

The Economic Impact of the Medicaid Expansion on Virginia's Economy

The economic impact from expanding Medicaid is nearly four times larger with the opting in scenario when compared to opting out of the federal expansion, at least in the 2014 – 2019 timeframe. The uncertainties increase after 2019, and that period was not part of the scope of this study. This analysis looks at a five-year window that is specified in the Patient Protection and Affordable Care Act (PPACA). In either the opting in or opting out scenario, the state can expect increased spending on Medicaid.

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1. Executive Summary

The Patient Protection and Affordable Care Act (PPACA) was signed into law by President Obama on March 23, 2010. After multiple litigations, in June of 2012 the U.S. Supreme Court upheld almost all provisions of PPACA as constitutional, including the mandate that requires all American residents to either purchase health insurance or pay a penalty. However, the Supreme Court also ruled that the federal government could not force states to expand their Medicaid programs by withholding federal funds to the existing Medicaid programs. Each state must now decide to either opt in or out of the federal expansion. The analysis in this report estimates the net economic impacts for the Commonwealth for both options. Chmura estimated the impacts for the Virginia portion of the expansion and limited the analysis to the potential Medicaid expansion. Given the overarching policy issues with the PPACA, the reader should weigh the assumptions and caveats closely with the conclusions and findings.

The Medicaid expansion can inject new money into Virginia's healthcare industry, provide cost savings for Virginia businesses, and increase household spending for those newly insured. Consequently, the Medicaid expansion can generate more Virginia jobs and tax revenue. Notably, the state will also see increased spending on its portion of Medicaid spending (Figure 1.1).

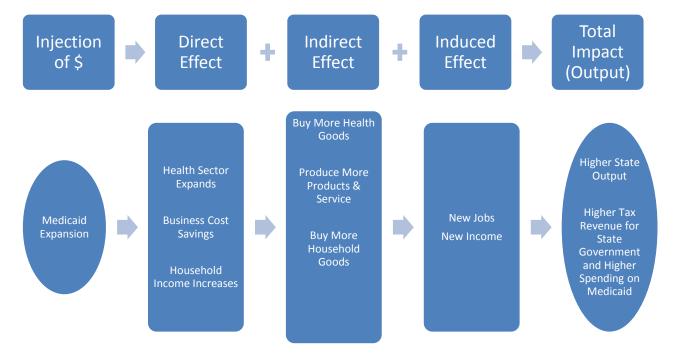


Figure 1.1: Impact of Medicaid Expansion on Virginia Economy

¹ Virginia Hospital and Healthcare Association (VHHS) contracted Chmura Economics & Analytics (Chmura) to study the economic impact of the Medicaid expansion.



The New Enrollees Factor

- Increased awareness of the expansion may lead to more new enrollees into Medicaid that previously
 elected not to participate. If Virginia does not opt in, these new Medicaid recipients will fall under the 50/50
 state-to-federal fund match. This is referred to as the "woodwork" effect in this report. The impact from the
 woodwork effect is additional spending for the state.
- If Virginia opts in to the expansion, new eligible enrollees would come into the state program as beneficiaries to the federal match.
- Either scenario—opting in or out—will result in increased spending for the state for new enrollees.

Key Takeaways

- The health care sector, businesses, and households in Virginia all stand to benefit more if the state opts in than if it opts out (see summary table below).
- The total economic impact (direct and ripple effects of healthcare, business, and household sectors) from
 opting in is an annual average \$3.9 billion and 30,821 jobs from 2014 to 2019, more than four times the
 economic impact of opting out of the expansion.

Comparison of Economic Impact (Annual Average 2014-2019)

		Opting In	Opting Out
New Medicaid Enrollees		400,000	89,845
Health Care Sector	Direct Spending (\$Million)	\$1,859.7	\$417.7
	Total Economic Impact (\$Million)	\$3,457.4	\$776.6
	Total Employment Impact	26,395	5,929
Business	Direct Spending (\$Million)	\$20.2	\$4.5
	Total Economic Impact (\$Million)	\$34.6	\$7.8
	Total Employment Impact	215	48
Household	Direct Spending (\$Million)	\$238.9	\$53.7
	Total Economic Impact (\$Million)	\$417.7	\$93.8
	Total Employment Impact	4,211	946
Total Economic Impact	Direct Spending (\$Million)	\$2,118.8	\$475.9
	Total Economic Impact (\$Million)	\$3,909.8	\$878.2
	Total Employment Impact	30,821	6,923
State Government		-\$244.7	-\$261.9

Source: Chmura Economics & Analytics

- Most of the direct economic impact will come from new spending on health services an estimated \$1.9 billion increase in health services for the newly insured.
- Businesses stand to benefit by an estimated reduction of \$20.2 million if the state opts in because of expected reductions in private insurance premiums compared with \$4.5 million if the state opts out.
- Virginia residents, who obtain insurance through the Medicaid expansion, will see a reduction in out-of-pocket spending on healthcare for an annual average savings of \$238.9 million from 2014 to 2019 if the state opts in compared with \$53.7 million if the state opts out.
- The increase in state government spending is 7% higher (\$261.9 million) if it opts out compared to \$244.7 million per year if it opts in. The surprising results are that the state would incur more expenditure (2014 to 2019) if it opts out. The reasons are threefold.

- The federal government is going to pick up the dominant share of the cost of insuring newly eligible Medicaid participants from 2014 to 2019. As a result, even if the number of new Medicaid enrollees increased significantly under the opting-in scenario, the state costs will not increase as much from 2014 to 2019.
- If Virginia chooses to expand Medicaid, there will be a significant reduction in the number of uninsured in the state, thus relieving the state of its portion of uncompensated care.
- The Medicaid expansion will also bring in more jobs to Virginia's healthcare industry and will lead to increased tax revenue to offset the additional spending on new Medicaid enrollees.

Key Assumptions

- Based on a mid-range of several estimates, we have assumed that 400,000 Virginians would obtain
 coverage if eligibility were increased to 133 percent of the federal poverty level as contemplated under
 current law. The populations most affected by the Medicaid expansion in Virginia will be childless adults,
 parents with children, and some disabled individuals.
- Spending per new Medicaid enrollee is estimated to average \$6,418 per year from 2014 to 2019, which is lower than the national average.
- The timeframe of this study is limited to 2014 to 2019 because the federal match is less certain after that period (see below and Appendix 2 for potential state budget effects under different federal match scenarios in later years). Under current federal law, the state portion of payment for the newly eligible Medicaid participants is 0% from 2014 to 2016, 5% in 2017, 5% in 2018, 7% in 2019, and 10% in 2020. The woodwork effects were discussed earlier in this summary.
- Even if Virginia opts out of the Medicaid expansion, we assume that more (currently eligible) individuals are likely to enroll due to the individual mandate of the law. It is estimated that the woodwork effect can result in close to an annual average of 90,000 new enrollees in Virginia from 2014 to 2019.
- Based on national studies, the expansion in Medicaid coverage can be expected to reduce private
 insurance premiums anywhere from 1.1 to 0.3 percentage points per year, in part by lowering
 uncompensated care pressures on private insurance rates. We have used the estimate of a 0.7 percentage
 point reduction in this study.

What Circumstances and Variables are Omitted from this Study?

- This study focuses on the Medicaid expansion component of PPACA and does not analyze the impact of
 other provisions of the law. For example, the health insurance exchange program has the potential to
 reduce the number of uninsured, which can generate additional healthcare spending for Virginia's
 healthcare sector or reduce state uncompensated care payments. The impact estimated in this study does
 not represent the full effect of the law.
- This analysis focuses on Virginia and while it does contemplate the direct effects of the expansion on the state budget, it does not estimate the dynamic effects of actions the state may take to balance its budget to offset the increased cost of Medicaid.
 - The state may choose to make budgetary reductions in other areas such as education or transportation. Alternatively, the state may seek to increase revenue sources.

³ The study did not include the 10% state portion for 2020 as there is likely to be an amendment to the health care law before 2020.



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- Both of the above would be associated with multiplier impacts that would be a drag on state economic growth.
- Fundamental changes in the timing of the expansion or structure of the program, possibly driven by actions
 to address the federal deficit, would substantially alter the results of this analysis. Broader economic
 consequences of federal policy actions to resolve the federal deficit and debt are beyond the scope of this
 report.
- Finally, Appendix 2 presents the summary economic impact from 2020 to 2022 under two scenarios: the federal match continues at 90% and the federal match reverts to 50%.
 - o From 2020 to 2022, if the federal match of Medicaid spending stays at 90%, the average net budgetary impact for the state government will be an increase of \$589.4 million per year.
 - o If the federal match becomes 50% as for the existing Medicaid program, state spending is estimated to increase by \$1.8 billion per year from 2020 to 2022.
 - If Virginia opts out of the Medicaid expansion, the net budgetary effect is an increase in spending of \$414.1 million per year from 2020 to 2022 regardless of the percentages of the federal match.⁴

⁴ Please see Appendix 2 for more details.



2. Background

The Patient Protection and Affordable Care Act (PPACA) was signed into law by President Obama on March 23, 2010. On March 30, a reconciliation bill, the Healthcare and Education Reconciliation Act (HCERA), which modified the original bill, was signed into law. Collectively, these two bills (PPACA/HCERA) represent what is referred to in this document as the "healthcare reform" law, and are called PPACA or simply ACA. PPACA has been described as the most significant healthcare reform legislation since the passage of Medicare and Medicaid.⁵

The healthcare reform law has generated a tremendous amount of controversy. Multiple lawsuits have ensued around the country, challenging its constitutionality. Those lawsuits reached the U.S. Supreme Court; and in June 2012, the U.S. Supreme Court upheld almost all of PPACA as constitutional, including the key component of the individual mandate that requires all American residents to purchase health insurance or pay a penalty. However, the Supreme Court ruled that the federal government could not force states to expand their Medicaid programs to include more eligible people by withholding federal funds to the existing Medicaid programs. Under the original legislation, all states have to expand their Medicaid programs and the federal government would pay all costs of the Medicaid expansion from 2014 to 2016. Thereafter, states would pay an increasing share that is not to exceed 10% of the total cost. Under the Supreme Court ruling, however, states can opt out of the Medicaid expansion. The issue facing Virginia is whether to expand its Medicaid program (opting in) or to opt out of the Medicaid expansion.

In October 2010, only six months after the healthcare reform law was passed, the Virginia Hospital and Healthcare Association (VHHA) commissioned the Weldon Cooper Center for Public Service of the University of Virginia to study the economic effects of healthcare reform in Virginia. Using the change in the federal budget resulting from PPACA, estimated by the Congressional Budget Office (CBO), the Weldon Cooper study examined what the projected effects of PPACA in the Commonwealth of Virginia would be from 2014 to 2019.

Two years have passed since the Weldon Cooper study. With the constitutionality of the healthcare reform law settled by the Supreme Court, the issue of opting-in or opting-out of the Medicaid expansion has come into focus. VHHA needs to understand the impact of both options on the broader economy of Virginia. VHHA retained Chmura Economics & Analytics (Chmura) to analyze the impacts on the Virginia economy if the state opts in or out of the Medicaid expansion under PPACA. In particular, this study analyzes the economic impact of the Medicaid expansion on the following four key stakeholders:

- **Virginia's healthcare industry:** The Medicaid expansion would potentially bring new patients and spending into the industry. The reduced number of uninsured patients could also reduce the uncompensated care payment and cost for certain healthcare providers, mostly hospitals.
- Virginia's business community: The Medicaid expansion has the potential to reduce healthcare costs for
 the private insurance market. If private insurance premiums are reduced due to the Medicaid expansion,
 then many Virginia businesses who offer health insurance to their employees can potentially see a cost
 savings.
- **Virginia households:** Virginia residents who will obtain insurance through the Medicaid expansion can see reduced out-of-pocket spending on healthcare, which can be diverted to other parts of the state economy.

⁶ Source: "Economic Effects of Health Care Reform on Virginia," by Terance H. Rephann. Center for Economic and Policy Studies, Weldon Cooper Center for Public Service, University of Virginia, October 18, 2010.



