Year One Evaluation of the Health Insurance Marketplace in West Virginia Report Four: Economic Theories of Decision Making and Baseline Data



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Report Four: Economic Theories of Decision Making and Baseline Data

Executive Summary

The purpose of this report is to outline consumer decision making and baseline data from an economic perspective. The information is most relevant for those assisting consumer decision making, policy makers, hospitals and providers, business leaders interested in work force development, and researchers. More specifically, this report includes a model of consumer decision making, analysis of survey responses to assess factors associated with consumers' plans to purchase a plan on the Marketplace, a summary of Marketplace premiums by household type, and baseline statistics, including work force composition, compared to national averages.

The Marketplace has many potential ties to the state economy. Compared to the pre-Marketplace economy, the Marketplace might alter factors such as the number of individuals who have insurance coverage, the types of plans consumers choose, Medicaid take-up rates, risk pooling, health insurance premiums, market share of insurance carriers, the cost of health services, and employment decisions. Few of these questions can be answered with data so early into implementation; thus this report focuses on the economics of consumer decision making, Marketplace premiums, and baseline data.

The report contains three key findings:

- Subsidy eligibility was the dominant factor in whether an individual planned to purchase an insurance plan through the Marketplace. This finding highlights that consumers on the Marketplace are price conscious. Further, future court rulings on subsidies, experiences using insurance benefits, and experiences reconciling subsidies and penalties through the tax system could have important implications for prices (net, gross, and perceived) and future enrollments.
- Compared to national averages prior to the Marketplace, fewer West Virginians were insured through non-group private plans similar to those offered through the Marketplace, and average monthly premiums in the individual market were substantially higher (55%). Higher premiums increase the risk that younger, healthier

individuals will be priced out of the market, potentially leading to higher premiums in the future. West Virginia also had an older average population and higher health care spending per person, which will likely put upward pressure on premiums in the Marketplace.

• Marketplace subsidies are based on income level, whereas Marketplace premiums vary according to age. The combination of these factors means that within the subsidy range, younger and older households pay the same out-of-pocket premiums and the older households receive larger subsidies. From a practical perspective, this means that younger households are more likely to face the full insurance premium cost, which might be substantially higher than what was available pre-Affordable Care Act (ACA). Older households, particularly those receiving subsidies, are more likely to view the Marketplace plans as financially attractive.

In the next few years, the economic impact of the Marketplace will likely center around the behavior of consumers and employers. Early analysis suggests that subsidies/net insurance premiums and the characteristics of Marketplace customers (e.g. age and health status) might prove important in determining the overall impact of the Marketplace in West Virginia.

Introduction

The Marketplace has many potential ties to the state economy. Compared to the pre-Marketplace economy, the Marketplace might alter factors such as the number of individuals who have insurance coverage, the types of plans consumers choose, Medicaid take-up rates, risk pooling, health insurance premiums, market share of insurance carriers, the cost of health services, and employment decisions. Few of these questions can be answered with data so early into implementation.¹

Therefore, in this section we focus on baseline data and how the Marketplace enrollment numbers presented in Report Three might affect key economic outcomes. This report also explores factors that might affect current enrollment and enrollment over time. Premium calculations are used to illustrate how Marketplace plans differ for families of similar characteristics based on age and income. We present a discussion of decision making to explain

¹ Appendix J describes national predictions and early trends relating to ACA goals.

likely enrollment patterns. This section concludes with a discussion of how the West Virginia workforce and economic projections might affect Marketplace operations in the near future.

Exchange Enrollment and Insurance Coverage

Model of Consumer Behavior

Consider an uninsured person faced with the decision of whether to seek health insurance. Their decision might be based on a number of factors, but for simplicity this section will focus on four major factors: (1) expected health expenditures/potential loss, (2) price of insurance (including premiums and expected out-of-pocket expenses), (3) preferences and beliefs about health insurance, and (4) the cost of enrollment.

Taking the first factor, expected health expenditures/potential loss, insurance will be more attractive to individuals with higher expected health expenditures and those with higher potential losses. Expected health expenditures are the probability of needing a health service times the cost of that service.² For example, this might be calculated as in Exhibit 1.

Exhibit 1 Example of Expected Health Expenditures Calculation



In practice, individuals are likely to focus on past use and the experiences of friends and neighbors to generate these expectations.³ Based on the above model, expected health expenditures will be higher for those with greater health risk (e.g., older individuals, those with chronic conditions, those who have higher-risk hobbies) and for those who believe that major

² For simplicity, the model does not consider that cost of service might vary depending on insurance carrier and provider.

³ For example, see D. Kahneman, J. L. Knetsch, and R. H. Thaler, "The Endowment Effect, Loss Aversion, and Status Quo Bias," *Journal of Economic Perspectives*5 (1991): 193–206, for information on status quo bias, and David Rothschild and Justin Wolfers, "Forecasting Elections: Voter Intentions versus Expectations" (working paper, 2013) for recent evidence on how individuals aggregate information in their social networks.

health events (e.g., accidents, cancer, stroke) are more common. Note that it is the person's expectations that matter, and these might not align with published research statistics.

