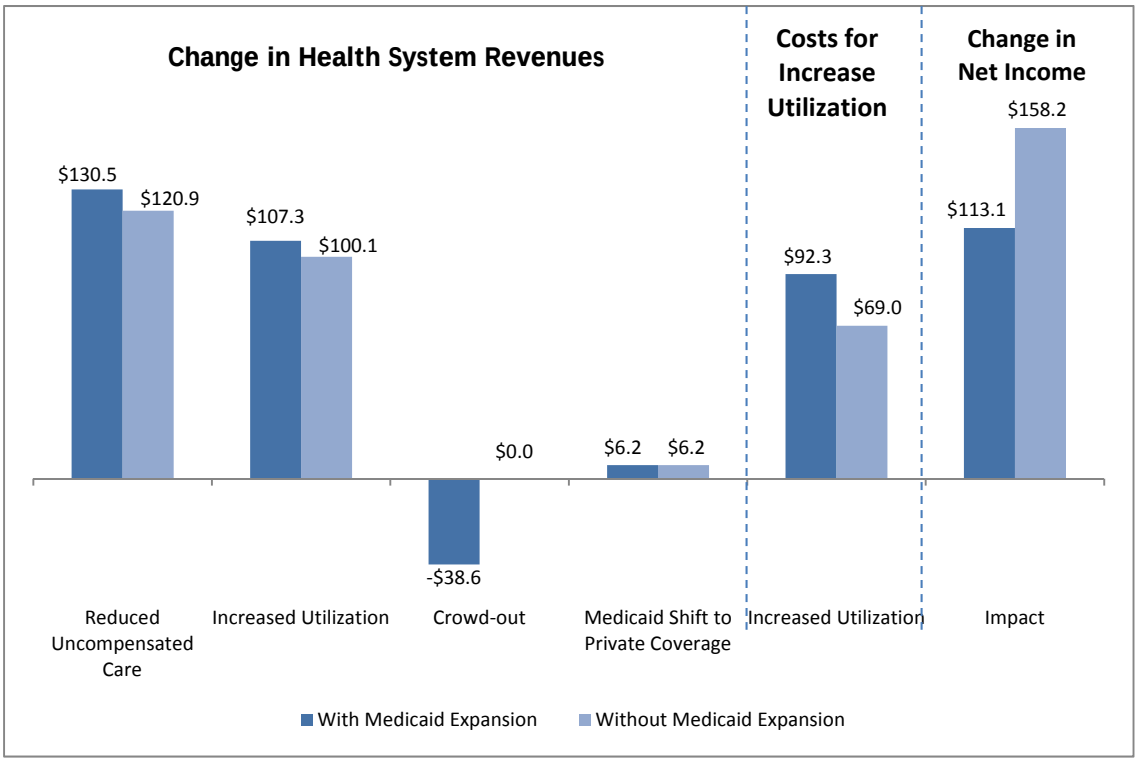
programs nationally[18]. In conjunction, these state-specific traits make it difficult to extrapolate trends for New Hampshire provider systems based on what is projected nationally or for other states.

Additionally, we assume that health system inpatient and outpatient utilization for newly insured people will increase to the same levels as insured people with similar demographic, income, and health status characteristics. If the state expands Medicaid, we estimate an increased utilization by the newly insured translating to $92.3 million in costs, for which the hospital will receive about $107.3 million in revenue due to the mix of Medicaid and commercial payments. Similarly, if the state does not expand Medicaid, we estimate an increase in utilization of $69.0 million in costs with $100.1 million in payments (***Figure 11***).

Our analysis shows that about 20,500 individuals who choose to enroll in the Medicaid expansion would have been covered by private insurance in the absence of the expansion (i.e., crowd out). Health systems would have received commercial payment rates for services provided to these people in the absence of the expansion, but will instead receive the lower Medicaid rates. Because of the lower Medicaid reimbursement, we estimate a loss to the health systems of $38.6 million (***Figure 11***). We also estimate that 3,500 previous Medicaid enrollees would take private coverage as their employers begin to offer coverage. Conversely, hospitals would have received Medicaid payment rates for these people in the absence of the ACA, but will instead receive higher commercial rates. We estimate the net effect would be an increase in net income of about $6.2 million, also shown in ***Figure 10***.

[18] Kaiser Family Foundation Medicaid-to-Medicare Fee Index, 2008

Figure 11. Impact on New Hampshire Health System Revenues Under the ACA With and Without the Medicaid Expansion[1/]



1/ Assumes that all provisions of the ACA are fully phased in, but illustrations in 2011 dollars. Estimates do not include Medicare payment reductions scheduled under the ACA.
Source: Lewin Group analysis using the New Hampshire version of the Health Benefits Simulation Model (HBSM).

Overall, as shown in ***Figure 11***, we estimate that health systems would see an increase in net income of about $113.1 million under the Medicaid expansion assuming full implementation in 2014, which would represent a 28 percent increase in their current net income. However, due to more people being enrolled in private insurance in the absence of the expansion, we estimate that health system net income would increase by $158.2 million. Under no Medicaid expansion, although health systems would see more of an improvement in their bottom line, they would need to provide a greater volume of uncompensated care.

4. Institutions for Mental Disease

Long-term adult psychiatric care does not receive federal funding through the Medicaid program. This provision, termed the Institutions for Mental Diseases (IMD) exclusion, prohibits Medicaid reimbursement for care delivered to individuals between 21 years and 65 years of age in psychiatric institutions. Although not required, the New Hampshire Medicaid program has elected to cover inpatient psychiatric care for persons under 21 years of age and those over 65 years of age, as optional services under its state Medicaid plan.

An IMD is defined as "a hospital, nursing facility, or other institution of more than 16 beds that is primarily engaged in providing diagnosis, treatment or care of persons with mental diseases,

including medical attention, nursing care, and related services."[19] In the state of New Hampshire, the primary IMD is New Hampshire Hospital (NHH), a state-operated, publically-funded psychiatric hospital that provides inpatient psychiatric services to children, adolescents, adults, and elders with severe mental illness.

New Hampshire Hospital receives Disproportionate Share Hospital (DSH) payments from the state for serving a high number of low-income patients and for providing a large volume of uncompensated care. In state fiscal year 2012, total expenditures at NHH reached nearly $58.7 million. The hospital received $9.2 million in DSH payments, which represents 16 percent of its expenses. However, DSH payments for NH Hospital are not made from the state's uncompensated care fund.

We find that the ACA reductions in federal Medicaid DSH allotments will not affect DSH payments in New Hampshire over the next several years. Since the ACA will have no impact on DSH funding in the state then there will be no need for additional state funds to cover costs for NHH.

5. Safety Net Providers

a. Community-Based Health Centers

Community-based health centers in the state are non-profit, locally-driven entities that focus on providing comprehensive primary care and other health services to communities and populations that would otherwise face significant barriers to accessing health care services and treat patients irrespective of their ability to pay for those services. Federally Qualified Health Centers (FQHCs) currently provide care to 12 percent of the Medicaid population, and it is uncertain how this may shift upon implementation of ACA provisions and the presumed increased demand for primary care services that may result.. We analyze the effects of Medicaid expansion one of the primary community-based clinic models: Federally-Qualified Health Centers.[20] These facilities currently receive enhanced reimbursement rates to partially offset the costs of providing care to the uninsured and the underinsured, and will continue to receive these rates under the ACA.

The 10 FQHCs in New Hampshire provide services at 52 sites in the state, and are primarily located in underserved areas confronted by high levels of poverty and a scarcity of physician practices. FQHCs are given cost-based reimbursement for services provided under Medicare, and are reimbursed under the Prospective Payment System (PPS) for services provided under Medicaid. Additionally, they are eligible to receive a variety of federal, state, and non-governmental grants. These grants include competitively awarded non-federal grants, which FQHCs must compete for on an intermittent basis. Past FQHC revenues have included a one-time American Recovery and Reinvestment Act Capital Improvement Projects and Facilities Improvement grant, which has since been discontinued.

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[19] 42 U.S.C. §1396d(i)

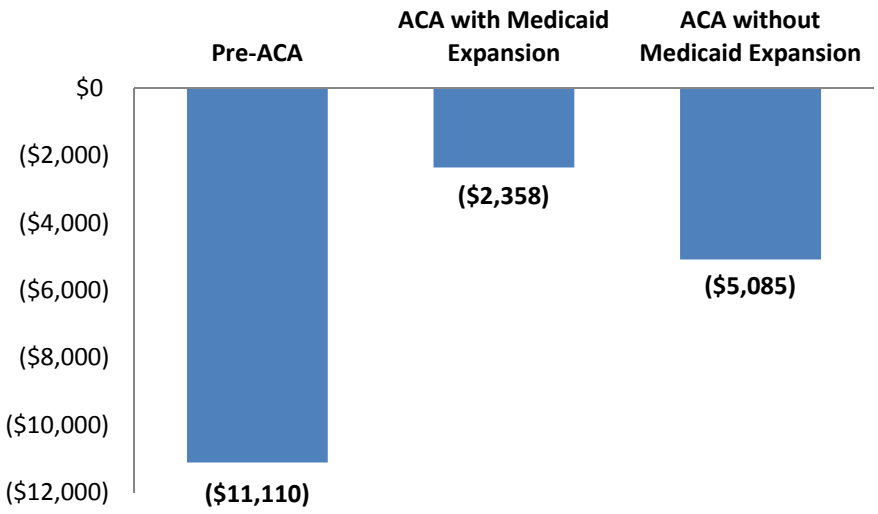
[20] While FQHC Look-Alikes perform similar functions as FQHCs, they do not receive federal health center grants. Our analysis does not include FQHC Look-Alikes. Consequently, projections may slightly underrepresent the true volume of care delivered in this capacity.

From the U.S. Department of Health and Human Services' Uniform Data System (UDS), we compiled five years (2007-2011) of aggregate annual financial and utilization data for New Hampshire's FQHCs. We simulated the transition of patients from their current source of coverage (Medicaid, Medicare, other public insurance, private coverage, and uninsured) to coverage under the ACA in proportion to the change in coverage for people below 200 percent of FPL in our simulation model. Using these assumptions, we estimated the impact on FQHCs with and without Medicaid expansion.

