Year One Evaluation of the Health Insurance Marketplace in West Virginia Report Five: Baseline Status of Health in West Virginia

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The Health Research Center (HRC) at West Virginia University (WVU) has proven experience conducting rigorous health outcome evaluation, including evaluations of the Center for Disease Control's (CDC) Community Transformation Grant (CTG) and the Communities Putting Prevention to Work (CPPW) programs.

http://publichealth.hsc.wvu.edu/hrc/

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Report Five: Baseline Status of Health in West Virginia

Executive Summary

The purpose of this report is to describe baseline health and healthcare trends in West Virginia. Healthcare practitioners, administrators, insurance carriers and public health professionals, including academics and practitioners, are the primary intended audience. Little is known about the future impact of the Health Insurance Marketplace on health and the healthcare system. These data will be utilized in future years of evaluation to perform trend analysis to examine a relationship between the Marketplace and health outcomes. Interested parties are likely to use this information in order to make valid hypotheses about the impact of both the Marketplace and other components of the Patient Protection and Affordable Care Act (ACA).

The discussion within this report includes important secondary data on health metrics and rankings describing chronic disease and other leading indicators in West Virginia, and hypothesizes on how these might change post-Marketplace implementation. Examples of such secondary data are the Behavioral Risk Factor Surveillance Survey (BRFSS) and the American Community Survey (ACS) Small Area Health Insurance Estimates. A general discussion of health insurance coverage, including a breakdown by county, is also provided along with implications of health and access differences between the individuals with insurance and those without insurance.

In partnership with the West Virginia University Office of Health Services Research (OHSR), we present data on visits to Federally Qualified Health Centers (FQHCs) and free clinics within the state. This discussion includes an examination of patient visits and chronic disease diagnoses. Additionally, the breakdown of insurance coverage type by patient is explored within the FQHCs. The report concludes with a brief overview of provider availability and patient feedback using the Health Area Resource File (AHRF) and the Consumer Assessment of Healthcare Providers and Systems (CAHPS), both federally reported data. All findings are discussed within the context of evaluating Marketplace impact moving forward and reflecting differences in insurance status among the population.

Introduction

The ACA's individual mandate for health insurance coverage, in conjunction with the Medicaid expansion and other ACA requirements, attempts to ensure all Americans have access to *affordable* health insurance. These efforts are intended to help individuals with chronic disease control their health issues and, over the long term, reduce costs. Furthermore, the preventive measures built into the ACA are intended to help reduce or delay the onset of chronic disease among the population. Although the main focus of this report is the Marketplace, it may be difficult moving forward to separate some effects of the Marketplace from the state's decision to expand Medicaid. Of course, measurable change in health metrics at the population level will likely take years. This caveat was essential to West Virginia's decision to evaluate the impact of the Marketplace over a five-year period. By evaluating health metrics, numerous trends may emerge over the next several years.

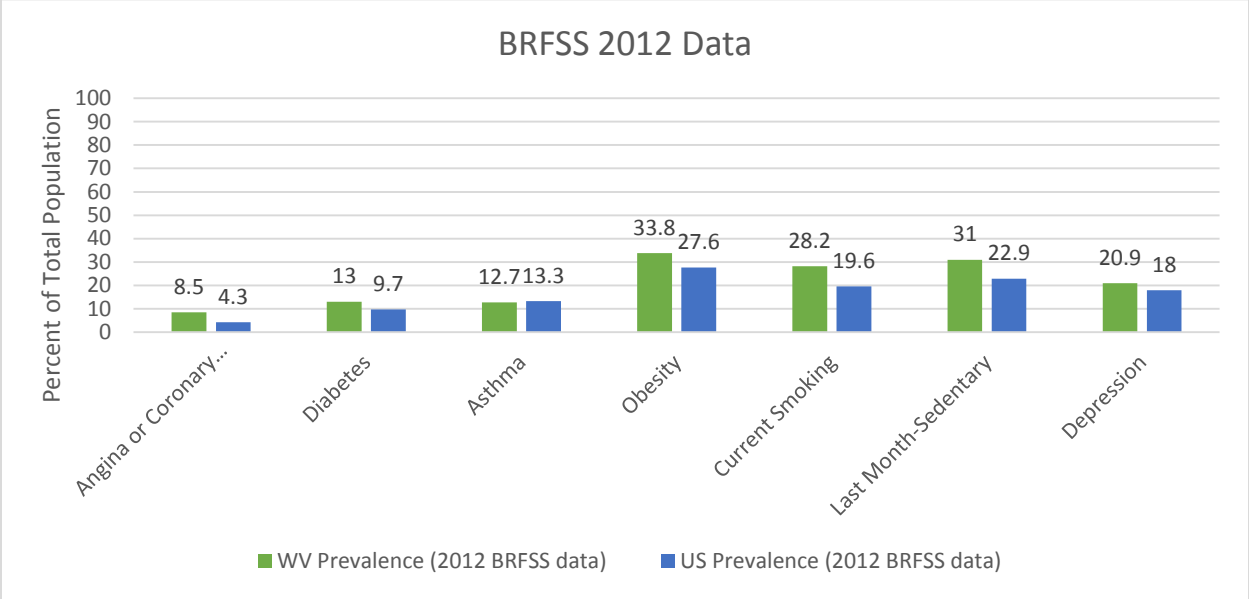
First, we may see an early increase in diagnosed chronic disease, as individuals seek treatment or healthcare maintenance who are potentially insured and have access to care for the first time in years. Secondly, we may see changes in primary care and emergency room utilization that reflect on the costs of care to the healthcare system. Within the primary care setting, there may be an increase in control of chronic disease and adherence to medical advice and preventive strategies. In a longer-term view, there should be decreases in chronic disease prevalence, hospitalizations, and so on. While a five-year evaluation may not demonstrate these decreases in prevalence at the population level, it will set the stage for future work to continue monitoring, and a framework for long-term policy evaluation.