Potential loss is the amount of financial damage that a household could sustain due to medical bills. This potential loss is higher for households that have more assets and consistent streams of income; households with few assets and little income would be unable to pay, and these medical bills would likely be discharged as bad debt. These factors can work in opposite directions, as healthy, high-income individuals might have low expected health costs but considerable assets to protect against loss. Likewise, an unhealthy, low-income individual might have high expected expenditures but little risk of financial loss.

The second factor, price of insurance, includes insurance premiums and expected outof-pocket expenses for deductibles, co-pays, and co-insurance. The probability of obtaining
health insurance is lower the higher the price of coverage. However, considering all the cost
elements requires complex calculations and sophisticated predictions about future health
service utilization. It is likely that a person will look for a way to make the decision easier,
perhaps unconsciously, by focusing on one factor such as the premium. One would expect the
more complicated elements of co-pays for rare events (e.g., emergency department visits) and
co-insurance rates to have a smaller impact on decision making than the more transparent
elements, such as monthly premiums and plan deductibles. Thus, in this model, the probability
of insurance coverage decreases as premiums and deductibles rise.

Preferences and beliefs about insurance include overall perceptions of the healthcare system, the effectiveness of medical treatment, and attitudes about the role government entities play in healthcare. These preferences and beliefs can increase or decrease the likelihood of enrollment for each individual.

Finally, we consider the costs of enrollment, which include the non-monetary costs of time and emotional stress, as well as costs such as travel to assister appointments. Even in the absence of monthly premiums, obtaining insurance required action on the part of the individual. His or her desire to have insurance must outweigh status quo bias, or the general tendency to avoid change. Further, the individual must become knowledgeable about where to enroll and what information (s)he need to apply, and then complete the enrollment process. The more costly the enrollment process, the less likely a person is to enroll. For example, advertising might

increase awareness of the Healthcare.gov portal, but difficulties providing information, such as income, dependent Social Security numbers, or provider networks, might make the enrollment process much more burdensome for consumers. The more complex and time consuming the enrollment process, the less likely someone is to have health insurance. For each person, implementation of the Marketplace might increase or reduce the costs of enrollment from the previous environment.

To summarize, higher expected health expenditures and greater possibility of financial loss increase the probability of insurance. Higher prices for insurance and higher costs of enrollment reduce the probability of coverage. Personal preferences about insurance, healthcare, the Marketplace, and the government can increase or decrease the probability of insurance. See Exhibit 2 for a summary of these ideas.

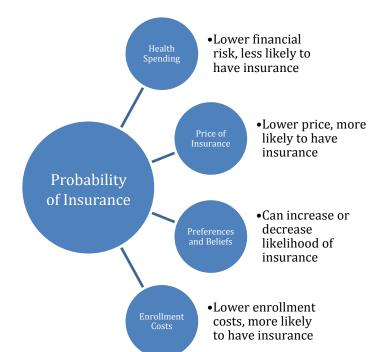
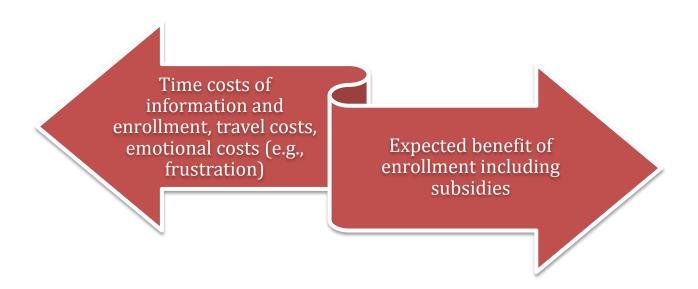


Exhibit 2 Model of Health Insurance Enrollment

Compared to the pre-ACA environment, the Marketplace might affect enrollment in several ways. First, the Marketplace might reduce health insurance enrollment costs. By serving as the entry point for the currently uninsured, the Marketplace offers information on Medicaid eligibility and general information on insurance and what is required to enroll. Having a centralized Marketplace for shopping for plans reduces the cost of gathering information about potential options. For evaluation purposes, the key question is whether the Marketplace

changes information costs from what was available in the pre-ACA marketplace (e.g., contacting an agent or insurance company directly). In addition, federal insurance subsidies are only available on the Marketplace, creating a close link between price and Marketplace enrollment for West Virginians between 139% and 400% of the federal poverty level. The Marketplace might also be tied to personal preferences, as it is tied both to the federal and state governments in West Virginia and is part of the federal Affordable Care Act. In the context of Exhibit 3, the Marketplace might alter the time, information, and enrollment costs "pulling" individuals away from enrollment.

Exhibit 3 Non-monetary or Indirect Enrollment Costs Lower the Probability of Insurance Coverage



The model above is useful for thinking about who the likely Marketplace enrollees will be, and their expectations can be compared to enrollment trends for 2014. For simplicity, potential Marketplace enrollees are divided into three categories of individuals who were uninsured at the time of open enrollment: (1) the Medicaid eligible (under 139% of the federal poverty line), (2) the subsidy eligible (household income between 139% and 400% of the federal poverty line), and (3) those above the income cut-off for subsidies (greater than 400% of the federal poverty line).