As shown in ***Figure 12***, we model the reduction in FQHC shortfalls (costs less collections) from uninsured patients due to changes in coverage under the ACA, with and without the Medicaid expansion. For illustrative purposes, we show the impact on FQHCs (presented in 2011 dollars) assuming all ACA provisions are fully implemented. Aggregate uncompensated care across all 10 FQHCs for uninsured patients reached over $11.0 million in 2011.

Under the ACA, FQHCs would see a dramatic reduction in uncompensated care, with or without the Medicaid expansion (***Figure 11***). If the state implements the Medicaid expansion, FQHCs would see uncompensated care reduced by nearly $9.0 million to $2.4 million. Without the Medicaid expansion, uncompensated care would fall by about $6.0 million to $5.1 million compared to pre-ACA estimates.

Figure 12. FQHC Uncompensated Care from Uninsured Recipients With and Without Medicaid Expansion in 2011 ($1,000s)



1/ Assumes all provisions of the ACA are fully implemented and impacts illustrated in 2011 dollars.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM) and 2011 UDS data.

We also estimated total revenues, costs, and shortfalls for all FQHC patients. As uninsured patients become covered by Medicaid or private coverage, we assumed that FQHCs would receive payments for these patients at current Medicaid or private payment levels. We also assume that FQHCs would see increased utilization for newly insured patients, which we estimate will be about 70 percent above current utilization levels for uninsured patients.

Based on these assumptions, we estimate that FQHCs would see a substantial increase in revenues, from $26.3 to $38.6 million under the ACA with the Medicaid expansion compared to revenues of $33.4 million without the expansion (***Figure 13).*** The analysis also shows that FQHC losses for patient care would also drop from $21.6 million to $16.7 million under the ACA with the Medicaid expansion compared to $19.5 million without the expansion.

Figure 13. Revenues, Costs, and Shortfalls for FQHCs from All Payers With and Without Medicaid Expansion in 2011

	Total Cost	Revenue	Shortfall
Pre-ACA	$47,514,259	$26,345,914	$21,168,345
ACA with Medicaid Expansion	$55,347,874	$38,609,318	$16,738,556
ACA without Medicaid Expansion	$52,924,012	$33,447,093	$19,476,919

1/ Assumes all provisions of the ACA are fully implemented and impacts illustrated in 2011 dollars.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM) and 2011 UDS data.

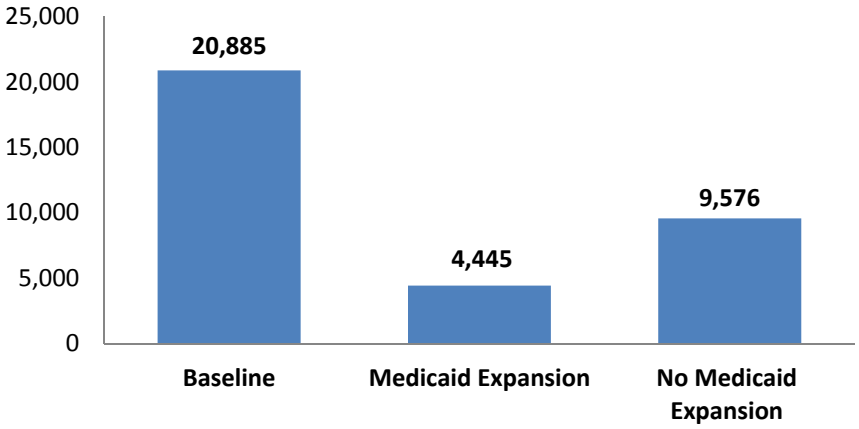
Historically, grant and other non-direct patient service revenue have accounted for a significant portion of FQHCs' total revenues. In 2011, they received $31.1 million in combined grants, which accounted for nearly 42 percent of total revenues:

- Federal Bureau of Primary Health Care (BPHC) grants of $8.9 million that contribute to the cost of operating the FQHC, including purchasing and leasing of buildings and equipment and training for staff;
- Federal American Recovery and Reinvestment Act (ARRA) grants of $12.0 million for facility and capital improvement projects, which are discontinued after 2012; and
- State government grants of $4.7 million and local government and private grants of $4.6 million.

Of the combined grant total, 15 percent were from state government grants and contracts. While grant funding will help to offset the cost of providing uncompensated care, their usage may be restricted or earmarked for specific purposes. It is unclear whether New Hampshire will continue its current trajectory of state funding, thus it is uncertain whether Medicaid expansion will lead to clear savings for the state.

To illustrate the long-term impact of the ACA with and without the Medicaid expansion, we projected patient volume, revenues, and costs through 2020. As shown in ***Figure 14*** below, under the ACA, FQHCs will see a dramatic reduction in the number of uninsured FQHC patients in 2020 under the Medicaid expansion versus not expanding Medicaid.

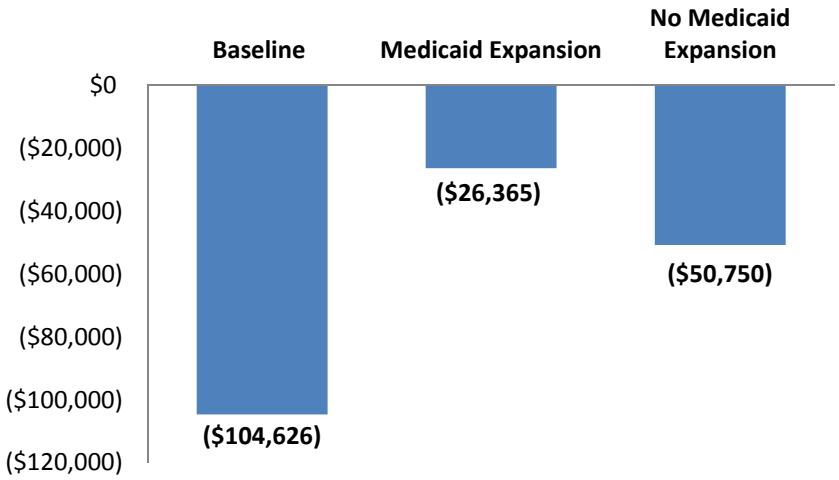
Figure 14. Number of Uninsured FQHC Patients Under Expansion versus No Expansion in 2020



Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM) and UDS data.

In the absence of Medicaid expansion, the cumulative cost of treating the uninsured is projected to be $65.9 million (or 51.5 percent) lower than under a projected pre-ACA scenario.[21] With expansion, however, total costs for treating this group of recipients are expected to be nearly $95.7 million lower (a 75 percent reduction), given there will be fewer uninsured in New Hampshire if Medicaid is expanded. Total annual shortfalls incurred by FQHCs for providing treatment to the uninsured will also diminish significantly. While this will occur with or without Medicaid expansion under the ACA, total annual and cumulative shortfalls over the period will be substantially lower under an expansion scenario ($26.4 million) than under a no expansion scenario ($50.8 million), as shown in ***Figure 15***.

Figure 15. Cumulative Shortfall for FQHCs from Uninsured Recipients 2014-2020 ($1,000s)

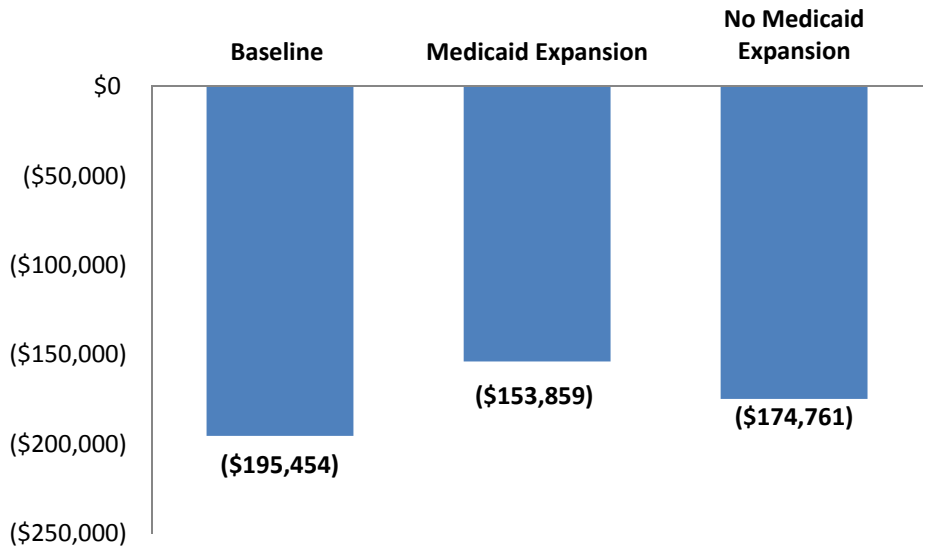


Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM) and UDS data.

[21] Please refer to the Methodology section for further detail regarding the derivation of these figures.

Across all payer categories, from 2014 to 2020, we find that cumulative shortfall (costs less patient revenues) for FQHCs under the Medicaid expansion scenario (a total shortfall of $153.9 million) to be $41.6 million less than the projected shortfall under our baseline, pre-ACA scenario (a total shortfall of $195.5 million). Though FQHCs will experience a reduced shortfall under the no expansion option (a total shortfall of $174.8 million), the shortfall under no expansion is projected to be $20.9 million more than the projected shortfall under expansion (***Figure 16***).

Figure 16. Cumulative Shortfall for FQHCs Across All Payer Categories, in $1,000s (2014-2020)



Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM) and UDS data.