Baseline West Virginia Population, Chronic Disease, and Insurance Data – National Sources

West Virginia has high levels of chronic disease and other health issues. In fact, the state population reflects some of the lowest rankings in terms of chronic disease, obesity, substance

abuse, and other lifestyle factors that contribute to chronic disease. Exhibit 1 displays recent prevalence and state ranking in comparison to the rest of the United States.[1]

Exhibit 1 Chronic Disease Rates (BRFSS)



From these numbers, it is evident that significant challenges confront population health in West Virginia. These issues impact both the public and private sectors. Workers with chronic diseases are less likely to be as productive or spend as much time on the job. Employers face higher costs when they choose to provide health insurance, and may not recruit or retain workers when they do not offer insurance. Federal, state, and local governments must spend more on healthcare expenses, such as Medicaid and Medicare, and provide funding for other programs that offer charitable or reduced rate medical services. Insurance companies are forced to raise the cost of premiums to cover serious illness, which can result in more individuals who cannot afford to purchase insurance.

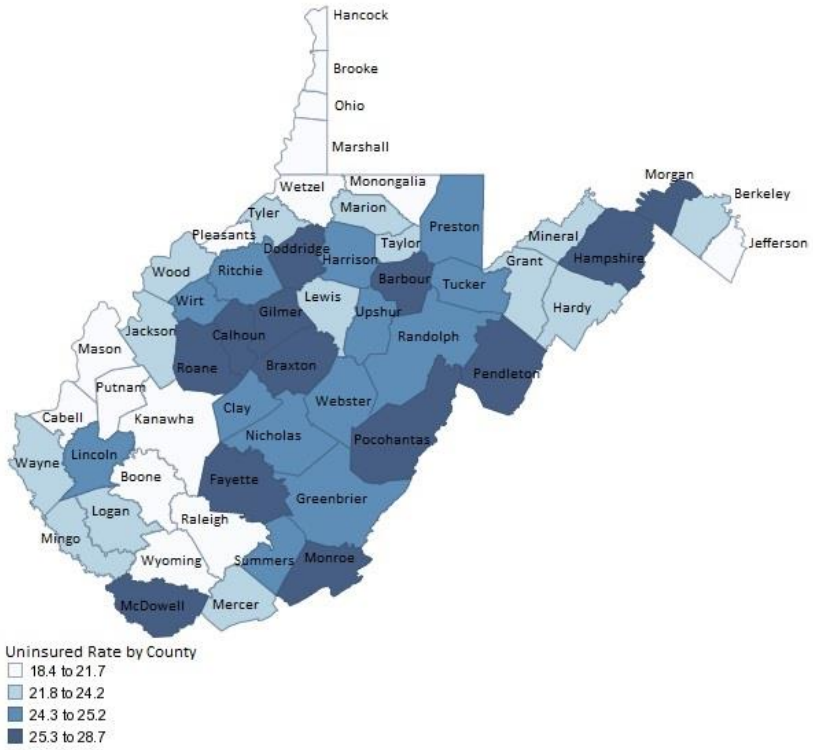
West Virginia sits near the middle of all US states in terms of the rate of uninsured per capita. Some of this may result from the large percentage of individuals on Medicaid and Medicare in West Virginia.[2] Exhibit 2 shows the overall uninsurance rate of West Virginia along with each county rate. These percentages represent approximately 255,358 individuals

[1]The source for Exhibit 1 is the Centers for Disease Control and Prevention, "BRFSS Prevalence and Trends Data," http://apps.nccd.cdc.gov/brfss/.