The Medicaid eligible population consists of those who were already eligible for Medicaid but not enrolled and those newly eligible for Medicaid due to the ACA expansion.

Based on the first factor in the model, we would expect those with greater healthcare needs to be more likely to enroll. Although Medicaid eligibility rules changed in 2014 (eligibility is now based on modified adjusted gross income) and the asset test was eliminated, it is unlikely that many new enrollees are seeking Medicaid coverage to protect large asset holdings. In terms of the second factor, price of insurance, Medicaid generally has negligible cost sharing, if any, and price is not a significant deterrent to enrollment. Personal preferences could be associated with higher or lower probabilities of enrolling depending on the person. Finally, the cost of enrolling in Medicaid would be lower if the Marketplace reduces the time it takes to search for information or find a source of help for enrollment.

The state of West Virginia undertook a large effort to reduce Medicaid enrollment costs by offering auto enrollment. Newly eligible adults were identified using data from applications for the Children's Health Insurance Program (CHIP) and child Medicaid enrollment. These individuals received a letter in the mail notifying them of their eligibility and were only required to "check the box" in order to enroll in Medicaid.

Marketplace enrollment is expected to be higher for those in the subsidy population with more health service needs, and again, this population is not expected to have large enough asset holdings to significantly increase the probability of coverage. Price of insurance will vary significantly within this population: premiums can range from between 2 and 9.5% of income, and cost sharing through copays, deductibles, and coinsurance can be 6% (100 to 150% FPL), 13% (151-200% FPL), 27% (201-250% FPL), and 30% (251-400% FPL). In this case, one would expect those with greater subsidies and cost-sharing assistance to be more likely to enroll. The cost of enrolling in a plan is likely lower for the subsidy-eligible population than what they would have faced prior to the Marketplace. Advertising would have increased knowledge of the Marketplace. Further, the Marketplace is the only place to access subsidies, and it serves as a tool for comparing plans. As with the Medicaid option, however, lack of access to or experience with the internet might make Marketplace enrollment more costly because individuals must seek assistance navigating the website.

Those above the cut-off for subsidies are also expected to be more likely to enroll the greater their health service needs, and this population is more likely to enroll to protect accumulated assets. The attractiveness of Marketplace prices for this group will depend on their age and health status. Older individuals with chronic conditions would have faced steep prices

prior to ACA coverage rules, but healthy younger individuals with higher incomes likely face higher prices on the Marketplace than what they could have purchased prior to the 2014 ACA provisions. The Marketplace might reduce enrollment costs by providing a convenient portal for purchasing insurance to this population that is more likely to have internet access and experience. However, there is not a strong incentive for these individuals to purchase through the Marketplace because they are not receiving a subsidy. In this case, the way that information is collected and shared across federal agencies and the limited plan options available on the Marketplace might push the non-subsidy population to purchase directly from insurance carriers.

Prior to Marketplace operations, West Virginians were surveyed and asked whether they were likely to purchase a plan on the Marketplace (see Report One for more information about the survey). The above model generates several key predictions about whether an individual would say that they were likely to purchase a Marketplace plan. These predictions are tested using responses from the survey.

Specifically the model predicts:

Factor	Direction of Effect on Enrollment	How Measured in Data
Good health	↓ Lower expected health costs decrease the likelihood of insurance coverage	Health reported to be good or excellent
High asset levels		Income
Lower price of insurance and cost sharing	↑ Lower prices increase the probability of plan purchase; subsidies are greater for older enrollees; already insured individuals are likely to have at least partially subsidized insurance	Qualify for Medicaid Qualify for subsidy Age Insured

Personal preferences	→ Personal preferences could go in either direction	Liberal political identification Conservative political identification
Internet access	↑ Internet access and experience reduces the cost of enrolling	Respondent reports access to the internet

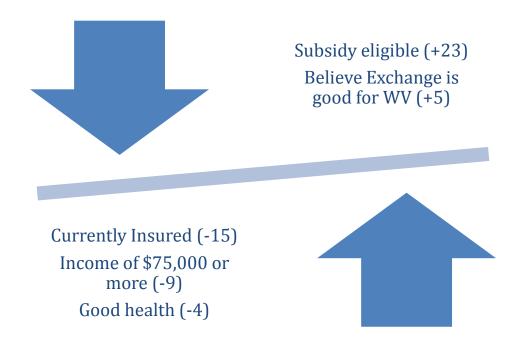
Results

Key Findings: Subsidy eligibility was the largest factor in explaining whether someone planned to purchase a plan on the Marketplace. Those who believed the Marketplace was good for West Virginia were also more likely to report that they planned to purchase a Marketplace plan. Currently having insurance, being in the highest income category (\$75,000+), and being in good health reduced the probability that someone planned to purchase a plan on the Marketplace.