⁵ Source: Reuters, available at: http://www.reuters.com/article/2012/06/28/usa-healthcare-court-idUSL2E8HS4WG20120628

• State government: The state will incur additional spending to pay its portion of the cost of new Medicaid enrollees whether it opts in or out of the Medicaid expansion program. However, the state may see a reduction in its payment of the uncompensated care cost due to less uninsured individuals. With the Medicaid expansion, the additional healthcare spending will also yield additional state revenues from the jobs and associated economic activity.⁷

The remainder of this report is organized as follows:

- Section 3 explains the Chmura approach to this study
- Section 4 evaluates the major provisions of PPACA and the current Medicaid program in Virginia, with a
 discussion on the number of potential new enrollees if the program is expanded beyond the currently
 eligible population
- Section 5 analyzes the economic impact of the Medicaid expansion if Virginia chooses to participate in the program, with four sub-sections focusing on its impact on the healthcare industry, business communities, households, and the state government
- Section 6 discusses the economic impact if Virginia chooses not to participate in the Medicaid expansion program, with separate discussions on four affected parties
- Section 7 summarizes and contrasts the key impact of the Medicaid expansion under the two options

⁷ The impact of the Medicaid expansion on Virginia's teaching hospitals is not analyzed in this report.



3. Methodology

3.1. Identifying Effects of Medicaid Expansion

Estimating the effect of the Medicaid expansion on Virginia's economy requires an understanding of the potential increase in eligible residents as well as the associated costs. The first step was to determine the number of Virginia residents that are eligible for the Medicaid expansion. The Virginia Department of Medical Assistance Services (VDMAS) is conducting such a study, but the results were not available to Chmura. Chmura researched and reviewed various estimates from other independent sources and selected the consensus estimate of those studies. After the number of new Medicaid participants was determined, Chmura researched average healthcare spending of Medicaid participants in Virginia to estimate the healthcare spending of those new participants in Virginia's healthcare industry. If Virginia opts out of the program, there will still be a "woodwork" effect: people who are currently eligible for Medicaid but not currently enrolled in the existing program may choose to enroll. As more people become insured, it will not only reduce the uncompensated care payments to certain healthcare providers, but will reduce the healthcare providers' own costs.

For Virginia businesses at large, the broader impact from the Medicaid expansion may result in a reduction in healthcare costs because the healthcare reform law could result in substantial cost savings for the U.S. healthcare sector, as it expands the Medicaid program, and establishes healthcare insurance exchanges. Both measures could reduce the uncompensated care costs and expand the insurance pool. In addition, the law includes measures of administrative simplification that can bring down overall healthcare costs. Chmura conducted a thorough literature review on the cost implications of PPACA and found cost reductions ranging from 0.3% to 1.5%. Based on research regarding the overall effect of PPACA in reducing healthcare costs, Chmura first estimated the effect of Medicaid expansion on private insurance premiums. Chmura also researched the employer portion of insurance premiums to estimate potential cost savings for Virginia businesses.

For Virginia residents, newly enrolled Medicaid participants can reduce their out-of-pocket healthcare spending, implying that they will have additional discretionary income to spend in other parts of the Virginia economy. Chmura applied the latest consumer spending pattern to estimate incremental spending to other sectors such as food, retail, and recreation when healthcare costs are reduced.

Virginia state government will be affected whether it opts in or out of the Medicaid expansion program. Although the federal government will pay 100% of the cost of covering newly eligible participants from 2014 to 2016, the state will have to pay a certain percentage afterwards if it chooses to opt in. However, the state may see a reduction in its payment of uncompensated care costs due to fewer uninsured individuals. In addition, with the expansion of the healthcare sector, the state can also receive additional revenue from the associated economic activity. Even if Virginia opts out of the Medicaid expansion, it will still experience an increased number of Medicaid enrollees due to the "woodwork effect," which would entail additional spending under the existing law.

⁹ Other provisions of PPACA, such as a penalty for businesses not offering healthcare coverage, may increase business costs. Those effects are out of the scope of this study.



⁸ Those studies included "The Impact of Health Reform on Health System Spending," Center for American Progress and the Commonwealth Fund, by David Cutler, Karen Davis, and Kristof Stremikis, May 2010; Source: "The Economic Case for the Health Care Reform: Update." Council of Economic Advisors, December 14, 2009; "Economic Effects of Health Care Reform on Virginia," by Terance Rephann, Weldon Cooper Center for Public Services, University of Virginia, October 2010.

While not the focus of the study, Chmura also qualitatively discussed the possible ramifications resulting from Medicaid expansion in other areas of the economy. Whether Virginia chooses to participate in the Medicaid expansion or not, the Medicaid spending growth may crowd out state spending on other areas such as education and transportation.

The analysis was conducted for six-years from 2014 to 2019. The first year the Medicaid expansion takes effect is 2014. Chmura chose 2019 as the last year of analysis because after that date, there is no certainty regarding the percentage of funds the federal government will match. Appendix 2 presents the summary impact of Medicaid expansion from 2020 to 2022 under two scenarios: (1) federal match is 90%, and (2) federal match is 50%.

3.2. Economic Impact Methodology

Increased healthcare spending, business cost reductions, and increased household discretionary income constitute the direct economic impact of the Medicaid expansion in Virginia. The total economic impact also includes the economic ripple effects from the direct impact. Ripple effects, categorized as indirect and induced (see Appendix 1 for definitions), measure the secondary benefits generated by the direct impact. Using healthcare spending as an example, ripple effects include additional sales to many local businesses supporting the healthcare industry such as medical devices and supplies (indirect impact). They also include increased sales to local businesses that cater to workers in Virginia's healthcare industry when those workers spend their income in the region (induced impact).

The indirect and induced impacts were estimated with IMPLAN Pro¹⁰ software after the direct impact was estimated. Different healthcare expenditures, business cost savings, and household spending items were input into various IMPLAN model sectors to estimate the indirect and induced impacts for each sector before being aggregated to arrive at the overall economic impact. Figure 3.1 illustrates the economic impact framework.

¹⁰ *IMPLAN Professional* is an economic impact assessment modeling system developed by Minnesota IMPLAN Group that is often used by economists to build models that estimate the impact of economic changes on local economies.



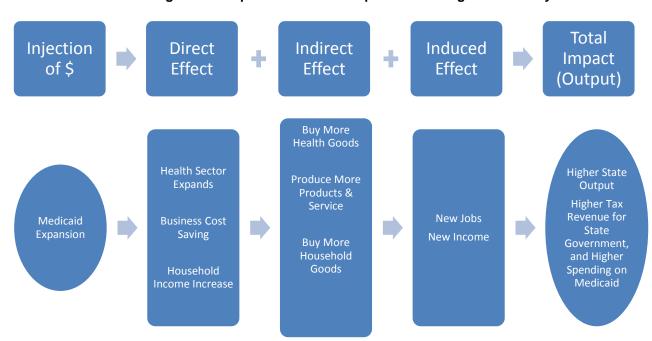


Figure 3.1: Impact of Medicaid Expansion on Virginia Economy

4. Summary of PPACA and the Medicaid Expansion

4.1. Key Features of PPACA

PPACA aims to provide a comprehensive reform on the healthcare system in the United States. It is extremely complex, covering a wide range of healthcare-related issues that impact all members of society, including individuals, businesses, insurance companies, healthcare providers, and state governments. The key features of the healthcare reform law are summarized below:¹¹

- Individual mandate: The law requires most U.S. citizens and legal residents to have health insurance.
 Those without coverage will have to pay a tax penalty. Exemptions will be granted for financial hardship, religious objections, American Indians, undocumented immigrants, those with income below the tax filing threshold, and those who cannot afford insurance.
- **Employer requirement:** The law requires employers to offer healthcare coverage to their employees. Employers that do not offer coverage and have full-time employees receiving the insurance premium tax credit from participating in health insurance changes will be assessed a fee. Exemptions for the fee are granted for employers with up to 50 full-time employees.
- **Medicaid expansion:** The law dramatically increases the number of people with health insurance by expanding Medicaid to all non-Medicaid eligible individuals under age 65 (children, pregnant women, parents, and adults without dependent children) with family incomes up to 133% of the Federal Poverty Level (FPL) based on modified adjusted gross income (MAGI). To finance the coverage for the newly eligible, states will receive federal funding at by decreasing amounts through 2020: 100% for 2014 through 2016, 95% in 2017, 94% in 2018, 93% in 2019, and 90% in 2020.
- Treatment of Children's Health Insurance Program (CHIP): The law requires states to maintain current income eligibility levels for children in Medicaid and the Children's Health Insurance Program (CHIP) until 2019 and extend funding for CHIP through 2015.
- Health insurance exchanges: The law creates state-based American Health Benefit Exchanges and Small Business Health Options Program (SHOP) Exchanges, administered by a governmental agency or non-profit organization, through which individuals and small businesses with up to 100 employees can purchase qualified coverage. Each state may set up their health insurance exchanges; but if a state chooses not to do so, the federal government will set up health insurance exchanges for that state. The law also stipulates the benefits package and the eligibility requirements of health insurance exchanges.
- **Subsidies to individuals:** For those U.S. citizens and legal immigrants participating in health insurance exchanges, the law provides refundable and advanceable premium credits to eligible individuals and

¹² In this study, family income refers to MAGI if not specified otherwise. In calculating Medicaid eligibility, 5% of income is disregarded. The effective eligibility is actually 138% of FPL. Chmura's analysis used 138% of FPL in its modeling, but keeps 133% FPL in its description of the law, to be consistent with the letters of the law.



¹¹ The summary of the law is from Kaiser Family Foundation. Source: http://www.kff.org/healthreform/upload/8061.pdf

families with incomes between 100-400% of FPL. The premium credits will be set on a sliding scale based on income. The law also provides cost-sharing subsidies to eligible individuals and families.

- Subsidies to employers: The law provides small employers with a tax credit if they purchase health insurance for employees and have no more than 25 employees and average annual wages of less than \$50,000. The law creates a temporary reinsurance program for employers providing health insurance coverage to retirees over age 55 who are not eligible for Medicare.
- Changes to private insurance: The law adds new requirements for private insurance plans, such as a requirement to provide dependent care for children up to age 26; prohibiting health plans from placing lifetime limits on the dollar value of coverage; and prohibiting exclusions for children due to pre-existing conditions. Other provisions of the law concern insurance market rules and health insurance administration.
- Tax changes related to reform: PPACA makes many tax law changes to finance healthcare reform, such
 as imposing fees on pharmaceutical manufacturers and health insurers, and imposing a tax on insurers of
 health plans with aggregate value exceeding \$10,200 for individual coverage and \$27,500 for family
 coverage.¹³ Other tax-related changes involve health savings accounts and tax reductions related to
 healthcare.
- Other provisions: The law also has provisions such as improving both the quality and performance of the healthcare system, the current Medicaid program, and healthcare workforce training and development.

Healthcare reform is a very complex endeavor. To understand the ramifications of these provisions and how they interact with each other is extremely challenging. The remainder of this report focuses on one of the main components of PPACA—the expansion of Medicaid and how it may affect Virginia's economy.

4.2. Medicaid Expansion in Virginia

4.2.1. Expanding Medicaid Eligibility

One of the key vehicles through which PPACA can dramatically increase the number of Americans with health insurance is to expand the Medicaid program. Medicaid was established in 1965 through amendments to the Social Security Act, with the objective to provide both health and long-term care for low-income individuals including children, pregnant women, parents, seniors, and individuals with disabilities. While the federal government mandates that certain population groups have to be covered, each state has the option to cover additional population groups. As a result, the eligibility requirements are different among states. For example, Wisconsin, Minnesota, and Vermont have requirements that are less stringent than the federal mandate. As a result, PPACA's Medicaid expansion provision will have a greater impact on those states, rather than states whose eligibility is closely aligned with the federal mandate.

¹⁴ Source: http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-State/virginia.html



¹³ This is often referred to as the "Cadillac Plan."

In Virginia, the following populations are covered under the existing Medicaid program before the expansion:

- Children (0-19 years old) with family income up to 133% of the FPL; with the CHIP program, all children with family income up to 200% of the FPL are covered 15
- Pregnant women with family income up to 133% of the FPL
- Parents with family income up to 31% of the FPL
- Elderly and individuals with disabilities with family income up to 80% of FPL¹⁶

Adults without children are not covered.

PPACA will increase the number of people with health insurance by expanding Medicaid to all non-Medicaid eligible individuals under age 65 (children, pregnant women, parents, and adults without dependent children) with incomes up to 133% of the FPL based on modified adjusted gross income (MAGI). Since children and pregnant women with family income up to 133% of FPL are already covered in Virginia under the existing Medicaid program, the newly eligible Medicaid enrollees will be mostly parents, adults without children, and individuals with disabilities, as shown in Figure 4.1.