In addition to the 10 FQHCs, there are also 12 Rural Health Clinics (RHCs) spread mainly throughout the remote regions of New Hampshire. Without adequate data to assess the impact of a potential Medicaid expansion upon these facilities, it is not possible to discuss them in detail at this time. However, we expect that projected trends observed for FQHCs, with regards to the reduction in uncompensated care and reduction in uninsured care recipients, will apply to RHCs as well. Because certain centers are a part of larger health care systems, the effects of Medicaid expansion has been largely accounted for in the hospital analysis of this report.

b. Community Mental Health Centers

Located throughout the state are 10 Community Mental Health Centers (CMHCs) serving individuals recovering from mental illness or emotional disorders. These Centers are non-profit organizations contracted annually by the state to participate in its network of regional behavioral health providers. In fiscal year 2009, the Centers provided behavioral health services to over 48,000 New Hampshire residents, one-fourth of whom were children.[22]

[22] Quarter 4 of Fiscal Year 2009, New Hampshire Department of Health & Human Services, Bureau of Behavioral Health

We analyze annual audited financial statement data from 2006 through 2009 to evaluate the financial sustainability of health centers in subsequent years, through 2020. Because CMHCs currently receive little or no funding from the state to offset the cost of providing treatment to uninsured or underinsured individuals, a potential Medicaid expansion will likely not generate savings to the state. However, it will have a significant impact on the financial viability of CMHCs.

In FY 2009, the combined revenue for all 10 Centers was approximately $150.0 million. Notably, annual margins after accounting for operating expenses were low throughout the four year historical period. When the 2010 Medicaid payment reimbursement cuts are accounted for in projecting future revenues and expenses, the margin becomes negative. Because Medicaid payments account for such a substantial proportion of total revenue (nearly 75 percent of total revenue sources[23]), the financial sustainability of CMHCs is highly dependent upon Medicaid policy and payment rates.

The CMHC also provide a substantial amount of uncompensated care to uninsured and underinsured patients. The New Hampshire Community Behavioral Health Association provided us with 2009 aggregate loss figures for the four largest categories of uncompensated care:

- Uncompensated emergency services ($3.6 million);
- Spend down ($5.7 million);
- Application of sliding fee schedule to self-pay patients ($7.0 million); and
- Intake services ($1.7 million).

In total, combined losses due to uncompensated care across the 10 CMHCs in 2009 represented nearly 12 percent of total operating expenditures. We then use the provided figures to estimate future losses due to uncompensated care, after adjusting for CMHC-observed trends in shortfalls.[24] Under a baseline scenario, assuming that historical trends will persist in the 2014 to 2020 period, total expected losses due to uncompensated care will reach upwards of $206.0 million.

Using the Lewin Group's Health Benefits Simulation Model, we estimated the reduction in uncompensated care to the CMHCs due to currently uninsured persons gaining Medicaid coverage or private insurance coverage as a result of Affordable Care Act provisions with and without the Medicaid expansion. Under Medicaid expansion, the CMHCs may see a $162.8 million reduction in uncompensated care during the 2014 to 2020 period (***Figure 17***). Without an expansion, a smaller reduction will occur, largely due to effects of other provisions of the ACA.

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[23] Includes all patient service revenue, as well as grants and contracts.

[24] For example, CMHCs have historically been unable to recoup losses resulting from patients participating in spend down. The New Hampshire Community Behavioral Health Association estimates Medicaid expansion may reduce loss due to spend down by $6.0 million to $7.0 million annually.

Figure 17. Impact of Medicaid Expansion on CMHC Uncompensated Care ($1,000s)

	2014	2015	2016	2017	2018	2019	2020	2014-2020
Baseline	$24,388	$25,905	$27,517	$29,230	$31,050	$32,984	$35,039	$206,114
Reduction in Uncompensated Care								
Expansion	$19,260	$20,458	$21,731	$23,084	$24,521	$26,048	$27,671	$162,774
No Expansion	$12,623	$13,408	$14,242	$15,129	$16,071	$17,072	$18,136	$106,681

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

In addition to the Community Mental Health Centers, a number of Peer Support Agencies for mental and behavioral health services are also located throughout the state. These facilities exhibit similarities to the CMHCs, but are counted as a separate line item in the state budget. Pending receipt of adequate data on these resources, analysis is not possible at this time.

D. Economic Impact

In order to estimate the overall impact of the Medicaid expansion in New Hampshire, we estimated net change in payments to New Hampshire providers due to all provisions of the ACA with and without the Medicaid expansion in order to isolate the effects of just the Medicaid expansion. Expected provider revenues without an expansion are compared to revenues with expansion, and is presented in the third column of ***Figure 18***. As discussed previously, hospitals and hospital systems gain lower revenue over the period under an expansion, while physicians, clinics, and the prescription drug sectors gain higher revenue. In total, providers will experience an estimated $158.3 million in lost revenue between 2014 and 2020 without Medicaid expansion.

Figure 18. Difference in Provider Revenue, by Sector (2014-2020) (in millions) [1/]

	Change in Provider Payments with Medicaid Expansion	Change in Provider Payments without Medicaid Expansion	Difference in Provider Revenue with and without the Medicaid Expansion,
Hospital1/	$1,193	$1,421	($228)
Physicians/Clinics2/	$1,611	$1,405	$206
Drugs3/	$696	$516	$181
Total	$3,500	$3,341	$158

1/Based on the Lewin Group's analysis of hospitals and health systems

In addition, we estimate the change in household health spending in New Hampshire under the ACA with and without the Medicaid expansion in order to isolate the effects of just the Medicaid expansion. As shown in ***Figure 19***, without a Medicaid expansion, households will spend more on premiums, since more people will be covered under private insurance than with under Medicaid.[25] However, there will be higher subsidies, as more people obtain coverage through the

[25] All estimates were made under the assumption that Medicaid does not require a premium or cost-sharing charges. Although most individuals covered by Medicaid will not have a premium, the state has limited authority to impose cost-sharing charges and premiums for certain Medicaid beneficiaries under the Deficit reduction Act of 2005.

Health Benefits Exchange. Since private coverage will require higher cost-sharing for care than Medicaid, households will spend more on the direct payments to providers without the expansion. Additionally, a slightly higher proportion of the uninsured will remain uninsured without a program expansion, leading to higher amounts paid towards individual mandate penalties. Under Medicaid expansion, we estimate the New Hampshire households will save about $145 per year on average.

Figure 19. Change in Household Health Spending in New Hampshire (in millions)

	With Expansion	Without Expansion	Impact of Expansion
Change in Premiums	$273.7	$440.0	-$166.3
Premium Subsidies	-$237.6	-$342.6	$105.0
Direct Payments	-$2.0	$26.0	-$28.0
Penalties	$35.8	$38.6	$2.8
Net Impact	$69.9	$162.0	-$92.1

1/ Assumes all provisions of the ACA are fully implemented in 2014.

Using these inputs, The Lewin Group partnered with REMI to conduct an economic impact analysis of both the non-expansion and Medicaid expansion scenarios using REMI's proprietary Tax-Pi software. The model provides economic and fiscal impacts relative to the baseline scenario from 2014 to 2020. The baseline scenario assumes no major changes to New Hampshire's economy or policies, which means that the baseline forecast has no inherent understanding of the ACA's impact in the coming years. The REMI model compares the baseline scenario to the ACA without Medicaid expansion and to the ACA with Medicaid expansion. The results focus on fiscal and economic growth that would be created under each scenario.

As shown in ***Figure 20***, in the non-expansion scenario, New Hampshire experiences an increase of about 3,700 jobs in 2014, compared to pre-ACA projections, or a 0.42 percent change. Employment peaks at just under 4,900 new jobs in 2016 and tapers down to an annual increase of roughly 4,300 in 2020. During the 2014 to 2020 period of analysis, new employment under no expansion averages approximately 4,400 jobs above the baseline forecast. By comparison, under Medicaid expansion, New Hampshire experiences an increase of about 4,300 jobs in 2014, or a 0.49 percent change—almost 600 more than under no expansion. Similar to the non-expansion scenario, the employment growth peaks in 2016 but with about 5,700 new jobs. Over the 2014 to 2020 analysis period, New Hampshire gains an average of 5,100 jobs under Medicaid expansion relative to the baseline scenario—700 more jobs compared to no expansion.

Figure 20. Change in Total Employment from Baseline, 2014-2020

	2014	2015	2016	2017	2018	2019	2020
Expansion	4,304	4,995	5,672	5,501	5,287	5,073	4,943
No Expansion	3,730	4,310	4,898	4,747	4,571	4,391	4,279
Difference	574	685	773	754	717	682	664

Gains in employment under ACA will vary by sector. Employment gains by sector for the top five private non-agricultural and non-government sectors experiencing the most change during the 2014 to 2020 period are listed in ***Figure 21.*** Under both the expansion and no expansion scenarios, we anticipate that New Hampshire will enjoy a growth in the number of jobs in these five sectors, when compared to pre-ACA estimates. The ambulatory health care services sector experiences the greatest average number of added jobs—over 1,500 under expansion and about 1,300 without expansion. Most of these sectors experience greater job gains with expansion, while the hospital sector experiences a greater gain without expansion.

Figure 21. Average Change in Employment by Sector from Baseline, 2014-2020

	With Expansion	Without Expansion	Difference, with Expansion
Ambulatory health care services	1,578	1,315	263
Hospitals	1,035	1,212	-177
Retail trade	721	489	232
Construction	450	367	83
Administrative and support services	173	151	22

The ACA also impacts gross state product (GSP) in New Hampshire. GSP represents the total value of goods and services produced in New Hampshire. Under no expansion, the New Hampshire economy adds $274 million in GSP in 2014, while it adds $316 million under expansion. Increase in GSP peaks in 2016, at $377million in new growth under no expansion and $436 in new growth under expansion—a 0.44 percent increase and 0.51 percent increase, respectively, above the baseline's forecasted GSP growth. From 2014 to 2020, New Hampshire's economy accrues a total of $2.5 billion in additional GSP growth under no expansion, compared to more than $2.8 billion under expansion (***Figure 22***).