Discussion: Main results from a linear regression are presented in *Exhibit 4* and suggest that eligibility for a subsidy was the dominant factor in determining whether an individual planned to purchase a Marketplace plan.⁴ Those who thought they would qualify for a subsidy were 23 percentage points (150%) more likely to plan to enroll through the Marketplace. Respondents who believed the Marketplace was good for West Virginia also reported being more likely to enroll through the Marketplace by 5 percentage points (33%). The likelihood of purchasing a Marketplace plan was lower for those with insurance, those in the highest income category, and those in good health (compared to those with average, below average, or poor health). Current insurance coverage reduced the likelihood of purchasing a Marketplace plan by 15 percentage points (100%). High income and good health reduced the likelihood of a Marketplace purchase by 9 percentage points (60%) and 4 percentage points (27%), respectively.

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⁴ Significance levels are based on robust standard error calculations. The regression model also included controls for other income categories, age categories, liberal and conservative political identification, an indicator for access to the internet, and a constant. We fail to reject the null of a zero coefficient for variables not included in *Exhibit 4*. Results are similar for a probit model.



Enrollment versus Coverage

Key Findings: Selecting a Marketplace plan does not necessarily mean that the individual has health insurance coverage. Experiences with Marketplace plans are likely to affect enrollment for 2015.

Discussion: As noted in Report Three, CMS reports 19,856 individuals have selected a Marketplace plan in West Virginia, and 21,019 individuals were determined eligible for Medicaid/CHIP.⁵ However, these numbers are likely to be an upper bound for individuals actually covered by a Marketplace plan because maintaining coverage requires continued action on the part of the enrollee. Specifically, the enrollee must continue to pay plan premiums to remain covered. Estimates suggest about 80-90% of those enrolled through the Marketplace make their first payment, and it is too soon to know how many will make payments in subsequent months.⁶ Those who let their coverage lapse, or failed to sign-up in the open enrollment period, can still become covered during the year if they have a qualifying life event

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⁵ Department of Health and Human Services, *Health Insurance Marketplace: Summary Enrollment Report for the Initial Annual Open Enrollment Period*, ASPE Issue Brief (Washington, D.C., 2014).

⁶ Ibid.

or a complex situation (e.g., change marital status, have a baby, lose employer insurance coverage, etc.). Others might become insured outside of the Marketplace through a new employer or new eligibility for Medicaid or Medicare coverage.

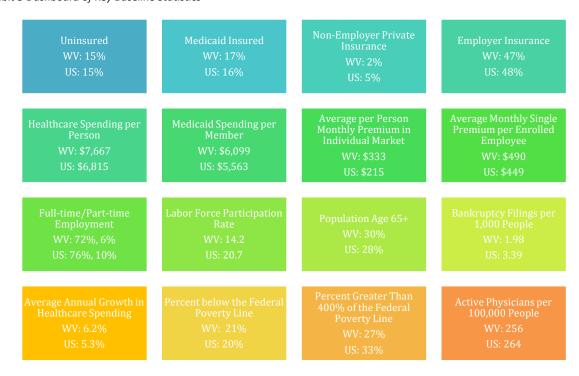
Another factor that could affect premium payments and future enrollments is the experience that a Marketplace enrollee has with their plan. Marketplace plans represent a service purchased from the private market. However, health insurance is likely to be one of the most complex services an individual purchases, and many previously uninsured (and currently insured, for that matter) individuals are unlikely to fully understand the implications of copays, deductibles, coinsurance, and provider networks. As Marketplace enrollees use their plans, they will learn about the more complicated aspects of their insurance coverage, and this might affect their willingness to pay for a future plan. Those who have high expenses and clearly see the value of their coverage are more likely to repurchase, whereas those who use few services and never reach their deductible might be more reluctant to repurchase.

A related issue is the enrollee's insurance reference point. Marketplace plans have significantly higher cost sharing than Medicaid plans and, depending on income, more cost sharing than many employer plans. If enrollees are expecting coverage similar to Medicaid, they might be startled by the amount of money they are expected to pay out-of-pocket for services.

Baseline Data

This section includes a description of key metrics that are likely to be monitored as ACA implementation unfolds. As more data become available, researchers will begin to tackle the difficult question of whether some or all of the observed changes in baseline data were *caused* by ACA components, including the Marketplace, subsidies, the individual mandate, and Medicaid expansion.

Exhibit 5 Dashboard of Key Baseline Statistics



Data sources: Kaiser Family Foundation, State Health Facts; US Courts; US Census Bureau; Association of American Medical Colleges. Data are from 2012.

Key Findings: Baseline rates of insurance for non-group private insurance were less than half the national average in West Virginia. Average monthly premiums in the individual market were substantially higher in West Virginia (55%), consistent with the substantially lower rate of non-employer private insurance in the state. West Virginia health spending per person and health insurance premiums were higher than the national average. West Virginia had lower employment and labor force participation rates and an older average population. Bankruptcy filings were substantially lower in West Virginia. Healthcare spending grew faster in West Virginia.