¹⁶ Data from eligibility of the parents and seniors are from VDMAS. Source: "Overview of Medicaid & the Potential Impact of Federal Health Reform on Medicaid in Virginia," presentation to the Health Reform Initiative Advisory Committee, by Department of Medical Assistance Services, August 21, 2010.



¹⁵ Source: "Where Are States Today? Medicaid and CHIP Eligibility Levels for Children and Non-Disabled Adults." By Kaiser Family Foundation, July 2012.

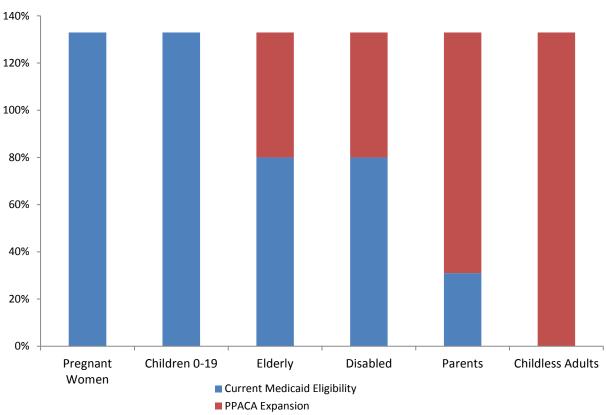


Figure 4.1: Medicaid Eligibility Expansion Under PPACA

Source: Virginia Department of Medical Assistance and Kaiser

4.2.1. New Medicaid Enrollees in Virginia

The latest data show that in Fiscal Year 2011, there were 1.15 million Virginians enrolled in the Medicaid program.¹⁷ Slightly over half (51%) of the enrollees were children, followed by disabled individuals (26%), pregnant women or parents (16%), and the elderly (7%).

¹⁷ Source: http://www.dmas.virginia.gov/Content atchs/atchs/va-medprg.pdf



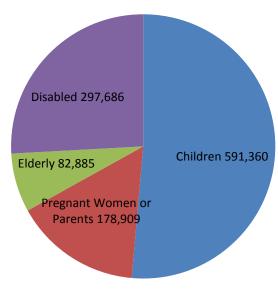


Figure 4.2: Exisiting Medicaid Enrollees, FY 2011

Source: Virginia Department of Medical Assistance Services

If Virginia chooses to adopt the Medicaid expansion program, the number of new enrollees will increase dramatically. In this study, Chmura did not independently estimate the number of potential new Medicaid enrollees in Virginia. Multiple studies have indicated that the number should be around 400,000 for their study periods; examples being 2014 to 2019 and 2014 to 2020. For example, in a 2010 study, the Virginia Department of Medical Assistance Services (VDMAS) estimated the increased number of Medicaid enrollees in Virginia will range between 271,047 and 425,930. In 2011, the Urban Institute estimated that, if PPACA had been fully in place, 400,000 additional people in Virginia would have enrolled in the Medicaid program. Another source for the possible number of new enrollees is the American Community Survey (ACS), 2011. ACS estimated that in 2011, there were 375,725 Virginians that were both uninsured and under 1.38 times the federal poverty thresholds —those are the individuals who will be eligible for the Medicaid expansion program, which should align with the number of potential new enrollees. Of course, other factors can affect new enrollees; for example, some adults currently with private insurance may choose Medicaid with the expansion. In this report, Chmura used an average 400,000 per year from 2014 to 2019 as the number of new enrollees if Virginia chooses to expand its Medicaid program.

The estimated number of new Medicaid enrollees will also include those from the so-called "woodwork" effect. Those are the individuals who are eligible for the existing Medicaid program, but have not enrolled. With the implementation of PPACA, especially the individual mandate provision, it is likely that they will choose to enroll in the Medicaid program. The estimated number from the "woodwork" effect depends on the outreach effort by both state and federal government, and how that can change the participation rate in Medicaid.

Chmura used the following method to estimate the potential new Medicaid enrollees under the existing eligibility. In 2011, Virginia had 476,595 adults (excluding children and seniors) enrolled in the Medicaid program. The Virginia's

¹⁹ Source: Virginia, Characteristics of Uninsured Population, http://factfinder2.census.gov/faces/nav/isf/pages/index.xhtml.



¹⁸ Source: Overview of Medicaid & the Potential Impact of Federal Health Reform on Medicaid in Virginia, presentation to the Health Reform Initiative Advisory Committee, by Department of Medical Assistance Services, August 21, 2010.

Medicaid take-up rate is not available, ²⁰ but the latest national study indicated that the Medicaid take-up rates for adults varied anywhere from 51% to 94%, with a national average of 68.2%. ²¹ Assuming Virginia's adult take-up rate is consistent with the national average, this implies an additional 222,000 individuals could qualify under the existing eligibility. Some of them may have had other private insurance. The U.S. Census American Community Survey indicated that approximately 41% of this population does not have insurance. Applying the same adult take-up rate, it is estimated that 89,845 of them could enroll in Medicaid under the current eligibility.

This implies that if Virginia opts in the Medicaid expansion, 22% of the total new enrollees will qualify under the existing criteria. This number is similar to other state studies. For example, a recent Maryland study showed that the number of Medicaid new enrollees due to the "woodwork" effect amounted to 44,069 in 2020, or 24% of the total new Medicaid enrollees.²²

Overall, with the Medicaid expansion, Virginia is expected to add an average of 400,000 new Medicaid enrollees from 2014 to 2019. Among those, 89.845 is the number of new enrollee under the existing eligibility criteria, while 310,155 is the number of new enrollees under the expanded eligibility. In November 2012, the Virginia Senate Finance Committee estimated that 305,000 new individuals will be enrolled if Medicaid coverage is expanded.²³ This is number is very close to number of newly eligible enrollees Chmura has chosen.

²³ Source: Senate of Virginia, Senate Finance Committee, Medicaid Expansion: Policy Issues, November 15, 2012.



²⁰ Medicaid take-up rate is defined as the percentage of Medicaid eligible population who actually enrolls in the Medicaid program,

²¹ Source: http://aspe.hhs.gov/health/reports/2012/medicaidtakeup/ib.shtml

²² Source: Fakhraei, S. H. (2012). "Maryland Health Care Reform Simulation Model: Detailed Analysis and Methodology." Baltimore, MD: The Hilltop Institute, UMBC.

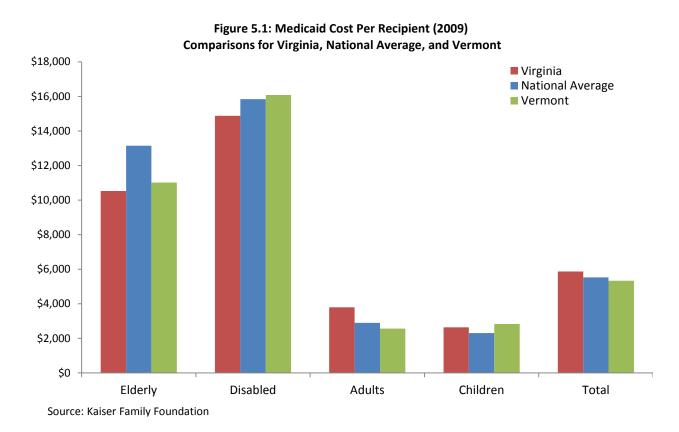
5. Economic Impact of Adopting the Medicaid Expansion

5.1. Healthcare Industry

5.1.1. Direct Effect of the Medicaid Expansion on Virginia's Healthcare Industry

This section estimates the total new Medicaid spending in Virginia, if Virginia chooses to participate in the Medicaid expansion program. Although the number of new Medicaid enrollees has been established, total Medicaid spending still remains to be determined. Total spending involves both the average cost per new Medicaid enrollee and how costs are allocated among different healthcare sub-sectors.

In 2009, the average cost per Virginia's Medicaid recipient was \$5,870 per year. The average cost for disabled and elderly individuals was more than \$10,000, and the average cost per child was \$2,639. The cost for pregnant women or adults was \$3,801 per year (Figure 5.1).²⁴

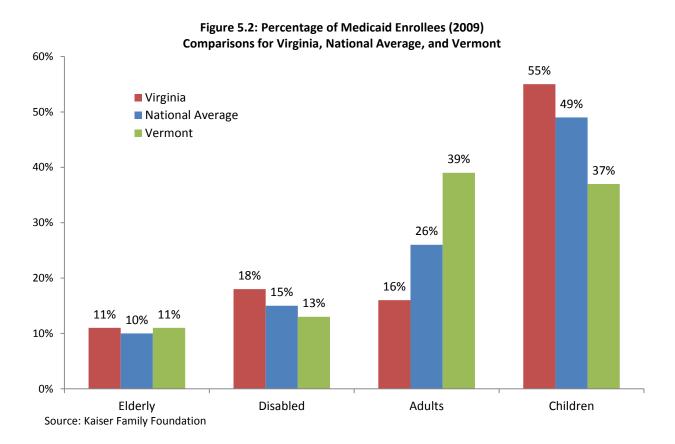


The overall cost per Medicaid enrollee in Virginia was 6% higher than the national average in 2009. However, it is incorrect to assume that average Medicaid healthcare services in Virginia are more expensive than the national average. As Figure 5.1 shows, when compared with the national average, the average Medicaid care costs in

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²⁴ These figures include both the federal and state portions of the Medicaid cost. Source: KFF, Statehealthfacts.org. http://www.statehealthfacts.org/comparetable.jsp?ind=183&cat=4&sub=47&yr=90&typ=4.

Virginia were cheaper for both the elderly and disabled enrollees, and only slightly higher for children. In contrast, the average cost for adults in Virginia was 31% higher than the national average. The reason is that Virginia's Medicaid eligibility for adults is more stringent. Only pregnant women under 133% of FPL and parents under 31% of FPL are eligible, and no childless adults are eligible regardless of income. As a result, only 16% of total Virginia Medicaid enrollees in 2009 were adults. Many other states such as Vermont and New York have expanded their adult eligibility. Consequently, 26% of national Medicaid enrollees in 2009 were adults. Those additional adults are generally healthier, bringing down the average national Medicaid cost. If Virginia chooses to undertake the Medicaid expansion, the number of adult enrollees will increase significantly, and the average cost per Medicaid patient might be lower than the national average.



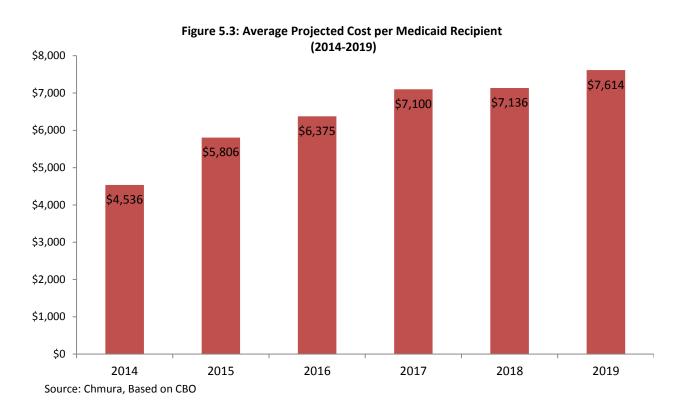
The percentage of future adult enrollees in Virginia should be higher than the national figure of 26% in 2009. As more states choose to opt in the Medicaid expansion, this figure is expected to increase. For example, the state of Vermont has expanded its Medicaid program to cover parents up to 185% of FPL and childless adults up to 150% of FPL. Those eligibility criteria are more generous than the PPACA requirements, which in 2009 resulted in adults comprising 39% of Medicaid enrollees. The New York state Medicaid Program enrolled childless adults up to 100% of FPL, and Delaware enrolled adults up to 110% of FPL. As a result, 37% of New York Medicaid enrollees were adults, and 40% of Delaware Medicaid enrollees were adults in 2009. If Virginia chooses to undertake the Medicaid expansion, the composition of its future Medicaid enrollees will resemble that of Vermont or Delaware

²⁵ Source: "Where Are States Today? Medicaid and CHIP Eligibility Levels for Children and Non-Disabled Adults." By Kaiser Family Foundation, July 2012



with approximately 40% being adults. Adjusting for different compositions of population groups, Chmura estimated that the average future cost of Medicaid per enrollee in Virginia is about 94% of the national average.