Figure 22. Change in Gross State Product from Baseline, 2014-2020 (in millions)

	2014	2015	2016	2017	2018	2019	2020	2014-2020
Expansion	$316.09	$374.57	$436.17	$433.90	$429.16	$423.73	$425.44	$2,839.05
No Expansion	$274.26	$323.45	$376.65	$374.06	$370.23	$365.57	$366.57	$2,450.78
Difference	$41.83	$51.13	$59.52	$59.84	$58.93	$58.16	$58.87	$388.27

The ACA affects personal income as well, which indicates the total amount of income received by all residents of the state, inclusive of wages, salary, benefits, and dividends. Under no expansion, personal income experiences an initial increase of $198 million in 2014 (0.29 percent increase), compared to baseline, while a larger increase of $223 million (0.32 percent increase) is seen under Medicaid expansion in 2014 (***Figure 23***). This translates to a gain of about $91 per capita under no expansion and $102 per capita under expansion, in 2005 dollars. The percent increase in personal income peaks in 2016 and 2017—a 0.39 percent increase under no expansion and a 0.44 percent increase under expansion, compared to the pre-ACA projected baseline. From 2014 to 2020, New Hampshire's economy accrues $2.1 billion in personal income under no expansion and over $2.3 billion in personal income under expansion.

Figure 23. Change in Personal Income from Baseline, 2014-2020 (in millions)

	2014	2015	2016	2017	2018	2019	2020	2014-2020
Expansion	$223.41	$282.81	$343.84	$359.59	$370.35	$377.79	$388.51	$2,346.30
No Expansion	$197.67	$249.03	$302.83	$316.48	$326.53	$333.60	$343.24	$2,069.38
Difference	$25.73	$33.78	$41.01	$43.12	$43.82	$44.19	$45.27	$276.92

The economic growth spurred by both the expansion and no expansion scenarios also stimulates new revenue generation. Economic growth drives tax revenue collection. As a state increases employment, income, and output, the pool of taxable dollars from which to draw increases, assuming no changes to the existing tax policy. For example, as business output grows in New Hampshire, the state's business profits tax will generate additional revenue. The REMI model uses this concept to calculate total revenue generation in the state. REMI utilizes all tax and fee categories outlined in the 2011 Governor's Operating Budget, including revenue sources such as the business profits and enterprise tax, tobacco tax, communications tax, state property tax, gasoline road toll, alcohol fund, Medicaid enhancement tax, and many others. The link between economic growth and the various revenue sources is utilized to forecast total revenue generation for the state in both the non-expansion and expansion scenarios.

Under the no expansion scenario, in 2014, New Hampshire's state government gains approximately $5.7 million in additional revenue, compared to the pre-ACA projected baseline (***Figure 24***). By comparison, Medicaid expansion would result in about $6.4 million in additional revenue in 2014. Total new revenue peaks in 2020—a 0.50 percent increase under no expansion and a 0.55 percent increase under expansion. From 2014 to 2020, New Hampshire collects $114 million in new revenues under the no expansion scenario, compared to $127 million in new revenues under the expansion scenario; this represents a $13 million increase in revenue under expansion, compared to no expansion.

Figure 24. Change in State Revenue from Baseline, 2014-2020 (in millions)

	2014	2015	2016	2017	2018	2019	2020	2014-2020
Expansion	$6.39	$14.47	$18.05	$20.55	$21.64	$22.59	$23.64	$127.32
No Expansion	$5.72	$12.92	$16.12	$18.37	$19.39	$20.31	$21.30	$114.13
Difference	$0.67	$1.54	$1.94	$2.18	$2.25	$2.28	$2.34	$13.20

The aforementioned economic and fiscal indicators accumulate to modest differences between expansion and non-expansion over the 2014 to 2020 analysis period. Overall, the REMI model indicates a significant boost to New Hampshire's economy, revenues, and employment regardless of whether the expansion or non-expansion scenario is selected. However, the Medicaid expansion maximizes the economic, fiscal, and employment (for most sectors) impacts when compared to the no expansion scenario.

E. Impact on Commercial Market

1. Cost Shifting

Providers must find financial support to cover costs when payment received for services falls short. This phenomenon is often referred to as "cost-shifting," and represents an attempt by providers to offset a portion of unpaid costs of care from one patient population through above-cost charges and revenues from other patient populations. In response to higher charges by providers insurers may, theoretically, shift a portion of the additional cost burden onto members, which may then be reflected through increased premiums.

It is estimated that in 2009, the twenty-six New Hampshire Health Care Systems cost-shifted $683 million, a direct reflection of the amount of the uncompensated and undercompensated care delivered in the state[26]. It is unclear to what degree this sum translated to higher premiums for the privately insured. Cost shifting in the market from uncompensated care and underpayment by Medicare and Medicaid onto individual and employer market insurance premiums will not occur spontaneously under the ACA. Cost shifting may result if purchasers, such as employers, demand lower premiums based on the decrease in the number of uninsured, while insurers may demand lower payment rates from hospital systems because they will no longer need to cross-subsidize for the uninsured and underinsured.

Nationwide, speculation regarding the effect of impending DSH cuts on hospitals margins have prompted concern about whether the potential impact will be borne by the privately insured through increasing member premiums. We estimate that the ACA Medicaid DSH cuts will not impact Medicaid DSH payments to New Hampshire hospitals through 2020, assuming that the current payment methodology continues. Thus, the DSH reductions will have no impact on individual premiums. However, the reduction of uncompensated care under Medicaid expansion would potentially reduce cost-shifting, and could theoretically reduce premiums for those who are privately insured.

Under Medicaid expansion, we estimate that uncompensated and undercompensated care (inclusive of bad debt, charity care, and payment below cost from Medicaid and Medicare) will comprise an average of 0.7 percent of total annual private insurance premiums in the state (***Figure 25***). This includes single coverage premiums in the individual market, single and family coverage in the private-sector employer market, and single and family coverage in the public-sector employer market. This estimate also accounts for an estimated 56,000 additional

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[26] Health System Cost-Shifting in NH." *New Hampshire Center for Public Policy* (2011)

members coming into the individual market beginning in 2014, who will be obtaining coverage through the Health Benefits Exchange. Research has indicated mixed consensus regarding the degree of cost-shifting by hospitals, with some estimates pointing to 50 percent of the costs of uncompensated and undercompensated care being shifted onto the private market[27].

Figure 25. Reduction in Private Insurance Premiums with Medicaid Expansion (in $1000s)

	2014	2015	2016	2017	2018	2019	2020
Premium per Member	$6.2	$6.5	$6.9	$7.3	$7.8	$8.3	$8.8
Total Premiums	$5,538,665	$5,886,382	$6,291,287	$6,668,341	$7,087,920	$7,555,270	$8,068,545
Uncompensated and Undercompensated Care Reduced	$41,600	$46,200	$59,200	$53,600	$49,500	$44,000	$46,100
Percentage of Total Premiums	0.8%	0.8%	0.9%	0.8%	0.7%	0.6%	0.6%

Absent a program expansion, uncompensated and undercompensated care represents a slightly lower portion of total premiums, in part due to an additional 19,000 members obtaining coverage through the HBE when compared to an expansion scenario, contributing to higher total annual premiums (***Figure 26***).

Figure 26. Reduction in Private Insurance Premiums without Medicaid Expansion (in $1000s)

	2014	2015	2016	2017	2018	2019	2020
Premium per Member	$6.1	$6.5	$6.9	$7.3	$7.7	$8.2	$8.8
Total Premiums	$5,594,126	$5,954,083	$6,372,914	$6,754,874	$7,179,899	$7,653,327	$8,173,277
Uncompensated and Undercompensated Care Reduced	$42,500	$46,200	$58,100	$51,500	$46,500	$40,100	$41,100
Percentage of Total premiums	0.8%	0.8%	0.9%	0.8%	0.6%	0.5%	0.5%

2. Source of Coverage: Individual vs. Group Market

Using the Lewin Group's Health Benefits Simulation model (HBSM), we estimated the effects on the commercial insurance markets in New Hampshire under the ACA with and without a Medicaid expansion. This was performed for the small group market (for businesses with fewer than 100 employees), the large group market (for businesses with 100 or more employees), and for the individual market.

[27] `Frakt, Austin, Ph.D. "How Much Do Hospitals Cost Shift? A Review of the Evidence." *The Milbank Quarterly* 89.1 (2011)

For each of the three markets, we model the effects of expanding and not expanding Medicaid on the number of members enrolled, as well as the effect on the average allowed cost, a measure of relative morbidity of the individuals transitioning in and out of the market. Average allowed cost effectively captures comprehensive individual-level spending within the market, as it includes both members' health care cost-sharing, as well as the share of expenses borne by insurers. However, these should not be used as estimates of premiums in the market.

Figure 27 shows member movement in and out of the small group market due to the ACA with and without the Medicaid expansion. Due to crowd out under the Medicaid expansion, we estimate there will be a small reduction in the number of people with small group employer coverage. However, we estimate a small increase in people covered in the small group market if Medicaid is not expanded. In either case the net change in the size of the small group risk pool is minimal, with or without the expansion. Likewise, a slight net decrease in average allowed costs occurs in both scenarios under the ACA, which would result in a minimum effect on premiums in the small group market.

Figure 27. Small Group Commercial Market: Members and Average Allowed Costs With and Without Medicaid Expansion (2014)

	With Medicaid Expansion		Without Medicaid Expansion	
	Members	Average Allowed Costs	Members	Average Allowed Costs
Current Small Group Market	215,469	$504	215,469	$504
Leave Small Group Market	16,362	$551	13,322	$698
To Medicaid	4,054	$583	0	$0
To Other Coverage	12,308	$541	13,322	$698
Retain Small Group Coverage	199,108	$500	202,147	$491
Leave Other Coverage for Small Group	14,322	$425	15,488	$393
From Uninsured	10,556	$359	11,645	$328
From Other Coverage	3,766	$610	3,843	$592
Small Group Under ACA	213,273	$495	217,480	$493

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM)

As shown in ***Figure 28***, the large group employer market will experience a more dramatic shift in the size of the risk pool if expansion occurs. The difference in size of the risk pool attributable to Medicaid expansion is substantial: under Medicaid expansion, there will be 9,200 fewer individuals in the risk pool, compared to no expansion. Due to the ACA, average costs for people in the large group market will drop under both expansion and no expansion scenarios. Average costs for people in the large group are similar regardless of the Medicaid expansion and thus would result in an insignificant effect on premiums.[28]

[28] Premiums will be 0.5 percent lower under Medicaid expansion.