Discussion: Beginning with the first row of *Exhibit 5*, prior to 2014, West Virginia had the same rate of uninsured as the national average. West Virginia had a slightly higher rate of Medicaid coverage and slightly lower rates of employer coverage. Baseline rates of insurance for non-employer private insurance were less than half the national average in West Virginia. This might prove to be an interesting metric to follow over time, as this is the population targeted by Marketplace plans. Moving to the second row of *Exhibit 5*, average healthcare spending per person and Medicaid spending per enrollee were 12.5% and 9.6% higher in West Virginia,

respectively. Average monthly premiums in the individual market were substantially higher in West Virginia (55%), consistent with the substantially lower rate of non-employer private insurance in the state. Premiums for employees were also higher (9%), but more in-line with higher healthcare spending in West Virginia.

Exhibit 5, row 3 highlights some important differences between the West Virginia labor force and national averages. Full-time employment was 4 percentage points (5.3%) lower in West Virginia, and part-time employment was 60% lower. Lower employment rates among those in the labor force indicate higher levels of unemployment. Additionally, the labor force participation rate (the percentage of the population in the labor force) is 31% lower in West Virginia than the national average. This indicates that a substantial number of the state's citizens are not participating in the labor force. Some possible reasons include being too young or too old to work, having a disability that prevents work, or choosing not to work (note the unemployed are counted as part of the labor force). West Virginia also has an aging population with a larger percentage in the 65 and older age category. The final entry on row 3 indicates that bankruptcy filings, sometimes caused by unpayable medical bills, are substantially lower in West Virginia.

The final row of *Exhibit 5* addresses changes in healthcare spending, poverty rates, and physician supply. Healthcare spending increased 17% faster in West Virginia than the national average, indicating that the difference in West Virginia and US health spending per person is likely to widen. West Virginia had a similar portion of individuals living below the poverty line (21% in West Virginia and 20% nationally); however, the state had far fewer high-income households (greater than 400% of the federal poverty line). The number of physicians per 100,000 people was about 3% lower in West Virginia than the national average.

Premium Calculations

Key Findings: Based on results from the Kaiser Family Foundation subsidy calculator, total health insurance premiums increase with age and are equivalent across income groups. Once a household is in the subsidy range, net premiums are equalized across age groups. Younger households in the 138-400% FPL income range are less likely to receive a subsidy.

Discussion: Insurance premiums and subsidies for different family types and income levels are considered below. Specifically, information is presented for a single adult, a household with two

adults, and a household with one adult and two children. Income groups include \$10,000, \$35,000, \$50,000, and \$75,000. For each household type and income categories, annual subsidies and premiums were calculated by age (25, 35, 45, and 60). Federal subsidies are available for households between 138-400% FPL for premium amounts greater than a specified percentage of income (3.3 to 9.5% depending on income level).

Households with incomes of \$10,000

All family types with an annual income of \$10,000 fell below the 138% FLP threshold for expanded Medicaid. Households with a single adult were at 86% FPL, households with two adults were at 64% FPL, and those with one adult and two children were at 42% FPL. All individuals in these households were eligible for Medicaid coverage with little or no cost sharing.

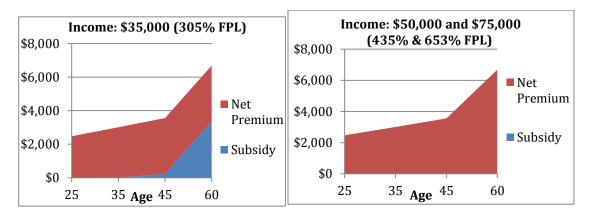
Single Adult Households

Results for single adults highlight the key features of Marketplace premiums and subsidies. *Exhibit* 6 includes information on the total premiums, broken down by the individual's out-of-pocket payment and the subsidy amount. First note that total premiums by age are equivalent across income groups, as income is not a factor used to determine insurance premiums. For all income groups, annual premiums increase with age from \$2,474 for a 25-year-old to \$6,687 for a 60-year-old. Second, once a household is in the subsidy range, net premiums are equalized across age groups because subsidies are designed to limit premiums to a percentage of income (9.5% in this case). Specifically, for a 45-year-old with an annual income of \$35,000, the annual premium is \$3,558 and the individual receives a \$233 subsidy, so that the net premium is \$3,325. For a 60-year-old with the same annual income, the annual premium is \$6,687, with a subsidy of \$3,362 and a net premium of \$3,325. Additionally, note that younger households in the 138-400% FPL income range are less likely to receive a subsidy because premiums are rated by age and subsidies are structured to limit premiums to a specified percentage of income.

⁷ Premiums and subsidies were calculated using the Kaiser Family Foundation subsidy calculator available

at http://kff.org/interactive/subsidy-calculator/. Calculations are based on non-smokers with no employer coverage in Monongalia County, West Virginia.