The most widely accepted estimates on the average cost per new Medicaid enrollee come from the Congressional Budget Office (CBO). The latest estimate was published in July 2012, reflecting an update after the Supreme Court decision. ²⁶ Most studies on the impact of healthcare use estimates from the CBO as a benchmark. As Figure 5.3 shows, According to the CBO, the average national yearly cost per Medicaid enrollee is projected to increase over the years, from about \$4,536 in 2014 to \$7,614 in 2019 in nominal terms. Virginia's cost per enrollee was adjusted to 94% of the national average



The numbers estimated by CBO only covers the federal portion of the cost for the Medicaid expansion. In the first three years from 2014 to 2016, the federal government covers 100% of the cost of the Medicaid expansion, but the rate is reduced gradually to 90% in 2020 and thereafter. If Virginia opts to offer the Medicaid expansion, the state government will have to pay a percentage of the total cost for new enrollees after 2014. Adding both federal and state spending, the average spending per new Medicaid enrollee is \$6,418 per year from 2014 to 2019.²⁷ The total

²⁷ The average spending per Medicaid enrollees in Chmura study is smaller than that estimated by Virginia Senate Finance Committee in 2012. Source: Senate of Virginia, Senate Finance Committee, Medicaid Expansion: Policy Issues, November 15, 2012.



²⁶ Source: "Estimates for the Insurance Coverage Provisions of the Affordable Care Act Updated for the Recent Supreme Court Decision." Congressional Budget Office, July 2012. Available at: http://www.cbo.gov/sites/default/files/cbofiles/attachments/43472-07-24-2012-CoverageEstimates.pdf.

amount of revenue flowing into Virginia's healthcare industry includes both federal and state funding, which can bring an average of \$2.6 billion in additional revenue to the industry from 2014 to 2019.

However, as Medicaid payments to Virginia's healthcare sector increase, newly enrolled Medicaid participants will reduce their out-of-pocket spending, decreasing the money flowing into Virginia's healthcare sector. Based on the latest Medical Expenditure Panel Survey conducted by the U.S. Department of Health and Human Services, ²⁸ the average out-of-pocket healthcare spending for non-elderly uninsured persons was \$804 per year in 2009, while average out-of-pocket spending for those in public healthcare programs was \$244 per year. Enrolling in the Medicaid expansion can provide sizable cost savings for those individuals. Medicaid patients will pay less out-of-pocket expense, which can reduce revenue to Virginia's healthcare industry by an average of \$338.8 million per year from 2014 to 2019.

Another change in healthcare revenue flow resulting from the Medicaid expansion is the change in uncompensated care, which is the cost of providing healthcare to uninsured patients. Based on an estimate by the Urban Institute, the total uncompensated care in the country in 2009 was \$62.1 billion for 49.1 million uninsured residents, for an average of \$1,265 per person per year. This cost is expected to grow at 5.1% per year. ²⁹ Of total uncompensated care, an estimated 75% of these costs are paid with federal, state, and local funding such as Disproportionate Share Hospital (DSH) payments, but healthcare providers were responsible for 25% of the cost. ³⁰ With the Medicaid expansion, the number of uninsured will be reduced. This will have two effects on revenue flows for the healthcare industry. First, it will reduce federal and state funding to the healthcare sector, averaging \$559.1 million per year. It will also reduce the uncompensated care cost borne by Virginia's healthcare providers, which is estimated to average \$186.4 million per year from 2014 to 2019. However, the changes in uncompensated care will mostly affect Virginia's hospitals, as they treat the majority of uninsured patients.

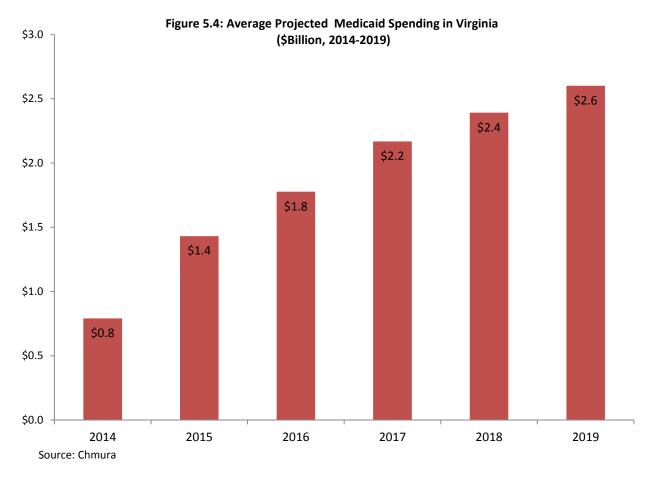
Adding all those components, Chmura estimates that from 2014 to 2019, the Medicaid expansion will inject an average of \$1.9 billion into Virginia's healthcare industry. This figure, of course, will increase over time due to both population growth and escalating healthcare costs. In 2014, the total new healthcare spending is estimated to be \$0.8 billion, increasing to \$2.6 billion in 2019 (Figure 5.4).

http://meps.ahrq.gov/mepsweb/data stats/tables compendia hh interactive.jsp? SERVICE=MEPSSocket0& PROGRAM=MEPSPGM.TC.SAS&File=HCFY2009&Table=HCFY2009_PLEXP_%40&VAR1=AGE&VAR2=SEX&VAR3=RACETH5C&VAR4=INSURCOV&VAR5=POVCAT09&VAR6=MSA&VAR7=REGION&VAR8=HEALTH&VARO1=4+17+44+64&VARO2=1&VARO3=1&VARO4=1&VARO5=1&VARO6=1&VARO7=1&VARO8=1&_Debug=

²⁹ Source: "The Cost of Uncompensated Care with and Without Health Reform." Urban Institute. Available at: http://www.urban.org/uploadedpdf/412045_cost_of_uncompensated.pdf
³⁰ Ibid.



²⁸ Source: Medical Expenditure Panel Survey 2009, Table 1. Source:



After total spending in the healthcare industry from the Medicaid expansion is determined, the spending amount in each healthcare sub-sector must be estimated. Healthcare sub-sectors include hospitals, nursing care facilities, and offices of doctors or dentists. The data from VDMAS indicated that in 2011, medical services (hospitals, doctors' offices) accounted for 49% of all Medicaid spending in Virginia, followed by spending in long-term care which accounted for 31%. However, the percentage of current Medicaid payments had a large proportion in long-term care payments due to a large number of disabled and elderly individuals in the existing Medicaid population. The new enrollees are more likely to be healthy adults. Other studies have argued that since the expanded Medicaid enrollees will be predominantly adults, their spending patterns should resemble the general population at large.³¹ Data from the Kaiser Family Foundation indicates that healthcare spending for the general population in Virginia was allocated as follows in 2009 (Figure 5.5): 37.1% for hospital care, 28.7% for physicians and other professional services, 15.7% for drugs and other non-durable supply, and 8.5% for nursing home and home health care.³²

³² Source: http://www.statehealthfacts.org/comparecat.jsp?cat=5&rgn=48&rgn=1&print=1



³¹ For an example, please see the Michigan Study, http://www.chrt.org/assets/price-of-care/CHRT-Technical-Paper-ACA-Medicaid-Expansion-2012-10-15.pdf

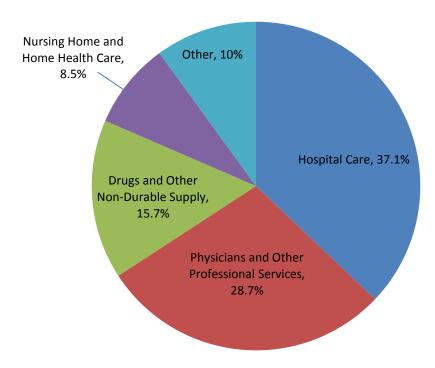


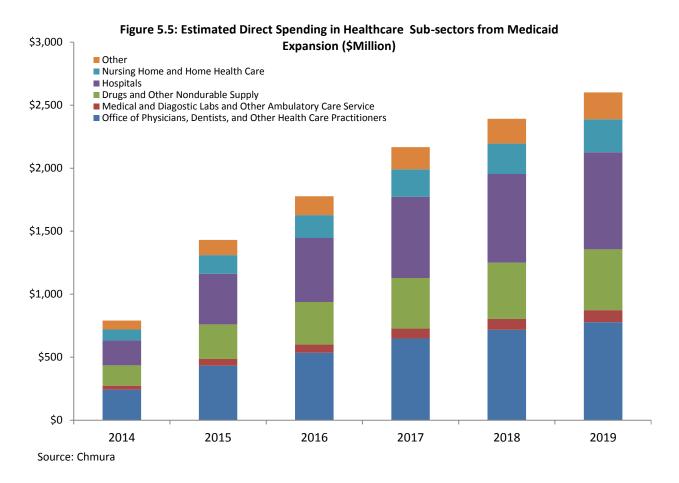
Figure 5.5: Medical Expenditures of the Virginia General Population 2009

Source: Kaiser Family Foundation

The latest Kaiser Family Foundation (KFF) spending patterns were used to allocate overall healthcare spending into various healthcare sub-sectors by North American Industry Classification System (NAICS) industries. As Figure 5.6 shows, the three healthcare sub-sectors that will receive the most spending from the Medicaid expansion are hospitals; offices of physicians, dentists and other healthcare practitioners; and drugs and non-durable supply.³³

³³ This estimate assumes that uncompensated care cost savings and payment reductions only affect hospitals and offices of physicians, dentists, and other healthcare practitioners.





5.1.2. Ripple Economic Impact

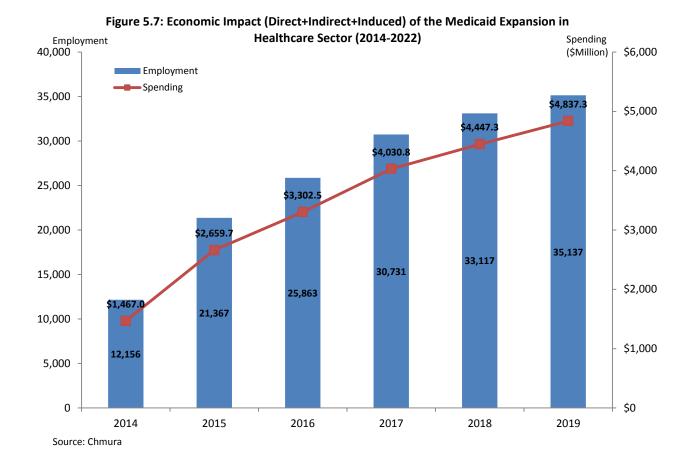
The total annual statewide economic impact (direct and ripple) of increased healthcare revenue from the Medicaid expansion is estimated to average \$3.5 billion from 2014 to 2019, which can support 26,395 Virginia jobs (Table 5.1). Direct revenue from the Medicaid expansion flowing into Virginia's healthcare industry is estimated to average \$1.9 billion per year, which can support 15,762 annual healthcare jobs. The indirect impact is estimated to be \$588.8 million and 3,709 jobs, benefiting other businesses in Virginia that support the state's healthcare industry. The induced impact is estimated to be \$1.0 billion and 6,923 jobs in the state, mostly benefiting consumer-related businesses such as retail shops, restaurants, and other services.

Table 5.1: Economic Impact of the Medicaid Expansion in Health Care Sector (Annual Average 2014-2019)

\$72 \$643.8 6,215 \$1,020.7 6,949 \$350.8 3,939 \$255.8 1,134 \$3,457.4
\$643.8 6,215 \$1,020.7 6,949 \$350.8 3,939 \$255.8
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\$643.8 6,215 \$1,020.7
\$643.8 6,215
\$643.8
872
\$129.4
7,287
\$1,057.0
Total Impact
•

Note: Numbers may not sum due to rounding Source: IMPLAN Pro 2010 and Chmura

From 2014 to 2019, the statewide economic impact from additional healthcare revenue will steadily increase from \$1.5 billion in 2014 to \$4.8 billion in 2019 (measured in nominal dollars). This increase reflects both the growth of the state population (thus more Medicaid enrollees), as well as escalating costs of healthcare services for Medicaid enrollees.