Figure 28. Large Group Commercial Market: Members and Average Allowed Costs With and Without Medicaid Expansion (2014)

	With Medicaid Expansion		Without Medicaid Expansion	
	Members	Average Allowed Costs	Members	Average Allowed Costs
Current Large Group Market	589,091	$560	589,091	$560
Leave Large Group Market	24,324	$595	16,352	$749
To Medicaid	8,832	$322	0	$0
To Other Coverage	15,492	$751	16,352	$749
Retain Large Group Coverage	564,767	$558	572,739	$555
Leave Other Coverage for Large Group	18,643	$298	19,887	$297
From Uninsured	14,162	$256	15,213	$260
From Other Coverage	4,481	$431	4,673	$417
Large Group Under ACA	583,054	$550	592,274	$547

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

The most significant differences are seen when we study the individual market. Whether Medicaid expansion takes place or not, the size of the individual market risk pool will more than double under the ACA and allowed costs for people in the individual market will also increase dramatically. This will mostly be due to guaranteed issue of coverage, elimination of pre-existing condition exclusions, and moving the high-risk pool enrollees (including those in the temporary federal pool) into the market.

Notably, as shown in ***Figure 29***, nearly 40 percent of the final individual market will be composed of those who were previously uninsured enrolling in the individual market. Enrollment in the individual market will be higher without the Medicaid expansion because fewer people who currently have individual coverage will leave for Medicaid. Also, more uninsured will take individual coverage since subsidies will be available for those between 100 and 138 percent of FPL. However, average costs for the group would be slightly lower if Medicaid is expanded, which would lead to slightly lower premiums in the individual market.

Figure 29. Individual Commercial Market: Members and Average Allowed Costs With and Without Medicaid Expansion (2014)

	With Medicaid Expansion		Without Medicaid Expansion	
	Members	Average Allowed Costs	Members	Average Allowed Costs
Current Individual Market	50,189	$339	50,189	$339
Leave Individual Market	11,860	$243	8,187	$261
To Medicaid	3,947	$196	0	$0
To Other Coverage	7,913	$266	8,187	$261
Retain Individual Market Coverage	38,329	$369	42,002	$354
Leave Other Coverage for Individual	67,827	$518	82,934	$530
From Uninsured	40,417	$313	53,428	$307
From High-Risk Pool	3,329	$2,390	3,594	$2,689
From Other Coverage	24,080	$603	25,912	$692
Individual Market Under ACA	106,156	$464	124,936	$471

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

IV. Methodology

This section describes the methodology used to produce the enrollment and cost estimates presented in this report.

A. Impact of ACA on Medicaid DSH Payments

The ACA reduces federal funding for the Medicaid Disproportionate Share Hospital (DSH) program beginning in 2014. The rationale for reducing Medicaid DSH funding is that the new coverage options provided under the ACA will reduce the number of uninsured and in turn the amount of uncompensated care that hospitals currently provide to the uninsured. Medicaid DSH payments were used to help pay hospitals for a portion of the uncompensated care they provided. Thus, as uncompensated care levels decline, then so will DSH payments.

The provisions in the ACA that specify federal reductions in DSH funding are separate from the Medicaid expansion provisions. Thus, DSH funding will be reduced whether or not the state expands Medicaid. However, the reductions will be tied to the number of uninsured in the state and how the state treats hospitals with high Medicaid and uncompensated care levels.

In our analysis of the impact of the ACA on Medicaid DSH payments, we examined the New Hampshire Medicaid DSH program and estimated the amount of DSH payments, based on the state's current method, and compared that to the projected federal DSH allotment available to the state through 2020. We estimated the amount of the Medicaid Enhancement Tax (MET) that would be collected for each year assuming that the tax rate is 5.5 percent of hospital net patient service revenue. Thirteen percent of the anticipated MET revenue is placed in the Uncompensated Care Fund (UCF), for which federal matching funds are drawn down up to the state's allotment. Payments from the UCF are first paid to cover uncompensated care costs for Critical Access Hospitals. The remainder, if any, is then paid to acute care hospitals for a portion of their uncompensated care costs.

As shown in ***Figure 30***, based on this methodology, we estimated the amount of Medicaid DSH payments that would be paid to hospitals plus the amount paid to New Hampshire Hospital (Institution for Mental Disease), which was $9.2 million in 2012. We estimate that by 2020, Medicaid DSH payments will be $101.9 million of which $50.9 million will be paid by the federal government. We then estimated the state's federal DSH allotment through 2020 assuming that New Hampshire is treated like an average state for treatment of the ACA Medicaid DSH cuts. Based on these assumptions, we estimate that New Hampshire's federal DSH allotment will drop to $92.0 million in 2020. However, this will still be more than what is needed to match the UCF. Thus, we estimate that the ACA Medicaid DSH cuts will not affect the Medicaid DSH payments to New Hampshire hospitals assuming that the current payment methodology continues through 2020.

Figure 30. Medicaid DSH Payments and Federal DSH Allotments Under the ACA for New Hampshire 2010-2020 [1/]

Year	Hospital DSH Payment [1/]	IMD DSH Payment [2/]	Total DSH Payment	Federal DSH Drawdown	Federal DSH Allotment Pre-ACA [3/]	Federal DSH Allotment Post-ACA [4/]	Amount (Under)/ Over Allotment
2010	$182.0	$18.5	$200.5	$100.3	$165.4	$165.4	-$65.2
2011	$205.8	$16.4	$222.2	$111.1	$160.3	$160.3	-$49.2
2012	$48.7	$9.2	$57.9	$29.0	$162.0	$162.0	-$133.0
2013	$57.2	$9.6	$66.8	$33.4	$165.4	$165.4	-$132.0
2014	$61.1	$10.2	$71.3	$35.6	$167.0	$158.5	-$122.9
2015	$64.5	$10.8	$75.3	$37.7	$170.4	$160.4	-$122.7
2016	$68.8	$11.5	$80.3	$40.1	$173.8	$163.7	-$123.6
2017	$72.8	$12.2	$84.9	$42.5	$177.2	$146.9	-$104.4
2018	$77.1	$12.9	$90.0	$45.0	$180.5	$96.2	-$51.3
2019	$81.9	$13.7	$95.6	$47.8	$183.9	$90.3	-$42.5
2020	$87.3	$14.6	$101.9	$50.9	$187.3	$92.0	-$41.0

1/ Assumes 13 percent of MET used to fund UCP and includes federal matching funds.
2/ Based on data reported by New Hampshire hospital for 2010 through 2012 and trended to 2020 based on projected hospital revenue growth for CMS Office of the Actuary.
3/ New Hampshire's DSH allotment for 2011 was trended to 2020 based on national projected federal DSH funding.
4/ Assumes DSH cuts for New Hampshire is made in proportion to national reduction specified in the ACA.
Source: Lewin Group estimates.

B. Health Systems

For this analysis, we used the Lewin Group Health Benefits Simulation Model for the state of New Hampshire. Our HBSM model provides estimated impacts of the coverage expansions on major stakeholders including hospitals and physicians. The HBSM model of hospital impacts reflects reductions in uncompensated care resulting from expanded health insurance coverage to the uninsured. We combined the results of the HBSM simulations with audited financial statement data for New Hampshire health systems for 2010 and 2011 provided by the New Hampshire Hospital Association (NHHA). These data provided consolidated information on gross and net revenue by payer, operating expenses and bad debt and charity care for health systems in the state. Health systems include the hospital as well as other entities owned by the system, such as physician groups, skilled nursing facilities, freestanding surgical centers, and home health agencies. ***Figure 31*** presents the data used for the analysis for 2011.

Figure 31. New Hampshire Health System Revenues and Expenses for 2011

Payer Group	Gross Revenue	Operating Expenses	Percent of Expenses	Net Revenue	Net Revenue as Percent of Expenses by Payer
Medicaid [1/]	$979,194,385	$449,667,570	10%	$295,193,568	66%
Medicare	$3,976,493,652	$1,826,093,230	39%	$1,337,714,941	73%
Commercial	$4,355,425,872	$2,000,107,229	43%	$2,947,601,749	147%
All Other	$346,115,834	$158,943,994	3%	$207,441,765	131%
Uncompensated care	$550,255,307	$252,689,324	5%	$0	0%
Other Operating				$303,115,201	
Total	$10,207,485,051	$4,687,501,347	100%	$5,091,067,224	109%

1/ We did not attempt to exclude Medicaid DSH payments from the data. Hospitals were not consistent in how they reported DSH payments. Some included DSH payments as other operating revenue while others included it as net Medicaid revenue. Also, we did not adjust Medicaid net revenues for retrospective settlements. Thus, this analysis yields higher Medicaid payment to cost ratios than other similar analyses have shown.
Source: Lewin Group analysis of data provided by the New Hampshire Hospital Association, derived from Audited Financial Statements for 2011.

The data show uncompensated care costs for bad debt and charity care of $252.7 million in 2011. Data provided by the NHHA also showed that about 75 percent of uncompensated care was provided to uninsured, while 25 percent was provided to underinsured people, which is similar to other estimates. Using our HBSM model, we estimate that uncompensated care costs for the uninsured would be reduced by about 70 percent if the state expanded Medicaid and about 45 percent due to other coverage provisions if the state did not expand Medicaid. This is due to a high portion of uncompensated care (48 percent) being provided to people below poverty in hospitals and emergency departments. Based on this analysis, we estimate that bad debt and charity care for New Hampshire health systems would be about $2.7 billion over the 2014 to 2020 period in the absence of the ACA. If the state expands Medicaid, this amount would be reduced by $1.3 billion over this period compared to $862.0 million if the state does not expand Medicaid (***Figure 32***). Thus, health systems in the state could see uncompensated care reduced by an additional $456.0 million over this period if the state expands Medicaid under the ACA.