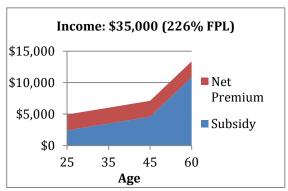
Exhibit 6 Net Premiums and Subsidies for Single Adult Households

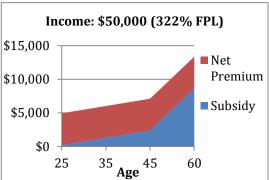


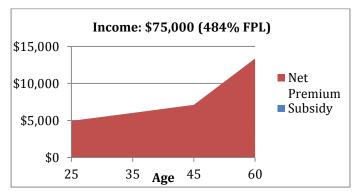
Two Adult Households

These patterns are even more pronounced in results for two adult households. Total premiums increase even more substantially by age, as they are now based on risk for two individuals rather than one. For all income groups, annual premiums increase with age from \$4,948 for two 25-year-old individuals to \$13,375 for two 60-year-old individuals. Households with annual incomes of \$35,000 and \$50,000 are in the full subsidy range. Net premiums are \$2,519 or 7.2% of income for households earning \$35,000 and \$4,750 or 9.5% of income for households earning \$50,000. As indicated in the last panel of *Exhibit* **7**, two person households earning \$75,000 do not qualify for any subsidies.

Exhibit 7 Net Premiums and Subsidies for Two Adult Households



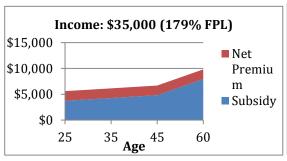


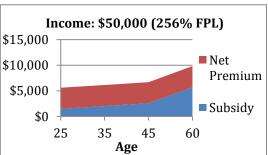


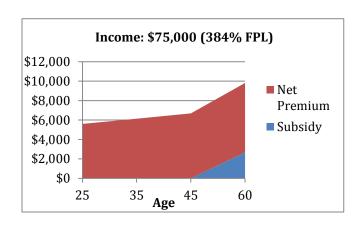
One Adult, Two Child Households

Premiums are not generally as high for one adult, two child households as they are for two adults because premiums are much lower for children than for older adults. For all income groups, annual premiums increase with age from \$5,603 for a 25-year-old with two children to \$9,817 for a 60-year-old supporting two children. Once again, households with annual incomes of \$35,000 and \$50,000 are in the full subsidy range. Net premiums are \$1,870 or 5.3% of income for households earning \$35,000 and \$4,112 or 8.2% of income for households earning \$50,000. As indicated in the last panel of *Exhibit 8*, households earning \$75,000 only qualify for a subsidy with a 60-year-old adult (9.5% of income).

Exhibit 8 Net Premiums and Subsidies for Two Adult Households







West Virginia Economic Outlook and Work Force Trends

Economic Forecasts and Insurance Markets

Key Findings: Recent economic forecasts for West Virginia indicate job growth concentration in areas less likely to provide full-time, year-round work with insurance benefits. Population decline and aging of the existing population will continue to put financial pressure on public insurance and provide challenges for maintaining robust non-employer risk pools.

Discussion: The Bureau of Business and Economic Research at West Virginia University has been producing state and regional economic forecasts in West Virginia for decades. According to their most recent forecasts⁸, employment is expected to increase 1 percent per year, but the fastest growing industries will be construction (2.3 percent annual growth) and professional and business services (2.1 percent annual growth). Statistics from the Bureau of Labor Statistics (BLS) indicate differences in medical benefits by worker characteristics. Medical benefits are offered to 73 percent of all workers, 41 percent of workers in service occupations, 87 percent of workers in management and professional occupations, and 72 percent of workers in construction, extraction, farming, fishing, and forestry.⁹ The largest discrepancies in medical benefits occur between full-time (86 percent) and part-time workers (24 percent). In 2013, the construction industry had one of the highest rates of involuntary part-time employment for

⁹ BLS, 2012. *Employee Benefits in the United States – March 2012.* News Release. BLS. Washington, D.C. http://www.bls.gov/ncs/ebs/sp/ebnr0018.pdf

⁸ Sartarelli, Jose, Brian Lego, Christiadi, Tess Meinert, Eric Bowen, Patrick Manzi, John Deskins, and Jane Ruseki. 2013. *West Virginia Economic Outlook 2014*. Bureau of Business and Economic Research. Morgantown, WV.

economic reasons (7.1 percent) while professional and business services was below the national average of 5.7 percent at 4.7 percent.¹⁰ The West Virginia population is forecasted to decline as deaths outnumber births. In general, the state's population is likely to continue to become older on average, increasing the enrollment in Medicare and increasing the need for Medicaid long-term care. An aging population also creates challenges for maintaining attractive premiums in the private marketplace as older individuals have higher expected health costs.

West Virginia Employment and Wages

Key Findings: Occupations and industry employment in West Virginia generally align with national averages, although West Virginians are generally more likely to be employed in healthcare, construction, and mining, and less likely to be employed in business and financial operations and computer and mathematical occupations. Average annualized wages are about ten thousand dollars lower than the national average in West Virginia. West Virginians make more than the national average in the mining industry, but far less in the information, financial, professional, and business services industries. In the most recent recession, West Virginia economy fared better than the US economy during the last recession and as a result did not lose as many jobs as the US. However, as the economy recovered, job growth in the US caught up and is expected to again outpace job growth in the state, as it did in the past. For that reason, between 2006 and 2013, employment in West Virginia appeared to be less volatile than national trends. West Virginia employment in the health services industry has increased steadily since 2006, but at a slower rate than national employment in the industry. Wage differences are smaller in the health services industry where West Virginians earn about five thousand dollars less than the national average per year.