The statewide economic impact estimated here only comes from the Medicaid expansion. Many uninsured Virginians will obtain insurance by participating in health insurance exchanges, which will also impact the state healthcare industry dramatically. Estimating the impact of those programs is outside the scope of this study.

5.2. Effect of Medicaid Expansion on Virginia's Businesses

5.2.1. Direct Impact of the Medicaid Expansion on Business Cost

While healthcare is the industry that will see the most impact from the Medicaid expansion, the effect of the expansion will extend to other businesses in Virginia. Businesses outside the healthcare industry will be affected primarily from the Medicaid program's potential to slow the growth of healthcare costs. Some studies also claimed that the Medicaid expansion could improve both the health of the American workforce and labor productivity. However, those benefits are hard to quantify and this study only focuses on the potential impact of the Medicaid expansion on the healthcare costs borne by Virginia's businesses.

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³⁴ For a summary of other effects, please see "Economic Effects of Health Care Reform on Virginia," by Terrance H. Rephann. Center for Economic and Policy Studies, Weldon Cooper Center for Public Service, University of Virginia, October 18, 2010.

There are varying estimates of possible healthcare cost savings from PPACA, and it is even more difficult to pinpoint the effect of the Medicaid expansion component. For instance, Cutler, Davis, and Stremikis (2010) estimated the possibility of "1.5 percentage-point reduction on cost increase annually from significant health reform," while another paper by Cutler and Sood (2010) described a likely "0.75 percentage point reduction" in the growth rate of total national healthcare costs. The Weldon Cooper study, commissioned by VHHA in 2010, utilized the assumption of 0.75 percentage points of annual reduction in cost growth.

Virginia's businesses are more concerned about the effect of healthcare reform on insurance premiums, since that is the business cost they have to bear. Estimates of this cost vary. For example, Cutler, Davis, and Stremikis estimated that the average family policy in private insurance markets will be \$2,000 cheaper in 2019 after reform, implying a reduction in premium appreciation of 1.1 percentage points per year. Government estimates are less than that. For example, The Council of Economic Advisors (CEA) of the Obama Administration estimated a cost savings of about \$1,000 for family policies in 2019 as a result of PPACA. The CBO's estimate was even more conservative—it estimated that a family policy would be only \$150 cheaper in 2016, implying that the average reduction in premium appreciation would be 0.3 percentage points per year. In this study, Chmura used the average of CBO and CEA estimates, and assumed that average reduction in premium reduction would be 0.7 percentage points per year.

In the above-referenced studies, the reasons for total healthcare cost savings come from many changes in the law, such as reduced administration costs and healthcare system modernization. Slowing cost growth can also be achieved by reducing the number of uninsured individuals in America.⁴¹ None of the available studies specifically estimated the effect of the Medicaid expansion on private insurance premiums.

Presumably, effects of the Medicaid expansion on private insurance premiums will be much smaller than the overall effect of PPACA. With more people enrolled in Medicaid, there is a reduced amount of uncompensated care by hospitals and other healthcare providers; this can directly affect healthcare costs. Hospitals and healthcare providers may, in turn, pass along those savings to their patients and customers by reducing the prices they charge to private insurance companies, which may reduce the insurance premium in private insurance markets.⁴²

⁴² For more discussion of this "cost shift" theory, please see New York Times article and studies referred therein. http://economix.blogs.nytimes.com/2012/07/05/could-states-save-by-expanding-medicaid/



³⁵ Source: "The Impact of Health Reform on Health System Spending," Center for American Progress and the Commonwealth Fund, by David Cutler, Karen Davis, and Kristof Stremikis, May 2010.

³⁶ Source: "New Jobs through Better Health Care." Center for American Progress, by David Cutler and Neeraj Sood. January 2010.

³⁷ Most studies concluded that the healthcare reform can reduce healthcare cost. Only one study argues that the law will not reduce health care cost. The study is "Bending the Curve: What Really Drives Health Care Spending", by Jason Fodemand and Robert Book, the Heritage Foundation. February 2010.

³⁸ While healthcare cost savings will eventually be reflected in insurance premiums, those two are not exactly the same. There are time lags and administrative costs for insurance companies to be considered.

³⁹ Source: "The Economic Case for the Health Care Reform: Update." Council of Economic Advisors, December 14, 2009.

⁴⁰ Source: Letters to the Honorable Evan Bayh. "An Analysis of Health Insurance Premiums under the Patient Protection and Affordable Care Act." November 2009.

⁴¹ Source: "The Impact of Health Reform on Health System Spending." Center for American Progress and the Commonwealth Fund, by David Cutler, Karen Davis, and Kristof Stremikis, May 2010.

Chmura used the following method to estimate the possible effect of the Medicaid expansion on private insurance premiums. First, Chmura estimated the importance of reduced uncompensated care cost relative to overall healthcare cost savings. Using the Urban Institute study on uncompensated care, ⁴³ Chmura estimated that the national healthcare sector could reduce uncompensated care costs of \$16.2 billion in 2019, as a result of moving about 29 million individuals Ofrom uninsured to insured. Among those, 11 million is the estimated number of new enrollees in Medicaid. ⁴⁴ As a result, 38% of the uncompensated care cost savings can be attributed to the Medicaid expansion. In the study by Cutler, Davis, and Stremikis (2010), it was estimated that the law provided healthcare cost savings of \$185 billion in 2019. The relative magnitude of the Medicaid expansion is about 3.4% of the overall cost reduction of healthcare reform. The conservative estimate implies that healthcare reform can achieve an average reduction in premium appreciation of 0.7 percentage points per year. As a result, the Medicaid expansion may reduce premium appreciation by 0.02 percentage points per year.

In 2011, there were 3.9 million Virginians under employer-based health insurance. This number will grow slightly to about 4.0 million in 2019.⁴⁵ The slow growth reflects the fact that some of the employees, even though eligible for their employer-based insurance plan, may choose insurance exchanges or Medicaid. In addition, it is estimated that of total insurance premiums, employers are responsible for 72%, while 28% is assumed by the employees.⁴⁶

Figure 5.8 illustrates the estimated cost savings in insurance premiums for Virginia's businesses as a result of the adoption of the Medicaid expansion. The estimated annual cost savings can average \$20.2 million per year from 2014 to 2019. The cost savings is projected to grow from \$7.4 million in 2014 to \$35.0 million in 2019.

⁴⁶ Source: "Employer Health Benefits, 2012 Annual Survey." The Kaiser Family Foundation and Health Research & Education Trust.

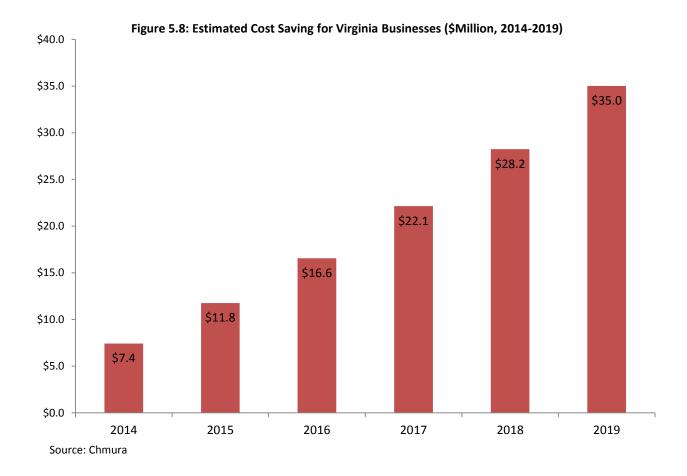


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⁴³ Source: "The Cost of Uncompensated Care with and Without Health Reform." Urban Institute. Available at: http://www.urban.org/uploadedpdf/412045_cost_of_uncompensated.pdf

⁴⁴ Source: "Estimates for the Insurance Coverage Provisions of the Affordable Care Act Updated for the Recent Supreme Court Decision." Congressional Budget Office, July 2012. Available at: http://www.cbo.gov/sites/default/files/cbofiles/attachments/43472-07-24-2012-CoverageEstimates.pdf.

⁴⁵ This assumes a similar growth rate as the growth of the national employer-based insurance, estimated by CBO July 2012.



Compared with the impact on other stakeholders in Virginia's economy, such as the amount of money flowing into Virginia's healthcare industry, the effect of the Medicaid expansion on business cost savings is modest, averaging only \$20.2 million per year from 2014 to 2019. Even when more aggressive cost savings assumptions are used, such as a premium reduction of 1.1% per year, the average cost savings for Virginia businesses is estimated to average \$31.1 million from 2014 to 2019, only about 1.6% of the direct effect of the Medicaid expansion on Virginia's healthcare industry.

5.2.2. Ripple Economic Impact

The cost savings for businesses can be used in different ways, including increased payroll, increased profits, or reinvesting to expand their operations. If a business chooses either of the first two options, there will not be an immediate economic impact in Virginia. However, most academic studies assume that cost savings will result in business expansion and increased employment. ⁴⁸ Chmura makes the same assumption that cost savings will be used to expand the output, which will generate ripple economic impacts. ⁴⁹

⁴⁹ Since the effect of the Medicaid expansion on business cost is modest, different assumptions will not materially change the economic impacts of the Medicaid expansion on the Virginia economy.



⁴⁷ Source: "The Impact of Health Reform on Health System Spending. Center for American Progress and the Commonwealth Fund," by David Cutler, Karen Davis, and Kristof Stremikis, May 2010.

⁴⁸ Source: "New Jobs through Better Health Care." Center for American Progress, by David Cutler and Neeraj Sood. January 2010.

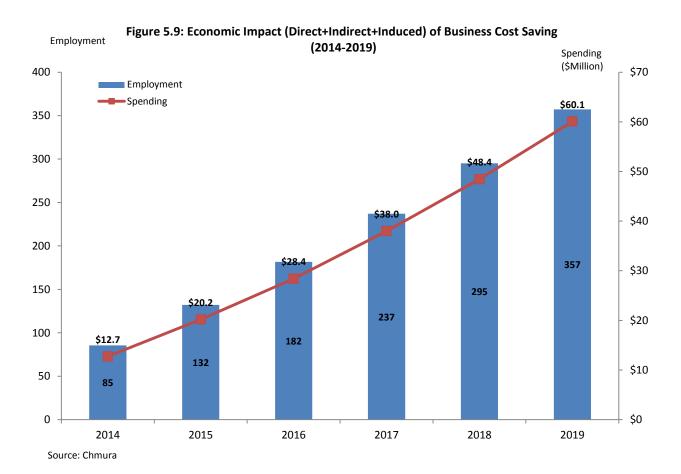
The total annual economic impact (direct and ripple) of business cost savings is estimated to average \$34.6 million from 2014 to 2019, which can support 215 Virginia jobs (Table 5.2). When considering the overall size of Virginia's economy, the economic impact from premium reductions for Virginia businesses appears to be modest.

Table 5.2: Economic Impact Business Cost Saving

		Direct	Indirect	Induced	Total Impact
Total (2014-19)	Spending	\$121.2	\$33.3	\$53.3	\$207.8
	Employment	741	186	361	1,289
Annual Average (2014-19)	Spending	\$20.2	\$5.6	\$8.9	\$34.6
	Employment	124	31	60	215

Note: Numbers may not sum due to rounding Source: IMPLAN Pro 2010 and Chmura

From 2014 to 2019, the economic impact of business cost savings will increase steadily over the years. The impact will increase from \$12.7 million and 85 jobs in 2014 to \$60.1 million and 357 jobs in 2019 (Figure 5.9).



5.3. Effect on Virginia Residents

5.3.1. Effect of the Medicaid Expansion on Household Spending

This section focuses on Virginia residents directly affected by the Medicaid expansion program, even though the effects such as insurance premium cost savings can affect all Virginia residents in employer-offered health insurance or private insurance exchanges.⁵⁰

One of the major goals of healthcare reform is to drastically reduce the uninsured population. Should Virginia choose to expand the Medicaid program, an estimated 400,000 Virginia residents will obtain health insurance. For those individuals, access to Medicaid will also reduce their healthcare expenditure, increasing household spending in other areas of the Virginia economy. When they are uninsured, they can seek healthcare through emergency rooms, either paying out-of-pocket, or adding to uncompensated care cost. Based on the latest Medical Expenditure Panel Survey conducted by the U.S. Department of Health and Human Services, ⁵¹ the average out-of-pocket healthcare spending for non-elderly uninsured persons was \$804, while average out-of-pocket spending for those in public healthcare programs was \$244. Enrolling in the Medicaid expansion can provide sizable cost savings for those individuals.