Figure 32. Reductions in Bad Debt and Charity Care for New Hampshire Health System, Under the ACA With and Without The Medicaid Expansion 2014-2020

Year	Operating Expenses	Bad Debt and Charity Care as a Percent of Operating Expenses	Bad Debt and Charity Care Costs Pre-ACA	Reduced Bad Debt and Charity Care under the ACA	
				With Medicaid Expansion	Without Medicaid Expansion
2014	$5,583	5.6%	$310	$125	$80
2015	$5,918	5.6%	$332	$155	$99
2016	$6,273	5.7%	$356	$189	$121
2017	$6,649	5.7%	$381	$202	$130
2018	$7,048	5.8%	$408	$216	$139
2019	$7,471	5.8%	$437	$232	$149
2020	$7,919	5.9%	$468	$248	$159
2014-2020	$46,862	5.7%	$2,692	$1,366	$877

Source: Lewin Group analysis using the New Hampshire version of the Health Benefits Simulation Model (HBSM).

To estimate the overall financial impact of the Medicaid expansion on New Hampshire health systems, we provide an illustration of the impact on revenues and costs, assuming that all provisions of the ACA are fully phased in, but in 2011 dollars. For this analysis, we assume that previously uncompensated costs for patients covered by the Medicaid expansion will be reimbursed at Medicaid rates that are below cost, as shown above. Payments for patients newly covered by private insurance are assumed to be made at private payment levels, which are substantially above costs. We estimate there will be more people newly covered by private insurance if the state does not expand Medicaid since those between 100 and 138 percent of FPL will be eligible for subsidized private coverage in the HBE. There is a greater reduction in uncompensated care if the state expands Medicaid ($131.3 million), compared to $85.9 million without the expansion. However, since hospitals would receive a much higher private payment rate compared to Medicaid, the revenues received by the hospital for this care under the expansion would be $130.5 million compared to $120.9 million without the expansion. The detailed calculations are shown in ***Figure 33*** and ***Figure 34.***

Second, we assume that health system inpatient and outpatient utilization for newly insured people will increase to the same levels as insured people with similar demographic, income, and health status characteristics. If the state expands Medicaid, we estimate an increased utilization by the newly insured of $92.3 million in costs, for which the hospital will receive about $107.3 million in revenue due to the mix of Medicaid and commercial payments. Similarly, if the state does not expand Medicaid, we estimate an increase in utilization of $69.0 million in costs, with $100.1 million in payments.

Our analysis shows that about 20,500 individuals who enroll in the Medicaid expansion would have been covered by private insurance in the absence of the expansion (i.e., crowd out). Health systems would have received commercial payment rates for services provided to these people in the absence of the expansion, but will instead receive the lower Medicaid rates. Because of the lower Medicaid reimbursement, we estimate a loss to the health systems of $38.6 million.

We also estimate that 3,500 previous Medicaid enrollees would take private coverage as their employers begin to offer coverage. Conversely, hospitals would have received Medicaid payment rates for these people in the absence of the ACA, but will instead receive higher commercial rates. We estimate the net effect would be an increase in net income of about $6.2 million.

Overall, we estimate that health systems would see an increase in net income of about $113.1 million under the Medicaid expansion assuming full implementation in 2014, which would represent a 28 percent increase in their current net income. However, due to more people being enrolled in private insurance in the absence of the expansion, we estimate that health system net income would increase by $158.2 million. Although health systems would see more of an improvement in their bottom line, they would need to provide a greater volume of uncompensated care without the Medicaid expansion.

Figure 33. Impact on New Hampshire Health System Revenues and Costs Under the ACA With the Medicaid Expansion (2011)

	Baseline Revenue and Costs Pre-ACA	Reduced Uncompensated Care	Increased Utilization	Crowd Out Private shifting to Medicaid	Medicaid Enrollees shifting to Private	Revenue and Cost under ACA
Costs by Payer						
Medicaid	$449.7	$77.1	$35.2	$51.9	-$7.6	$606.3
Medicare	$1,826.1	$0.0	$0.0	$0.0	$0.0	$1,826.1
Commercial	$2,000.1	$54.2	$57.2	-$49.3	$7.6	$2,069.8
All Other	$158.9	$0.0	$0.0	$0.0	$0.0	$158.9
Uncompensated Care	$252.7	-$131.3	$0.0	-$2.6	$0.0	$118.8
Total Operating Cost	$4,687.5	$0.0	$92.3	$0.0	$0.0	$4,779.8
Net Revenues by Payer						
Medicaid	$295.2	$50.6	$23.1	$34.1	-$5.0	$398.0
Medicare	$1,337.7	$0.0	$0.0	$0.0	$0.0	$1,337.7
Commercial	$2,947.6	$79.9	$84.2	-$72.7	$11.3	$3,050.3
All Other	$207.4	$0.0	$0.0	$0.0	$0.0	$207.4
Other Operating	$303.1	$0.0	$0.0	$0.0	$0.0	$303.1
Total Operating Revenue	$5,091.1	$130.5	$107.3	-$38.6	$6.2	$5,296.5
Net Operating Income	$403.6	$130.5	$15.0	-$38.6	$6.2	$516.7

1/ Assumes that all provisions of the ACA are fully phased in, but illustration of impacts in 2011 dollars.
Source: Lewin Group analysis using the New Hampshire version of the Health Benefits Simulation Model (HBSM).

Figure 34. Impact on New Hampshire Health System Revenues and Costs Under the ACA Without the Medicaid Expansion

	Baseline Revenue and Costs Pre-ACA	Reduced Uncompensated Care	Increased Utilization	Crowd Out Private shifting to Medicaid	Medicaid Enrollees shifting to Private	Revenue and Cost under ACA
Costs by Payer						
Medicaid	$449.7	$6.8	$2.0	$0.0	-$7.6	$450.8
Medicare	$1,826.1	$0.0	$0.0	$0.0	$0.0	$1,826.1
Commercial	$2,000.1	$79.0	$67.0	$0.0	$7.6	$2,153.8
All Other	$158.9	$0.0	$0.0	$0.0	$0.0	$158.9
Uncompensated Care	$252.7	-$85.9	$0.0	$0.0	$0.0	$166.8
Total Operating Cost	$4,687.5	$0.0	$69.0	$0.0	$0.0	$4,756.5
Net Revenues by Payer						
Medicaid	$295.2	$4.5	$1.3	$0.0	-$5.0	$295.9
Medicare	$1,337.7	$0.0	$0.0	$0.0	$0.0	$1,337.7
Commercial	$2,947.6	$116.5	$98.8	$0.0	$11.3	$3,174.1
All Other	$207.4	$0.0	$0.0	$0.0	$0.0	$207.4
Other Operating	$303.1	$0.0	$0.0	$0.0	$0.0	$303.1
Total Operating Revenue	$5,091.1	$120.9	$100.1	$0.0	$6.2	$5,318.3
Net Operating Income	$403.6	$120.9	$31.1	$0.0	$6.2	$561.8

1/ Assumes that all provisions of the ACA are fully phased in, but illustration of impacts in 2011 dollars.
Source: Lewin Group analysis using the New Hampshire version of the Health Benefits Simulation Model (HBSM).

Figure 35 presents our estimates of projected health system revenues by payer source from 2014 through 2020. The table also shows the change in revenues by payer under the ACA with and without the Medicaid expansion.

Figure 35. Impact on New Hampshire Health System Revenues Under the ACA Without the Medicaid Expansion2014-2020 (in millions)

	2014	2015	2016	2017	2018	2019	2020	2014-2020
Baseline Pre-ACA								
Medicaid	$327.4	$338.5	$350.4	$363.5	$375.9	$392.8	$414.6	$2,563.0
Medicare	$1,588.4	$1,682.7	$1,790.0	$1,908.6	$2,038.0	$2,171.1	$2,312.6	$13,491.3
Commercial	$3,251.6	$3,398.0	$3,567.9	$3,770.8	$3,989.8	$4,240.4	$4,492.7	$26,711.1
All Other	$231.0	$240.7	$251.0	$262.3	$275.9	$290.4	$305.5	$1,856.6
Total	$5,398.4	$5,659.9	$5,959.2	$6,305.1	$6,679.5	$7,094.7	$7,525.4	$44,622.1
Change under the ACA with Medicaid Expansion								
Medicaid	$86.7	$103.8	$122.0	$126.6	$130.9	$136.8	$144.4	$851.1
Medicare	-$37.3	-$52.8	-$62.4	-$77.5	-$91.7	-$107.9	-$117.4	-$547.0
Commercial	$86.1	$104.1	$124.3	$131.3	$138.9	$147.7	$156.5	$888.9
All Other	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total	$135.4	$155.1	$183.9	$180.4	$178.2	$176.6	$183.5	$1,193.0

	2014	2015	2016	2017	2018	2019	2020	2014-2020
Change under the ACA without Medicaid Expansion								
Medicaid	$0.6	$0.8	$0.9	$0.9	$1.0	$1.0	$1.1	$6.2
Medicare	-$37.3	-$52.8	-$62.4	-$77.5	-$91.7	-$107.9	-$117.4	-$547.0
Commercial	$189.9	$229.8	$274.2	$289.8	$306.6	$325.9	$345.3	$1,961.4
All Other	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Total	$153.2	$177.8	$212.7	$213.2	$215.9	$219.0	$228.9	$1,420.7

Figure 36 presents our estimates of projected health system uncompensated care by source from 2014 through 2020. The table also shows the change in uncompensated care costs under the ACA with and without the Medicaid expansion.