Discussion: This section contains data and Discussion of baseline employment and wage numbers for West Virginia compared to national averages from 2006 through the second quarter of 2013. We begin with a general discussion of employment and wages, and then discuss trends by occupation and industry with a focus on the health services industry.

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¹⁰ BLS. 2013, Labor Force Statistics from the Current Population Survey. BLS. Washington D.C. http://www.bls.gov/cps/cpsaat21.htm

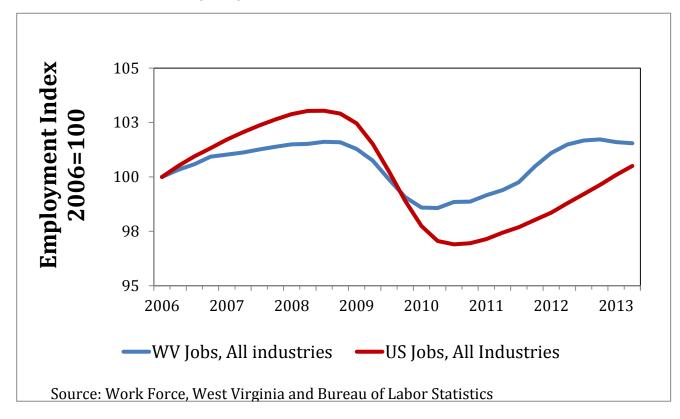
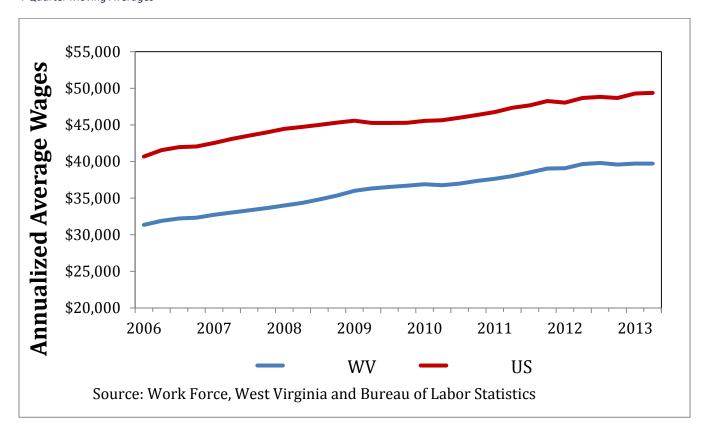


Exhibit 9 illustrates changes in employment from the first quarter of 2006 to the second quarter of 2013 for West Virginia and the United States. It shows that employment trend in West Virginia generally general align with the US in that jobs in both regions, although at different magnitude, fluctuate around the same period. Over the period of first quarter of 2006 to second quarter of 2013, employment in West Virginia appeared to be less volatile than national employment numbers. This represents the different impacts the most recent recession had on the two regions. West Virginia fared better than the US in this last recession and, as a result, did not lose as many jobs as the US. As the economy recovered, however, job growth in the US caught up and once again outpaced job growth in the stateas it did in the past.

4-Quarter Moving Averages



As demonstrated in Exhibit 10, average annual wages in West Virginia are well below the national average. West Virginians earn about ten thousand dollars a year less than the national average, which ranged from about \$41,000 to about \$49,000. Interestingly, West Virginia trends in wage growth are similar to the national average, and the gap remained roughly the same over the time period.

Exhibit 11 Employment Share by Occupation, West Virginia vs. United States, 2013 (Percentages)

Occupation Code	Occupation	wv	US
43	Office and Administrative Support	15.9	16.2
41	Sales and Related	9.9	10.6
35	Food Preparation and Serving Related	9.2	9.0
29	Healthcare Practitioners and Technical	7.7	5.8
53	Transportation and Material Moving	7.6	6.8

47	Construction and Extraction	7.0	3.8
25	Education, Training, and Library	6.1	6.3
51	Production	5.6	6.6
49	Installation, Maintenance, and Repair	4.9	3.9
11	Management	4.6	4.9
39	Personal Care and Service	3.6	3.0
31	Healthcare Support	3.2	3.0
37	Building and Grounds Cleaning and Maintenance	3.1	3.2
13	Business and Financial Operations	2.9	5.0
33	Protective Service	2.4	2.5
21	Community and Social Service	1.3	1.4
15	Computer and Mathematical	1.3	2.8
17	Architecture and Engineering	1.1	1.8
19	Life, Physical, and Social Science	0.9	0.9
23	Legal	0.9	0.8
27	Arts, Design, Entertainment, Sports, and Media	0.7	1.3
45	Farming, Fishing, and Forestry	0.2	0.3
	•	•	•

Source: Bureau of Labor Statistics

According to the occupational data (Exhibit 11), West Virginia and the United States generally share similar occupational distributions: nine of the top ten occupations in 2013 were the same for West Virginia and the United States. While West Virginia included construction and extraction occupations among the top 10, the United States included business and financial operation occupations instead. For both the state and the nation, since at least 2009, office and administrative support, sales, and food preparation and related occupations were the top three occupations.