Figure 5.10 illustrates the estimated cost savings for Virginia's new Medicaid participants. The estimated annual average healthcare cost expenditure will be reduced by \$338.8 million per year from 2014 to 2019, which can be used to stimulate Virginia's economy in other areas. The cost savings is projected to grow from \$211.5 million in 2014 to \$433.4 million in 2019.

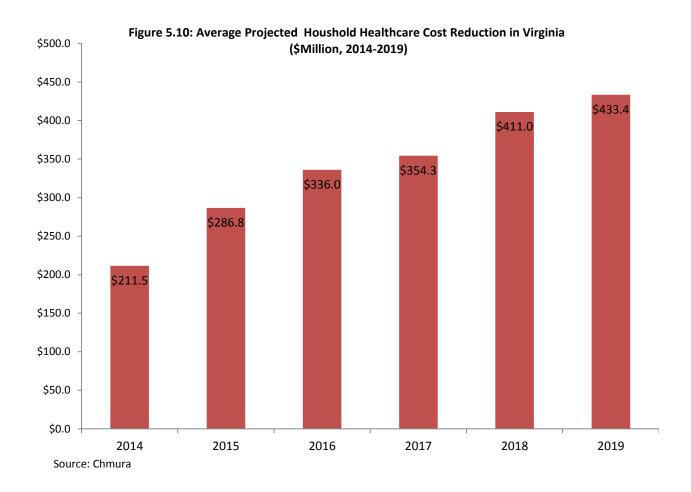
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⁵⁰ Discussion with VHHA confirmed that households in other insurance programs are beyond the scope of this study.

⁵¹ Source: Medical Expenditure Panel Survey 2009, Table 1. Source:



5.3.2. Ripple Effects of Household Spending

It is assumed new Medicaid enrollees will spend some of their healthcare cost savings in Virginia, which will generate ripple effects throughout the economy. It is estimated that the total annual economic impact (direct and ripple) of increased household spending will average \$417.7 million in from 2014 to 2019, which can support 4,211 Virginia jobs. Among those, the direct impact is estimated to be \$238.9 million per year, which can support 2,358 jobs in sectors other than healthcare. The indirect impact is estimated to be \$77.3 million and 814 jobs, while the induced impact is estimated to average \$101.5 million and 1,039 jobs in the state (Table 5.3).

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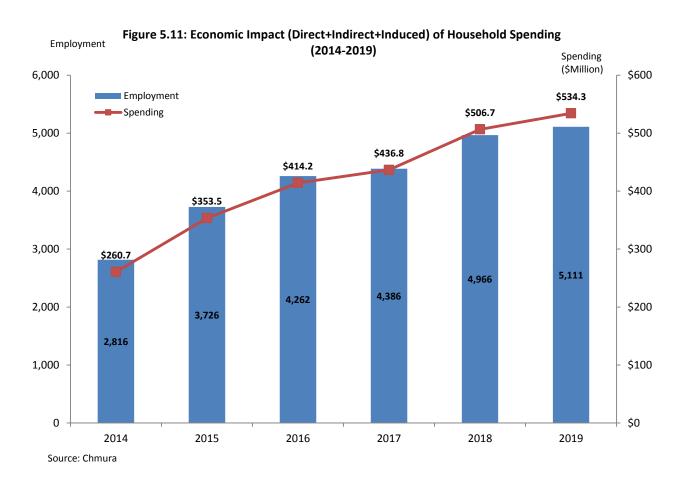
⁵² This is smaller than \$338.7 million because not all household income will be spent, and not all spending will occur in Virginia. Some income may also be saved or invested in financial assets.

Table 5.3: Economic Impact Household Income Change

		Direct	Indirect	Induced	Total Impact
Total (2014-19)	Spending	\$1,433.6	\$463.6	\$609.0	\$2,506.2
	Employment	14,146	4,886	6,235	25,267
Annual Average (2014-19)	Spending	\$238.9	\$77.3	\$101.5	\$417.7
	Employment	2,358	814	1,039	4,211

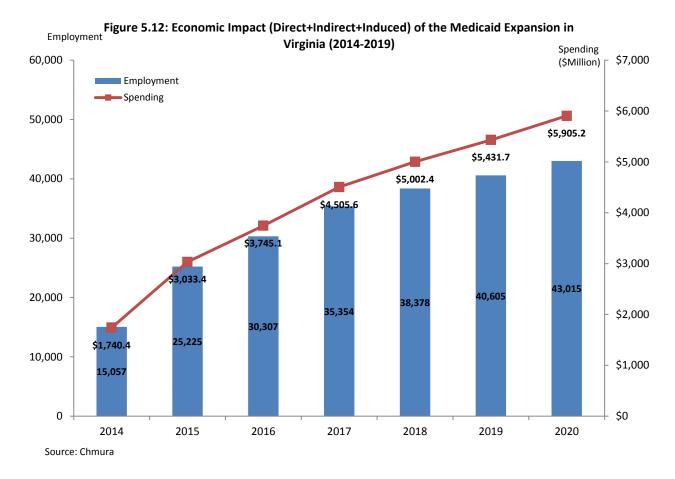
Note: Numbers may not sum due to rounding Source: IMPLAN Pro 2010 and Chmura

Figure 5.11 summarizes the economic impact of household spending by year.



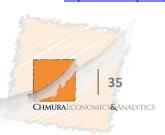
5.4. Economic Impact Summary

Combining economic impacts of the Medicaid expansion on the healthcare industry, businesses, and residents, the overall impact is illustrated in Figure 5.12. The economic impact (direct, indirect, and induced) in Virginia will increase from an estimated \$1.7 billion and 15,057 jobs in 2014 to \$5.9 billion and 43,015 jobs in 2019. The dominant share of the economic impact comes from the new revenue flowing into Virginia's healthcare industry as a result of the Medicaid expansion.



Outside of the economic impacts such as increased household spending and premium cost savings, there may be other benefits to the Virginia economy as well. Some studies claim that the Medicaid expansion could improve both the health of the American workforce and labor productivity. These studies assume that when the Medicaid expansion moves millions of Americans from being uninsured to being insured, they will be more likely to utilize preventive healthcare services, thereby becoming healthier and living longer and more productive lives. ⁵³ Research published in the New England Journal of Medicine ⁵⁴ demonstrates that expanded Medicaid coverage for low-income adults translates into a 6.1 percent reduction in mortality.

⁵⁴ Source: "Mortality and Access to Care among Adults after State Medicaid Expansions." Benjamin Sommers, Katherine Baicker and Arnold Epstein, the New England Journal of Medicine. July 2012. http://www.nejm.org/doi/pdf/10.1056/NEJMsa1202099



⁵³ For an example of a study on the effect of insurance on the health of workers, please see Dor, Avi, Joseph Sudano, and David W. Baker. 2006. "The Effect of Private Insurance on the Health of Older, Working Age Adults: Evidence from the Health and Retirement Study." *Health Services Research* 41, 3 (Part 1): 759-87.

Virginia businesses can benefit from a healthier workforce. Healthy workers have reduced absenteeism due to health issues; and this can, in turn, increase productivity.⁵⁵ Quantifying the health and well-being effects of the Medicaid expansion is beyond the scope of this study.

5.5. State of Virginia Budgetary Impact

The budget of Virginia will be impacted in multiple ways if the state chooses to adopt the Medicaid expansion component of PPACA. Virginia will need to pay for the state portion of the Medicaid expansion cost. But the state can also receive additional tax revenues from the expanded healthcare industry, cost savings from businesses, and increased household spending.

For the newly eligible Medicaid enrollees, the federal government pays 100% of the cost of new Medicaid participants from 2014 to 2016. The federal government will pay 95% of the total cost in 2017, 94% in 2018, and 93% in 2019. For those new enrollees under the existing criteria ("woodwork" effect), the existing funding formula applies and the federal government pays around 50% of total costs. ⁵⁶ As a result, the state portion of the Medicaid expansion payment is estimated to be \$138.9 million in 2014, increasing to \$584.4 million in 2019, for an average of \$364.5 million per year. However, the state can also reduce uncompensated care payment because those individuals will become insured. Assuming the state is responsible for 9.3% of the total uncompensated care cost, including DSH payment, ⁵⁷ with about 400,000 new Medicaid participants, Virginia is expected to save an average of \$69.2 million per year in its payment of uncompensated care from 2014 to 2019.

The state of Virginia can also collect individual and corporate income taxes from the expanded healthcare industry and associated economic activities, averaging \$34.3 million and \$6.0 million per year, respectively (Table 5.4).⁵⁸

⁵⁸ Source: Virginia Tax Department.



⁵⁵ For an example of a study on the effect on health status of workers on business productivity, please see Goetzel, Ron Z., Stacey R. Long, Ronald J. Ozminkowski, Kevin Hawkins, Shaohung Wang, and Wendy Lynch. 2004. "Health, Absence, Disability, and Presenteeism Cost Estimates of Certain Physical and Mental Health Conditions Affecting U.S. Employers." *Journal of Occupational and Environmental Medicine* 46, 4: 398-412.

⁵⁶ Kaiser Family Foundation (KFF), Matching Rates and Multiplier, statehealthfact.org, and "Medicaid Coverage and Spending in Health Reform: National and State-by-State Results for adults at or below 133% FPL," by John Holahan and Irene Headen, May 2010.

⁵⁷ Source: Senate of Virginia, Senate Finance Committee, Medicaid Expansion: Policy Issues, November 15, 2012.

Table 5.4: Estimated State Budgetary Impact (Average 2014-2019, \$ Million)

Health Sector Impact	
Spending on Medicaid Expansion Reduction in Uncompensated Care Payment (including state match of	-\$364.5
DSH)	\$69.2
Individual Income Tax	\$34.3
Corporate Income Tax	\$6.0
Business Impact	
Sales Tax	\$0.1
Individual Income Tax	\$0.3
Corporate Income Tax	\$0.2
Household Impact	
Sales Tax	\$4.0
Individual Income Tax	\$3.3
Corporate Income Tax	\$2.4
Total	-\$244.7

Source: Chmura

Cost savings and resulting output expansion can also be experienced by Virginia's retail businesses, which are subject to sales tax. It is assumed that 7% of direct cost savings to businesses is from retail. ⁵⁹ Virginia has a sales tax of 5%, with 4% going to the state government. Business cost savings can also result in additional jobs and profits, which can bring in an average \$0.3 million in individual income taxes, \$0.2 million in corporate income taxes, and \$0.1 million in sales taxes to the state government from 2014 to 2019.

As new Medicaid participants reduce their out-of-pocket spending in healthcare, they will spend more in other sectors of the Virginia economy, which will generate tax revenues for Virginia. It is estimated that 42% of total household spending is subject to sales tax. ⁶⁰ Applying this percentage to estimated new household spending, the state can collect an annual average of \$4.0 million in sales tax from 2014 to 2019. Increased household spending also results in more jobs and profits, which can result in \$3.3 million in individual income taxes and \$2.4 million in corporate income taxes for the state from 2014 to 2019.

In summary, if Virginia chooses to expand Medicaid, state government expenditures are expected to increase by an average of \$244.7 million per year from 2014 to 2019. The annual budgetary impact for the state of Virginia is summarized in Figure 5.13. In the first three years from 2014 to 2016, the federal government is covering 100% of the cost of newly eligible enrollees, so the state of Virginia can expect only a slightly negative impact on its budget. From 2017 to 2019, Virginia will have to spend more for Medicaid expansion, as the state picks up a larger portion of the cost to insure the new enrollees.

⁵⁹ IMPLAN Model 2010 estimates that 7% of Virginia output comes from retail, lodging, and food service industries.

⁶⁰ Source: "Consumer Expenditure Survey," Bureau of Labor Statistics.