Figure 36. Projected Uncompensated Care costs for New Hampshire Health Systems and the Change Under the ACA Without the Medicaid Expansion2014-2020 (in millions)

	2014	2015	2016	2017	2018	2019	2020	2014-2020
Baseline - Pre ACA								
Bad debt & Charity	$310.2	$332.2	$355.8	$381.0	$408.1	$437.0	$468.0	$2,692.4
Medicaid shortfall	$174.2	$182.6	$192.3	$203.4	$215.5	$228.9	$242.8	$1,439.6
Medicare shortfall	$550.6	$577.3	$607.8	$643.1	$681.3	$723.7	$767.6	$4,551.5
Total Uncompensated Care	$1,035.1	$1,092.2	$1,155.9	$1,227.6	$1,304.9	$1,389.6	$1,478.4	$8,683.6
ACA with Medicaid expansion								
Bad debt & Charity	$185.3	$177.3	$167.2	$179.1	$191.8	$205.4	$220.0	$1,326.0
Medicaid shortfall	$220.3	$238.6	$259.2	$274.3	$290.6	$308.6	$327.4	$1,918.9
Medicare shortfall	$587.9	$630.1	$670.2	$720.6	$773.0	$831.6	$885.0	$5,098.5
Total Uncompensated Care	$993.5	$1,046.0	$1,096.7	$1,174.0	$1,255.4	$1,345.6	$1,432.3	$8,343.4
ACA without Medicaid expansion								
Bad debt & Charity	$230.1	$232.8	$234.8	$251.5	$269.3	$288.4	$308.9	$1,815.9
Medicaid shortfall	$174.5	$183.0	$192.8	$203.9	$216.0	$229.5	$243.4	$1,443.1
Medicare shortfall	$587.9	$630.1	$670.2	$720.6	$773.0	$831.6	$885.0	$5,098.5
Total Uncompensated Care	$992.5	$1,046.0	$1,097.8	$1,176.1	$1,258.4	$1,349.5	$1,437.3	$8,357.5
Change in Uncompensated Care								
With expansion	-$41.6	-$46.2	-$59.2	-$53.6	-$49.5	-$44.0	-$46.1	-$340.2
Without expansion	-$42.5	-$46.2	-$58.1	-$51.5	-$46.5	-$40.1	-$41.1	-$326.0

C. Federally Qualified Health Centers

From the U.S. Department of Health and Human Services' Uniform Data System (UDS), we compiled five years (2007-2011) of aggregate annual data for New Hampshire's Federally Qualified Health Centers (FQHCs), which provided the FQHCs' expenses, total charges, and collected dollar amounts by payor category. Due to an inconsistent number of health centers profiled over the duration of the five-year period, it was necessary to derive per-patient annual cost and charge figures within each payor category. We accomplished this by using patient

count data by payor category, also provided within UDS, in conjunction with the financial figures found within each annual report.

For each payor category, we projected the total number of patients, the charge per patient, and the percentage of charges collected for 2012-2020 based on historical trends. By assuming that the pre-ACA Medicaid program continues, these projections model a hypothetical baseline scenario. From these figures, we were then able to deduce total charges and total collections for each payor category.

Using the Lewin Group's Health Benefits Simulation Model (HBSM), we traced the transition of the FQHCs' patient revenues between payor categories, as care recipients who are below 200 percent of FPL transition from one payor category to another as a result of new eligibility provisions under the ACA. We performed this simulation under a Medicaid expansion scenario, as well as under a no Medicaid expansion scenario, each under several enrollment lag assumptions, presuming that approximately 76 percent of individuals who are newly eligible for program enrollment will act in the first year of implementation (2014), 83 percent during the second year, and 100 percent henceforth.

In ***Figure 37***, we show the transition of FQHC patient revenues between payor categories in the absence of Medicaid expansion. Likewise, ***Figure 38*** shows this transition under a Medicaid expansion scenario. In both figures, the percentages shown in each row represent the proportion of total patient revenue borne by each payor category following the implementation of the expansion or no expansion scenario. For example, under Medicaid expansion, 80.7 percent of patient revenues that had previously been paid by private insurance prior to Medicaid expansion will continue to be covered by private insurance following expansion. However, Medicaid will now be responsible for 19.1 percent of patient revenues previously covered by private insurance, as a portion of care recipients who previously held private insurance now qualify for the expanded Medicaid program. A very small segment of the previously privately insured (0.3 percent) may lose or choose to forgo all sources of health insurance coverage if Medicaid expansion takes place. We adjust for the current Medicaid program's lack of coverage for substance abuse and dental services in calculating these proportions.

Figure 37. Transition of FQHC Patient Revenue Between Payor Categories in the Absence of Medicaid Expansion

Transition from:	Transition to:				
	Private	Medicaid	Medicare	Other Public	Uninsured
Private	99.6%	0.0%	0.0%	0.0%	0.4%
Medicaid	2.6%	97.4%	0.0%	0.0%	0.0%
Medicare	0.0%	0.0%	100.0%	0.0%	0.0%
Other Public	0.0%	0.0%	0.0%	100.0%	0.0%
Uninsured	50.2%	4.4%	0.0%	0.0%	45.4%

Figure 38. Transition of FQHC Patient Revenue Between Payor Categories Under Medicaid Expansion[1/]

Transition from:	*Transition to:*				
	Private	Medicaid	Medicare	Other Public	Uninsured
Private	80.7%	19.1%	0.0%	0.0%	0.3%
Medicaid	2.6%	97.4%	0.0%	0.0%	0.0%
Medicare	0.0%	0.0%	100.0%	0.0%	0.0%
Other Public	0.0%	0.0%	0.0%	100.0%	0.0%
Uninsured	31.9%	47.1%	0.0%	0.0%	21.0% [1/]

[1/] This figure may be slightly inflated, presuming that newly eligibles seeking services at FQHCs will be aided in Medicaid enrollment.

These payor-category transition projections were then used to compute ACA-weighted charge and collection amounts by payor category, for each of the projected years. We estimate costs for each payor category using an overall cost to charge ratio based on 2011 data. A summary of these figures is presented in ***Figured 39 and 40*** below.

Figure 39. Annual Total Cost, Revenue, and Shortfall for the Sum of All Payor Categories, Assuming Pre-ACA, ACA With Medicaid Expansion, and ACA Without Medicaid Expansion (in $1,000s)

	Pre-ACA			ACA with Medicaid Expansion			ACA without Medicaid Expansion		
	Total Cost	Revenue	Shortfall	Total Cost	Revenue	Shortfall	Total Cost	Revenue	Shortfall
2014	$54,272	$29,997	$24,275	$61,115	$40,856	$20,259	$58,997	$36,483	$22,515
2015	$56,732	$31,328	$25,404	$64,526	$43,752	$20,774	$62,115	$38,824	$23,291
2016	$59,303	$32,721	$26,583	$69,081	$48,374	$20,706	$66,055	$42,259	$23,796
2017	$61,991	$34,178	$27,813	$72,212	$50,613	$21,599	$69,049	$44,291	$24,758
2018	$64,801	$35,702	$29,098	$75,484	$52,957	$22,528	$72,179	$46,424	$25,755
2019	$67,738	$37,298	$30,440	$78,906	$55,412	$23,494	$75,450	$48,662	$26,788
2020	$70,808	$38,967	$31,841	$82,482	$57,983	$24,499	$78,870	$51,012	$27,858
2014-2020	$435,645	$240,191	$195,454	$503,805	$349,947	$153,858	$482,715	$307,955	$174,761

With or without Medicaid expansion under the ACA, we assume there will be increased utilization for these services for newly insured individuals. Thus, total annual cost of treatment for all individuals will increase above expected total costs under a hypothetical pre-ACA scenario. Cumulative total costs under the ACA for the 2014 to 2020 period, without Medicaid expansion, is expected to be over $482.7 million, while total cost with an expansion is expected to reach nearly $504.0 million (***Figure 39***). However, due to higher revenues gained under the ACA, FQHCs' total annual shortfall will be substantially lower under the ACA, and lowest with a program expansion.

Figure 40. Annual Total Cost, Revenue, and Shortfall for the Uninsured, Assuming Pre-ACA, ACA With Medicaid Expansion, and ACA Without Medicaid Expansion (in $1,000s)

	Pre-ACA			ACA with Medicaid Expansion			ACA without Medicaid Expansion		
	Total Cost	Revenue	Shortfall	Total Cost	Revenue	Shortfall	Total Cost	Revenue	Shortfall
2014	$15,948	$3,085	$12,863	$6,341	$1,227	$5,114	$9,334	$1,806	$7,529
2015	$16,671	$3,167	$13,504	$5,727	$1,088	$4,639	$9,137	$1,736	$7,401
2016	$17,426	$3,250	$14,176	$3,699	$690	$3,009	$7,976	$1,488	$6,488
2017	$18,216	$3,337	$14,879	$3,866	$708	$3,158	$8,338	$1,527	$6,810
2018	$19,042	$3,425	$15,617	$4,042	$727	$3,315	$8,715	$1,568	$7,148
2019	$19,905	$3,516	$16,389	$4,225	$746	$3,479	$9,111	$1,609	$7,501
2020	$20,807	$3,609	$17,198	$4,416	$766	$3,650	$9,523	$1,652	$7,872
2014-2020	$128,014	$23,389	$104,626	$32,316	$5,952	$26,365	$62,134	$11,385	$50,750

D. Community Mental Health Centers

Six years of financial history data on New Hampshire's 10 Community Mental Health Centers (CMHCs) was procured from a 2010 report underwritten by the Endowment for Health/Health Strategies of New Hampshire, entitled *Community Mental Health Centers in New Hampshire – Financial Performance and Conditions*. The report contained aggregate income statement figures for the 10 New Hampshire CMHCs from 2004 through 2009, including a breakdown of the centers' operating revenue and operating expenses by category.

Annual operating revenue and operating expenses were projected through 2020 using a growth rate based on historical trends and budgetary adjustments that occur within the projected period. For example, we accounted for the 2010 Medicaid reimbursement reductions to the Centers for mental health services, which reduced Medicaid payment levels by nearly seven percentage points from the previous fiscal year.

Based on historical trends, we assumed that the Centers' revenues and expenses will grow at roughly the same rate throughout the projected period, with the aggregate operating margin fluctuating around break even (plus or minus 3.6 percent). We also assumed that the Centers will engage in a limited degree of financial self-adjustment in the face of budgetary constraints by modifying their variable inputs.

The New Hampshire Community Behavioral Health Association provided each CMHC's uncompensated care losses, for the four largest categories of loss, for calendar year 2009. These categories include:

- Losses from uncompensated emergency services
- Losses from spend down
- Losses from application of sliding fee schedule to self-pay
- Losses from uncompensated in-take services

From the 2009 figures, we computed loss due to uncompensated care as a percentage of total operating expenditures, and assumed similar proportions for all projected years.