[2] In 2012, Kaiser reported 21% of West Virginians received Medicare, and in 2010 estimated 21% of West Virginians received Medicaid benefits. Some of these may be dual-eligibles.

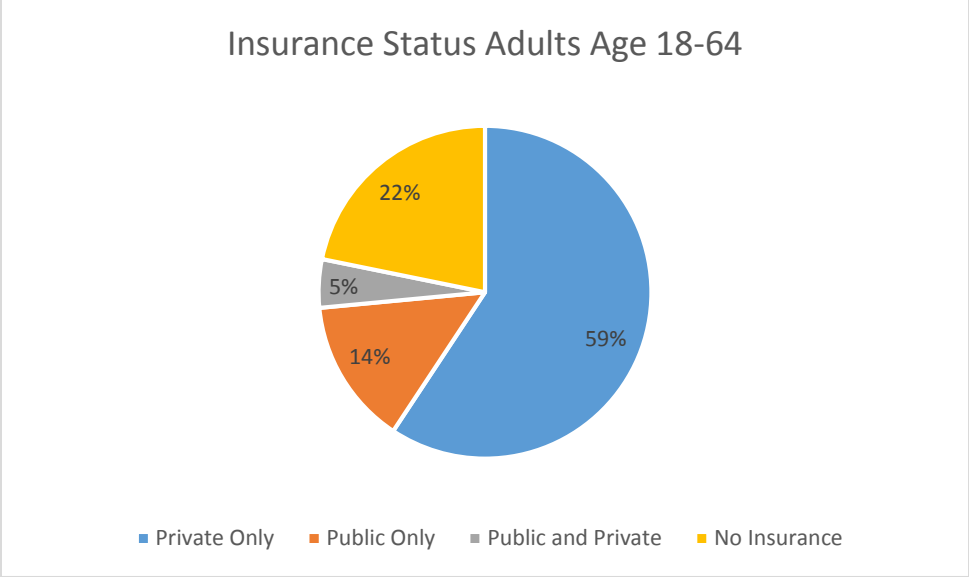
immediately prior to the opening of the Marketplace in West Virginia. By fall 2014, we will have officially updated numbers by which to see the short-term impact of the ACA on the uninsured in the state. Of those who are insured, Exhibit 3 shows the breakdown of the type of insurance among the population at baseline (prior to Marketplace opening).

Exhibit 2 Adults Age 18-64 Uninsured from the American Community Survey Small Area Health Insurance Estimates Year 2011



Source: American Community Survey Small Area Health Insurance Estimates Year 2011

Exhibit 3 2011 American Community Survey Insurance Rates by Type



Baseline West Virginia Primary Care Data – OHSR

As there is an expectation for an increase in individuals seeking medical care, the Marketplace (in conjunction with the Medicaid Expansion and other key portions of the ACA) has potential for a large impact on the healthcare system. While sliding scale fees, free clinics (which provide services to individuals who are uninsured), and other primary care opportunities may be available for those without insurance, it is unclear what the impact of mandated coverage will be on these service providers. To this end, the WVU Health Research Center (HRC), in collaboration with the WVU Office of Health Services Research (OHSR), has undertaken a detailed examination of a group of 24 federally qualified health centers (FQHCs) and free clinics within the state. Exhibit 4 - 10 show the number of patient visits in the FQHCs and free clinics over the last several years, as well as a breakdown of diagnoses of chronic disease and insurance status. This information will be tracked over the next several years to understand the impact of the Marketplace on the primary care system. Full reports in aggregate and broken down by de-identified clinics are available in Appendix G.

Exhibit 4 Number of Visits per Month at 24 FQHCs in West Virginia in 2012[3]