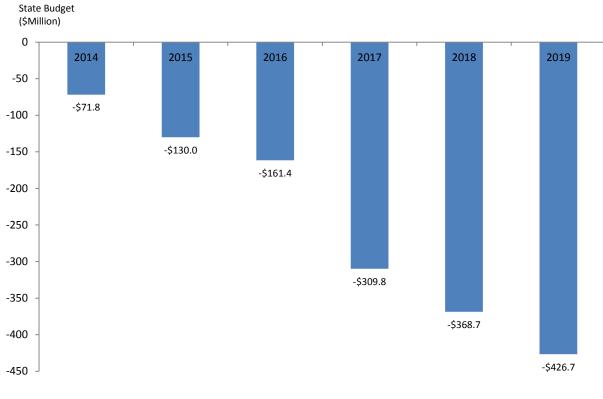


Figure 5.13: State Budgetary Impact of the Medicaid Expansion (2014-2019)

Source: Chmura

How the state will pay for the Medicaid expansion will be an issue confronting state leaders if Virginia chooses to adopt the Medicaid expansion under PPACA. The state could reduce spending in other areas, such as education, social service, or transportation. The state can also find ways to increase revenue by undertaking tax reforms. The impact on the broader economy will differ depending on the path Virginia chooses.

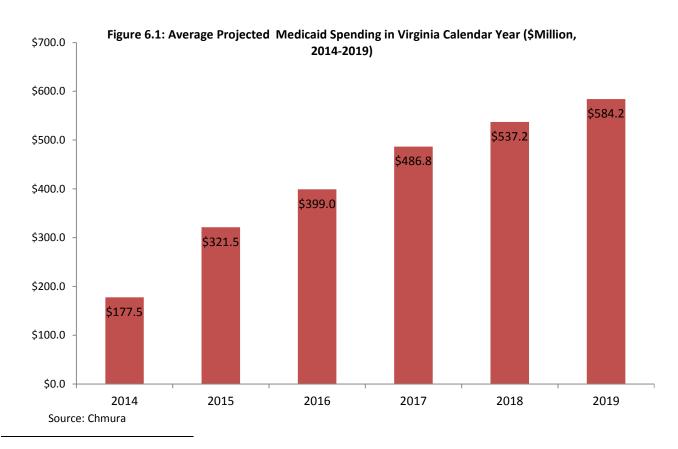
6. Economic Impact of Opting Out of Medicaid Expansion

6.1. Healthcare Industry

6.1.1. Direct Effect on Virginia's Healthcare Industry

If Virginia chooses to opt out of the Medicaid expansion part of the PPACA, there will likely be more Medicaid enrollees under the current eligibility. This is often termed the "woodwork" effect. As explained in Section 4.2, it is estimated that 89,845 Virginia residents could enroll in the Medicaid program under the current eligibility. Even though Virginia's opting out of the Medicaid expansion may produce additional uninsured residents⁶¹ and increase the number of individuals in the private health exchange, the ramifications of those developments are not analyzed here. 62

In light of the newly enrolled in the Medicaid program under the existing criteria, there will be increased heath care spending from the Medicaid participants, reduced out-of-pocket payments from individuals, and reduced uncompensated care payment for Virginia's healthcare sectors. Using the same assumptions of the average cost of Medicaid patients, out-of-pocket spending savings, and uncompensated care payments, Chmura estimates that the additional revenue flowing into Virginia's healthcare industry will average \$417.7 million per year from 2014 to 2019. That spending is allocated into different healthcare subsectors, using the same method as in Section 5.1.



⁶¹ This is referred to as the "Medicaid Donut Hole" effect, which is not part of this study.

⁶² Households in other insurance programs are beyond the scope of this study.

6.1.2. Ripple Economic Impact

If Virginia opts out of the Medicaid expansion, the total annual economic impact (direct and ripple) of additional healthcare revenue is estimated to average \$776.6 million per year from 2014 to 2019, which can support 5,929 Virginia jobs. Among those, direct new revenue to Virginia's healthcare industry is estimated to average \$417.7 million per year, which can support 3,540 healthcare jobs. The indirect impact is estimated to be \$132.3 million and 833 jobs per year, benefiting other businesses in Virginia that support Virginia's healthcare industry. The induced impact is estimated to be \$226.6 million and 1,555 jobs per year in the state, mostly benefiting consumer-related businesses such retail shops, healthcare facilities, and restaurants.

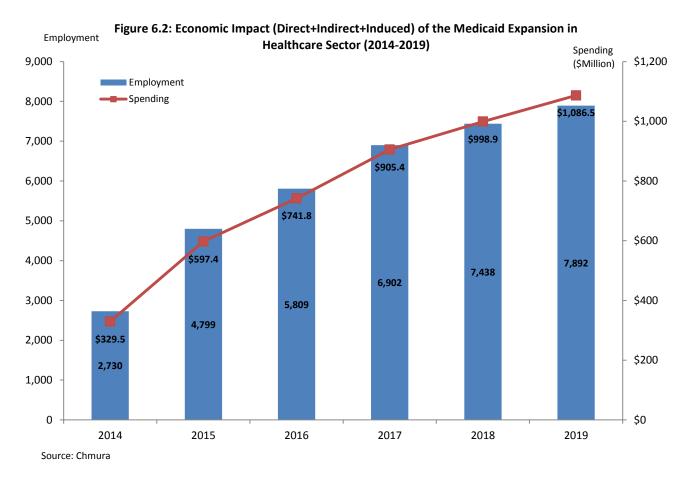
Table 6.1: Economic Impact of Increased Health Care Industry Revenue (Annual Average 2014-2019)

		Direct	Indirect	Induced	Total Impact
	Spending (\$Million)	\$125.5	\$33.4	\$78.5	\$237.4
Office of physicians, dentist and other health care practitioners	Employment	877	220	539	1,637
	Spending (\$Million)	\$15.4	\$5.8	\$7.8	\$29.1
Medical and diagnostic labs and other ambulatory care service	Employment	102	40	54	196
	Spending (\$Million)	\$78.7	\$24.9	\$40.9	\$144.6
Drugs and other Nondurable Supply	Employment	962	153	281	1,396
	Spending (\$Million)	\$120.7	\$45.5	\$63.0	\$229.3
Hospitals	Employment	848	281	431	1,561
	Spending (\$Million)	\$42.6	\$11.4	\$24.8	\$78.8
Nursing Home and Home Health Care (623)	Employment	641	74	170	885
	Spending (\$Million)	\$34.8	\$11.1	\$11.6	\$57.5
Other	Employment	110	65	80	255
	Spending (\$Million)	\$417.7	\$132.3	\$226.6	\$776.6
	Employment	3,540	833	1,555	5,929

Note: Numbers may not sum due to rounding

Source: IMPLAN Pro 2010 and Chmura

Figure 6.2 details the economic impact of the added healthcare revenue on Virginia's economy from 2014 to 2019.



6.2. Effect on Virginia Businesses

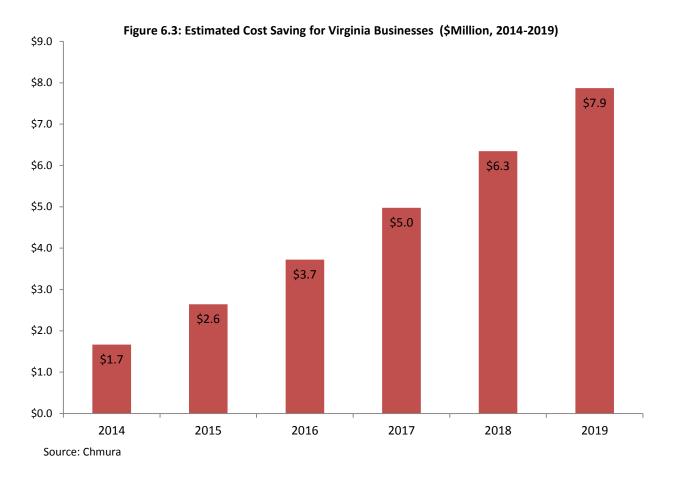
6.2.1. Direct Impact on Business Cost

When comparing the two Medicaid expansion options, the cost savings for state businesses may be smaller if Virginia opts out of the expansion. That is because there will be fewer new individuals enrolling in the existing Medicaid program, and uncompensated care costs will not decrease as much as the "opting-in" scenario. Since the number of new enrollees in the Medicaid program would be about 22% if Virginia chooses to expand, it is assumed that the overall business cost savings would be about 22% of that in the "opting-in" scenario. ⁶³

Figure 6.3 illustrates the estimated cost savings in insurance premiums for Virginia's businesses if Virginia opts out of the Medicaid expansion. It is estimated that the annual average cost savings can reach \$4.5 million from 2014 to 2019. The cost savings are projected to grow from \$1.7 million in 2014 to \$7.9 million in 2019.

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⁶³ Some of the would-be Medicaid enrollees will choose to enroll in health insurance exchanges, reducing the number of uninsured. This analysis does not consider that possibility.



6.2.2. Ripple Economic Impact

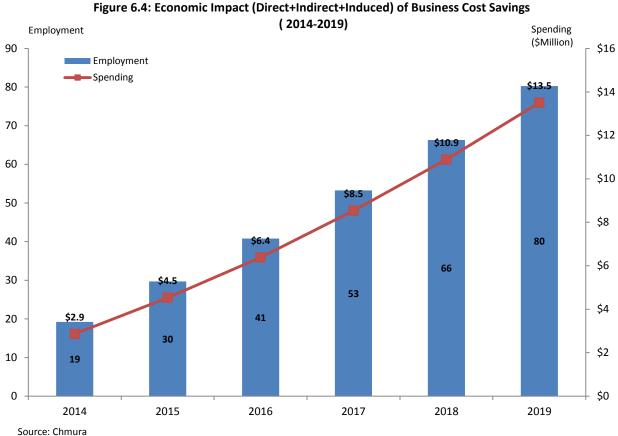
Chmura makes the same assumption that cost savings will be used to expand business output. The total annual economic impact (direct and ripple) of business cost savings is estimated to average \$7.8 million from 2014 to 2019, which can support 48 Virginia jobs (Table 6.2). The effect is relatively small compared to other impacts such as new revenues flowing into Virginia's healthcare industry.

Table 6.2: Economic Impact Business Cost Saving

		Direct	Indirect	Induced	Total Impact
Total (2014-19)	Spending	\$27.2	\$7.5	\$12.0	\$46.7
	Employment	167	42	81	290
Annual Average	Spending	\$4.5	\$1.2	\$2.0	\$7.8
(2014-19)	Employment	28	7	14	48

Note: Numbers may not sum due to rounding Source: IMPLAN Pro 2010 and Chmura

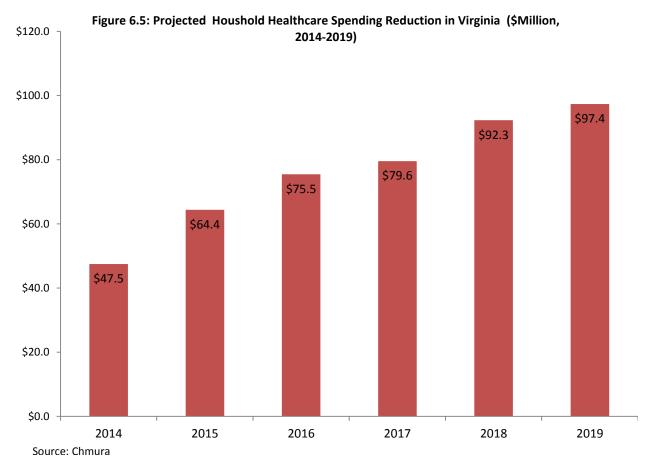
From 2014 to 2019, the economic impact of business cost savings will increase steadily over the years. The impact will increase from \$2.9 million and 19 jobs in 2014 to \$13.5 million and 80 jobs in 2019.



6.3. Effect on Virginia Residents

6.3.1. Effect on Household Spending

For those Virginians gaining insurance due to the "woodwork" effect, participating in the Medicaid program can reduce their healthcare expenses and divert their spending to other parts of the economy. Using the same methodology and assumptions as in Section 5.3, it is estimated that the total annual household healthcare expenditure will be reduced by \$76.1 million from 2014 to 2019.



6.3.2. Ripple Effects of Household Spending

It is assumed that new Medicaid enrollees will spend some of their healthcare cost savings in Virginia, which will generate ripple effects throughout the economy. It is estimated that the total annual economic impact (direct and ripple) of household spending will average \$93.8 million per year from 2014 to 2019, which can support 946 jobs in the state. The direct impact is estimated to be \$53.7 million per year, which can support 530 jobs in sectors other than healthcare. The indirect impact is estimated to be \$17.4 million and 183 jobs while the induced impact is estimated to average \$22.8 million and 233 jobs in the state (Table 6.3).