Notably, however, West Virginia has a higher concentration of health-related jobs than the United States. The healthcare practitioners and technical occupation is ranked fourth in the state and accounts for 7.6% of total occupations. In the United States, this occupation is ranked seventh and accounts for 5.8%. Moreover, all health-related occupations combined (healthcare practitioners and technical, personal care and service, and healthcare support occupations)

account for 14.5% of all occupations in West Virginia, well above the 11.8% share in the United States.

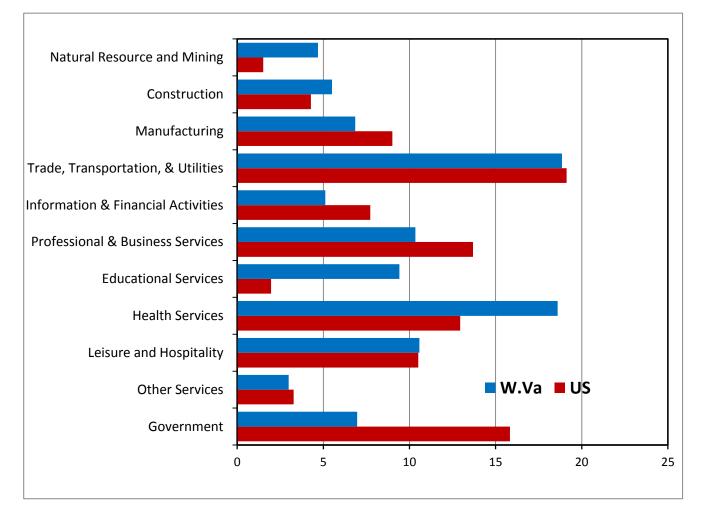


Exhibit 12 Employment Share by Industry, West Virginia and United States (Percentages)

Source: Work Force, West Virginia and Bureau of Labor Statistics, Quarter 2, 2013

The data by industry (Exhibit 12) reveal similar conclusions. However, the health services industry constitutes a much larger share of employment in the second quarter of 2013 (about 18%) in West Virginia than the national average (about 13%), while government workers constitute a smaller share.

Index, Q1-2006=100, Annual Averages

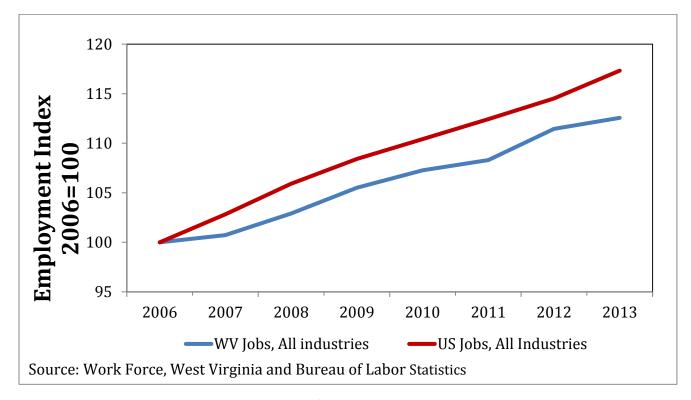


Exhibit 13 indicates that national shares of employment in health services are likely to converge with West Virginia shares over time as the national growth rate has outpaced growth in West Virginia each year since 2006.

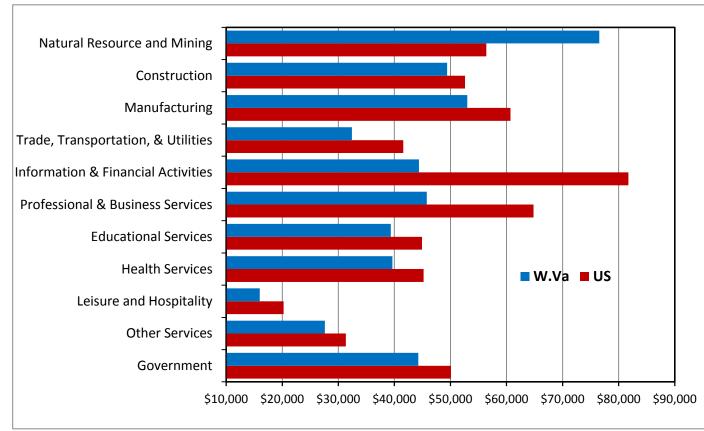


Exhibit 14 Annualized Average Wages by Industry, Quarter 2-2013, West Virginia and United States

Source: Work Force, West Virginia and Bureau of Labor Statistics

Exhibit 14 presents average annual wages by industry. Only those in the natural resource and mining industries earn more than the national average. Workers in the information and finance industry earn about half the national average in West Virginia, and those in the professional and business services industry also earn considerably less than the national average. Workers in the health services industry earn about five thousand dollars less per year.

In summary, the West Virginia work force differs from the national average in key areas that are likely to be impacted by ACA reforms including the Marketplace. One key area we expect to see an impact is the health services industry. More West Virginians are employed in the health services industry than the national average although average wages are lower. Increases in insurance from Marketplace plans and Medicaid might affect the number of people employed in health services and average wages. Going forward, these baseline statistics and trends can be used to assess work force changes relating to different components of the ACA, including the Marketplace.