Again, we applied the Lewin Group's Health Benefits Simulation Model payor group transition analysis, which is described in the previous section. We used a consolidated version to apply toward CMHCs. Under Medicaid expansion, 79 percent of uncompensated care will be reduced for patients below 200 percent of FPL. This is a combination of the proportion of previously uninsured individuals becoming newly eligible for Medicaid and the proportion of previously uninsured individuals obtaining private coverage. Similarly, in the absence of Medicaid expansion, 51 percent of the uncompensated care will be reduced for individuals below 200 percent of FPL.

Using these proportions applied to the projections of loss due to uncompensated care, we computed estimates of annual loss by category of uncompensated care, for each income demographic. Summaries of these estimates are shown in ***Figures 41***, ***42***, and ***43***, for pre-ACA baseline, expansion, and no expansion scenarios.

Figure 41. Total Uncompensated Care, Baseline ($1,000s)

CBHA Losses (calendar year)	2014	2015	2016	2017	2018	2019	2020	Cumulative
Uncompensated Emergency Services	4,917	5,222	5,547	5,893	6,260	6,649	7,064	41,552
Spend Down	7,722	8,202	8,712	9,255	9,831	10,443	11,094	65,259
Application of Sliding Fee Schedule to Self- Pay	9,484	10,074	10,701	11,367	12,075	12,827	13,627	80,157
In-Take Services	2,266	2,407	2,556	2,715	2,884	3,064	3,255	19,147
Total Losses	24,388	25,905	27,517	29,230	31,050	32,984	35,039	206,114

Figure 42. Total Uncompensated Care Reduced, With Expansion ($1,000s)

CBHA Losses (calendar year)	2014	2015	2016	2017	2018	2019	2020	Cumulative
Uncompensated Emergency Services	3,883	4,124	4,381	4,654	4,943	5,251	5,578	32,814
Spend Down	6,098	6,477	6,880	7,309	7,764	8,247	8,761	51,537
Application of Sliding Fee Schedule to Self-Pay	7,490	7,956	8,451	8,977	9,536	10,130	10,761	63,302
In-Take Services	1,789	1,900	2,019	2,144	2,278	2,420	2,571	15,121
Total Losses	19,260	20,458	21,731	23,084	24,521	26,048	27,671	162,774

Figure 43. Total Uncompensated Care Reduced, Without Expansion ($1,000s)

CBHA Losses	2014	2015	2016	2017	2018	2019	2020	Cumulative
Uncompensated Emergency Services	2,545	2,703	2,871	3,050	3,240	3,442	3,656	1,506
Spend Down	3,997	4,245	4,509	4,790	5,088	5,405	5,742	33,777
Application of Sliding Fee Schedule to Self-Pay	4,909	5,214	5,539	5,884	6,250	6,639	7,053	41,488
In-Take Services	1,173	1,246	1,323	1,405	1,493	1,586	1,685	9,910
Total Losses	12,623	13,408	14,242	15,129	16,071	17,072	18,136	106,681

The CMHCs profiled included:

Center for Life Management, Community Council of Nashua, Community Partners, Genesis Behavioral Health, Mental Health Center of Greater Manchester, Monadnock Family Services, Northern Human Services, Riverbend Community Mental Health, Seacoast Mental Health Center, and West Central Behavioral Health.

E. Cost-Shifting

Figure 44. Individual Market and Employer Market Premiums (2011)

	Individual Market	Employer Market			
	Single Coverage	Private-Sector-Single Coverage	Public-Sector - Single Coverage	Private-Sector-Family Coverage	Public Sector-Family Coverage
Members	50,189	144,452	34,375	515,213	124,540
Premium Per Member	$3,197	$5,818	$5,939	$5,452	$4,763
Total Premiums	$160,454,233	$840,422,760	$204,151,774	$2,809,072,933	$593,136,700

Member enrollment for each type of coverage within the individual and employer markets were projected for the 2014-2020 period, assuming that enrollment growth will occur proportionally to the rate of population growth in the absence of the ACA.

From the Lewin Group's analysis of Current Population Survey data, it is estimated that in addition to the projected enrollment based off of current enrollment levels, 56,000 additionally individuals will gain coverage through the Health Benefits Exchange under Medicaid expansion, while nearly 75,000 individuals are expected to gain coverage through the HBE without a program expansion. These additional projected enrollments were phased in beginning in 2014, assuming that 76 percent of expected enrollees will enroll by 2014, 88 percent by 2015, and full enrollment of those participating in the HBE by 2016.

Enrollment figures for single coverage and family coverage under private insurance in the employer market were derived from Medical Expenditure Panel Survey (MEPS) data. In 2011, there were approximately 550,000 private-sector employees in the state. Based on this, we applied the percent of the private-sector establishments that offer health insurance in the state (87.6 percent), the percent of New Hampshire private sector employees who choose to enroll in employer-sponsored health insurance (58 percent), and finally, the proportion of these employees who elect to enroll in single and family coverage, respectively. For both single coverage and family coverage markets, we applied an average premium across private-sector firms of all sizes for the premium per member amount. From the most recent available MEPS information, 2011 data, we applied the Centers for Medicare & Medicaid Services' National Health Expenditure growth rate for 2012 through 2020 to arrive at annual premium projections in both submarkets.

Member totals for New Hampshire's public-sector employees (federal, state, and local) were collected from Current Population Survey data, and trended using Census Bureau population

growth rate projections, as in other markets. Premium estimates were made based on MEPS data for New Hampshire's average total single coverage or family coverage premium per enrolled employee at establishments that employ 1000 or more employees.

Figure 44 illustrates the distribution of member counts, per member premiums, total premiums across the individual and employer markets for 2011.

F. Economic Impact

Using outputs from the analysis of the impact on healthcare providers, Regional Economic Models, Inc. (REMI) used a structural macroeconomic model to quantify the impact of the ACA on the broader New Hampshire economy, with and without the Medicaid expansion. Using the Tax-PI software, REMI simulated the statewide net fiscal and economic effects of expansion, and assessed the net effect of the changes in healthcare 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 built a 1-Region Tax-PI model of New Hampshire. The Tax-PI model is a dynamic, multi-sector regional economic simulation model used for economic forecasting and measuring the impact of public policy changes on economic activity. Tax-PI is a conjoined model that utilizes several different economic modeling approaches, including input-output analysis, econometrics, computable general equilibrium, and economic geography. The model used in this analysis includes more than 70 industry sectors and covers the state of New Hampshire. REMI's models have been used in thousands of national and regional economic studies, including studies of health care reform and health care issues around the United States.

While Tax-PI is a regional economic model capable of considering multiple geographies, this analysis was conducted using a single-region model of New Hampshire. The only inputs made to the model were changes in sales for the healthcare industries and consumer spending due to savings in household health spending. By entering inputs only for New Hampshire, this analysis assumed that the rest of the U.S. would carry on with normal trends. Essentially, the analysis was based on the assumption that New Hampshire will be the only state to enact an expansion of Medicaid from 2014 to 2020. We chose to make this assumption because the scope of the study did not allow for broad assumptions about other states' expansion of Medicaid, nor can New Hampshire control for the policies of other states. Therefore, we elected to conduct our study as if only New Hampshire would expand Medicaid.

By assuming that other states will not expand Medicaid, our analysis omitted a potentially large amount of economic activity in the rest of the U.S. The Medicaid-induced growth outside of New Hampshire, especially in neighboring Northeast states, would have significantly increased the economic growth already observed in our analysis of New Hampshire. This is because as one state increases GSP, business output, and personal income, it increases its interactions with neighboring states. These interactions occur in the exchange of goods and services between businesses, personal consumption expenditures by residents, migration between states, and many other forms of interlinked economic activity. Because our analysis did not account for interstate effects, the economic and fiscal impacts of Medicaid expansion in New Hampshire should be taken as conservative estimates that did not account for economic growth other states would have experienced with Medicaid expansion.

Medicaid spending data representing federal, state, and private Medicaid spending, as developed by The Lewin Group, was used as the primary input data into the Tax-PI model. This data was formatted to fit into categories of healthcare so that they may be inputted into the model as variables. The REMI model has more than 70 different industrial sectors, three of which pertain most closely to the healthcare industry data used in this analysis. The three healthcare sectors used in the model are outlined below with definitions from the U.S. Census Bureau's North American Industry Classification System:

- ***Ambulatory Health Care Services:*** Establishments in this sector provide health care services directly or indirectly to ambulatory patients and do not usually provide inpatient services. Health practitioners in this sector provide outpatient services, with the facilities and equipment not usually being the most significant part of the production process.
- ***Hospitals:*** This sector provides medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialized accommodation services required by inpatients. Hospitals may also provide outpatient services as a secondary activity. Establishments in the hospitals sector provide inpatient health services, many of which can only be provided using the specialized facilities and equipment that form a significant and integral part of the production process.
- ***Pharmaceutical Preparation Manufacturing:*** This industry comprises establishments primarily engaged in manufacturing in-vivo diagnostic substances and pharmaceutical preparations (except biological) intended for internal and external consumption in dose forms, such as ampoules, tablets, capsules, vials, ointments, powders, solutions, and suspensions.

The input data was then entered into the model using industry sales variables for the three aforementioned healthcare sectors as well as the retail and wholesale sectors involved in selling and distributing prescription medication. The sales variable induces increased growth of those industries, which simulates the effect of expanding government spending on healthcare.

Data on savings in household health spending was also included in the analysis. The household savings were inputted into the model through the consumption reallocation variable. The consumption reallocation variable spreads consumer spending across all categories of goods and services. This analysis operated under the assumption that these savings would be reintroduced into New Hampshire's economy as more consumer spending. Therefore, the household health savings were entered as new consumption in the model.

The outputs from the simulation reflected the economic growth created by the ACA and an expansion of Medicaid in New Hampshire. These outputs provided information on an array of economic and demographic indicators including total state employment, gross state product, personal income, and total revenues.