Table 6.3: Economic Impact Household Income Change

		Direct	Indirect	Induced	Total Impact
Total (2014-19)	Spending	\$322.0	\$104.1	\$136.8	\$562.9
()	Employment	3,177	1,098	1,400	5,675
Annual Average	Spending	\$53.7	\$17.4	\$22.8	\$93.8
(2014-19)	Employment	530	183	233	946
Note: Numbers may not sum due to rounding					

Source: IMPLAN Pro 2010 and Chmura

Figure 6.6 details the economic impact of changing household spending by year.

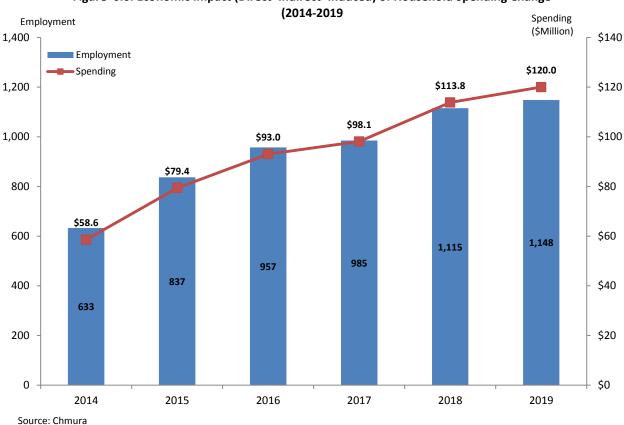
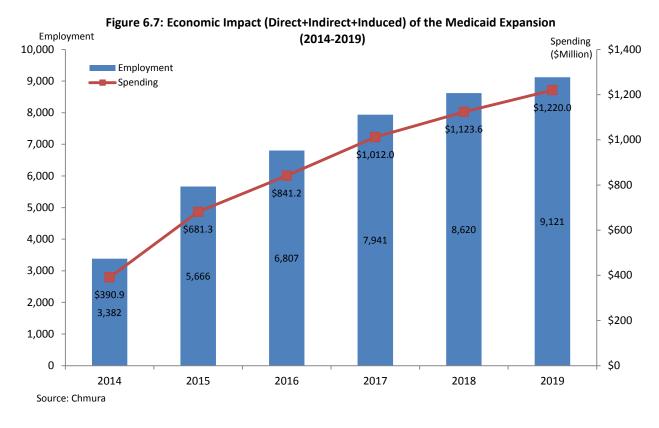


Figure 6.6: Economic Impact (Direct+Indirect+Induced) of Household Spending Change

6.4. Economic Impact Summary

Figure 6.7 illustrates the overall economic impact when combining the impacts of healthcare sectors, Virginia businesses, and Virginia residents if the state opts out of the Medicaid expansion program. The overall economic impact in Virginia will increase over the years. The total economic impact (direct, indirect and induced) is estimated to increase from \$390.9 million and 3,382 jobs in 2014 to \$1.2 billion and 9,121 jobs in 2019. The dominant share of the economic impact comes from new revenue to Virginia's healthcare industry as a result of spending from new Medicaid enrollees ("woodwork effect").



6.5. State of Virginia Budgetary Impact

Using the same methodology as in Section 5.5, Table 6.4 lists the estimated budgetary impact for the state government if it chooses to opt out of the Medicaid expansion. Due to the "woodwork" effect, the state will still see a significant increase in its spending on Medicaid under the existing eligibility criteria. But the state can also reduce its spending on uncompensated care, and receive tax revenues from the expanded healthcare sector.

Table 6.4: Estimated State Budgetary Impact (Average 2014-2019, \$ Million)

Health Sector Impact	
Spending on Medicaid Expansion	-\$288.8
Reduction in Uncompensated Care	\$15.5
Individual Income Tax	\$7.7
Corporate Income Tax	\$1.4
Business Impact	
Sales Tax	\$0.0
Individual Income Tax	\$0.1
Corporate Income Tax	\$0.0
Household Impact	
Sales Tax	\$0.9
Individual Income Tax	\$0.7
Corporate Income Tax	\$0.5
Total	-\$261.9

Source: Chmura

If Virginia chooses to opt out of the Medicaid expansion, the state government expenditure is expected to increase by an average of \$261.9 million per year from 2014 to 2019. The annual budgetary impact for the state of Virginia is summarized in Figure 6.8. The added state expenditure will increase from \$123.8 million in 2014 to \$358.6 million in 2019.

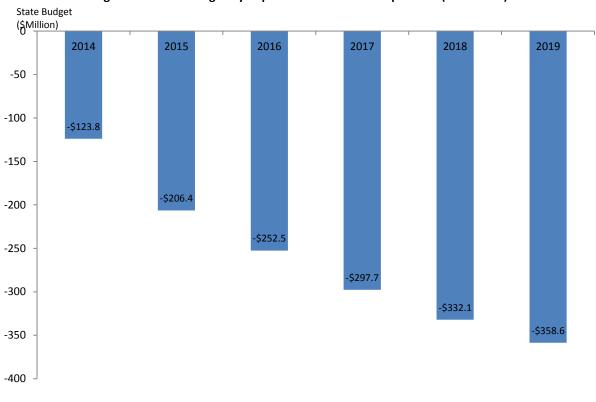


Figure 6.8: State Budgetary Impact of the Medicaid Expansion (2014-2019)

Source: Chmura

7. Summary

Table 7.1 summarizes the economic and fiscal impact of two options as Virginia ponders whether to expand the Medicaid program. When comparing the two options, the economic impact of Virginia's adopting the Medicaid expansion is more than four times the impact of opting out of the Medicaid expansion.

From the state government's budgetary perspective, additional state spending within the "opting-out" scenario is larger than spending within the "opting-in" scenario. The reasons are threefold. First, the federal government is going to pick up the dominant share of the cost of insuring newly eligible Medicaid participants. As a result, even if the number of new Medicaid enrollees increased significantly under the opting-in scenario, the state costs will not increase as much from 2014 to 2019. Second, if Virginia chooses to expand Medicaid, there will be a significant reduction in the number of uninsured in the state, thus relieving the state of its portion of uncompensated care. Third, the Medicaid expansion will also bring in more jobs to Virginia's healthcare industry and will lead to increases tax revenue to offset the additional spending on new Medicaid enrollees.

Table 7.1: Comparison of Economic Impact (Average 2014-2019)

		Opting In	Opting Out
New Medicaid Enrollees		400,000	89,845
Health Care Sector	Direct Spending (\$Million)	\$1,859.7	\$417.7
	Total Economic Impact (\$Million)	\$3,457.4	\$776.6
	Total Employment Impact	26,395	5,929
Business	Direct Spending (\$Million)	\$20.2	\$4.5
	Total Economic Impact (\$Million)	\$34.6	\$7.8
	Total Employment Impact	215	48
Household	Direct Spending (\$Million)	\$238.9	\$53.7
	Total Economic Impact (\$Million)	\$417.7	\$93.8
	Total Employment Impact	4,211	946
Total Economic Impact	Direct Spending (\$Million)	\$2,118.8	\$475.9
	Total Economic Impact (\$Million)	\$3,909.8	\$878.2
	Total Employment Impact	30,821	6,923
State Government		-\$244.7	-\$261.9

Source: Chmura Economics & Analytics

The final three tables below compare the economic impacts of Medicaid expansion on Virginia's healthcare industry, Virginia's businesses, and households.

Table 7.2: Impact on Healthcare Industry (Annual Average 2014-2019)

	Opting In	Opting Out
Estimated Number of New Medicaid Enrollees	400,000	89,845
Average Spending per new Medicaid Enrollee	\$6,418.3	\$6,418.3
Healthcare Revenue from Medicaid (\$Million)	\$2,571.2	\$577.5
Reduction in Healthcare Revenue due to Decreased Out-of-pocket Spending (\$Million) Reduction in Healthcare Revenue due to Changes in Uncompensated Care	\$338.8	\$76.1
(\$Million)	\$372.7	\$83.7
Total Healthcare Revenue	\$1,859.7	\$417.7
Total Spending in Virginia, including Multiplier Impact (\$Million)	\$3,457.4	\$776.6
Total Jobs Supported in Virginia, including Multiplier Impact	26,395	5,929

Source: Chmura Economics & Analytics

Table 7.3: Impact on Virginia's Businesses (Annual Average 2014-2019)

	Opting In	Opting Out
Estimated Reduction in Private Premium (\$)	\$7.1	\$1.6
Number with Employer Sponsored Health Insurance (Million)	3.9	3.9
Total Cost Saving in Premium	\$28.0	\$6.3
Cost Saving for Businesses	\$20.2	\$4.5
Total Spending in Virginia, including Multiplier Impact (\$Million)	\$34.6	\$7.8
Total Jobs Supported in Virginia, including Multiplier Impact	215	48

Source: Chmura Economics & Analytics

Table 7.4: Impact on Virginia's Households (Annual Average 2014-2019)

Opting In	Opting Out
400,000	89,845
\$338.8	\$76.1
\$238.9	\$53.7
\$417.7	\$93.8
4,211	946
	400,000 \$338.8 \$238.9 \$417.7

Source: Chmura Economics & Analytics

Appendix 1: Impact Study Glossary

IMPLAN Professional is an economic impact assessment modeling system. It allows the user to build economic models to estimate the impact of economic changes in states, counties, or communities. It was created in the 1970s by the Forestry Service and is widely used by economists to estimate the impact of specific events on the overall economy.

Input-Output Analysis—an examination of business-business and business-consumer economic relationships capturing all monetary transactions in a given period, allowing one to calculate the effects of a change in an economic activity on the entire economy (impact analysis).

Direct Impact—economic activity generated by a project or operation. For construction, this represents activity of the contractor; for operations, this represents activity by tenants of the property.

Overhead—construction inputs not provided by the contractor.

Indirect Impact—secondary economic activity that is generated by a project or operation. An example might be a new office building generating demand for parking garages.

Induced (Household) Impact—economic activity generated by household income resulting from the direct and indirect impact.

Multiplier—the cumulative impacts of a unit change in economic activity on the entire economy.

Appendix 2: Impact Summary 2020-2022

Federal Match 90%

State spending increases as it pays 10% of Medicaid costs, which is a larger share than it paid from 2014 to 2019.

Comparison of Economic Impact (Average 2020-2022)

		Opting In	Opting Out
New Medicaid Enrollees		455,172	102,238
Health Care Sector	Direct Spending (\$Million)	\$3,037.4	\$682.2
	Total Economic Impact (\$Million)	\$5,649.7	\$1,269.0
	Total Employment Impact	39,025	1,269
Business	Direct Spending (\$Million)	\$51.6	\$11.6
	Total Economic Impact (\$Million)	\$88.5	\$19.9
	Total Employment Impact	500	112
Household	Direct Spending (\$Million)	\$340.2	\$76.4
	Total Economic Impact (\$Million)	\$594.7	\$133.6
	Total Employment Impact	5,416	1,216
Total Economic Impact	Direct Spending (\$Million)	\$3,429.2	\$770.3
	Total Economic Impact (\$Million)	\$6,333.0	\$1,422.5
	Total Employment Impact	44,941	2,598
State Government		-\$589.4	-\$414.1

Source: Chmura Economics & Analytics

Federal Match 50%

The economic and fiscal impact under the opting-out scenario does not change, but state spending increases drastically if the federal share reverses to 50% of Medicaid costs under the opting in scenario.

Comparison of Economic Impact (Average 2020-2022)

		Opt-in	Out-out
New Medicaid Enrollees		455,172	102,238
Health Care Sector	Direct Spending (\$Million)	\$3,037.4	\$682.2
	Total Economic Impact (\$Million)	\$5,649.7	\$1,269.0
	Total Employment Impact	39,025	1,269
Business	Direct Spending (\$Million)	\$51.6	\$11.6
	Total Economic Impact (\$Million)	\$88.5	\$19.9
	Total Employment Impact	500	20
Household	Direct Spending (\$Million)	\$340.2	\$76.4
	Total Economic Impact (\$Million)	\$594.7	\$133.6
	Total Employment Impact	5,416	134
Total Economic Impact	Direct Spending (\$Million)	\$3,429.2	\$770.3
	Total Economic Impact (\$Million)	\$6,333.0	\$1,422.5
	Total Employment Impact	44,941	1,422
State Government		-\$1,843.4	-\$414.1

Source: Chmura Economics & Analytics