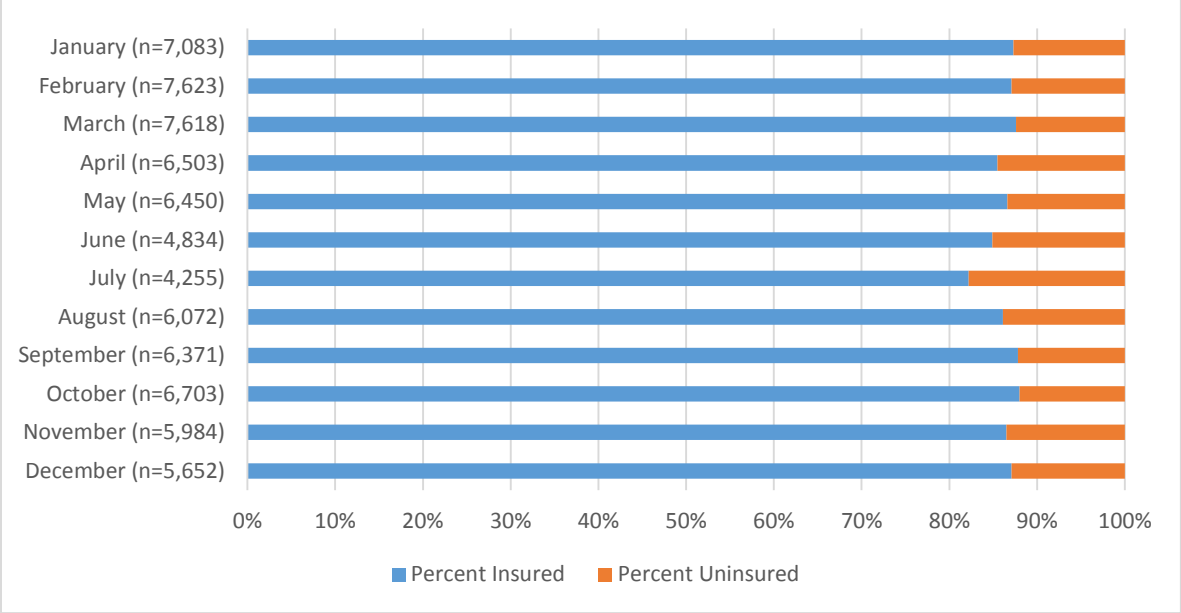
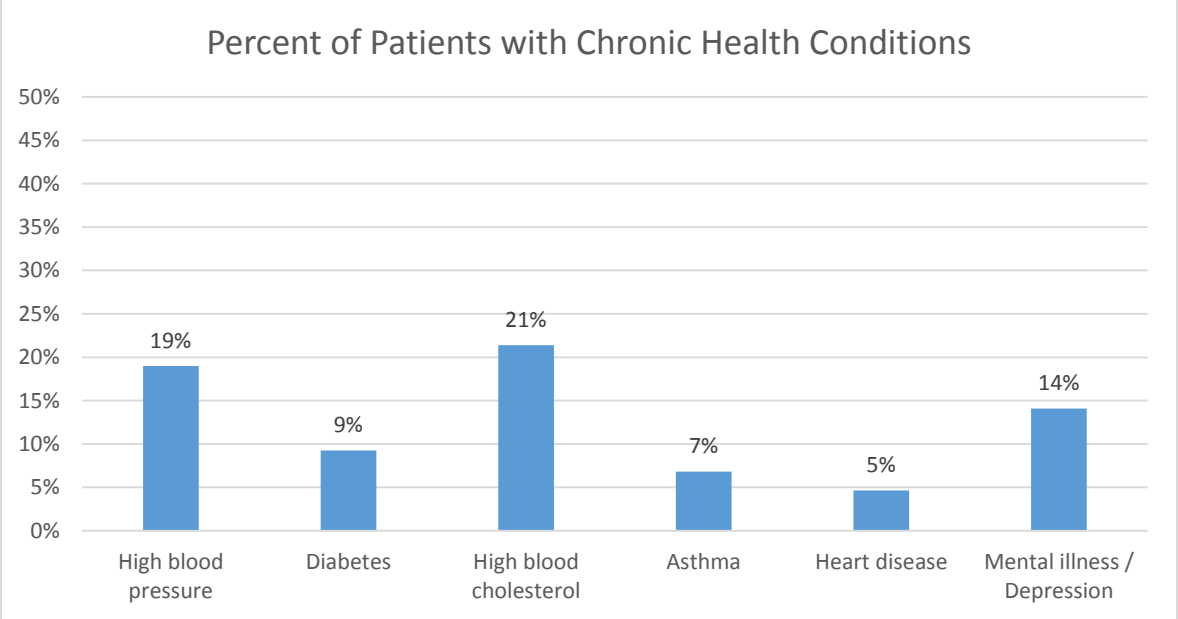


Exhibit 5 Patients with Chronic Disease in 24 FQHCs in West Virginia (Reporting period: 3/31/2011-03/31/2013)



[3] The source for Exhibits 4-10 is primary care center electronic medical record analysis provided by OHSR.

Exhibit 6 Number of Chronic Diseases per Patient in 24 FQHCs in West Virginia (Reporting period: 3/31/2011-03/31/2013)

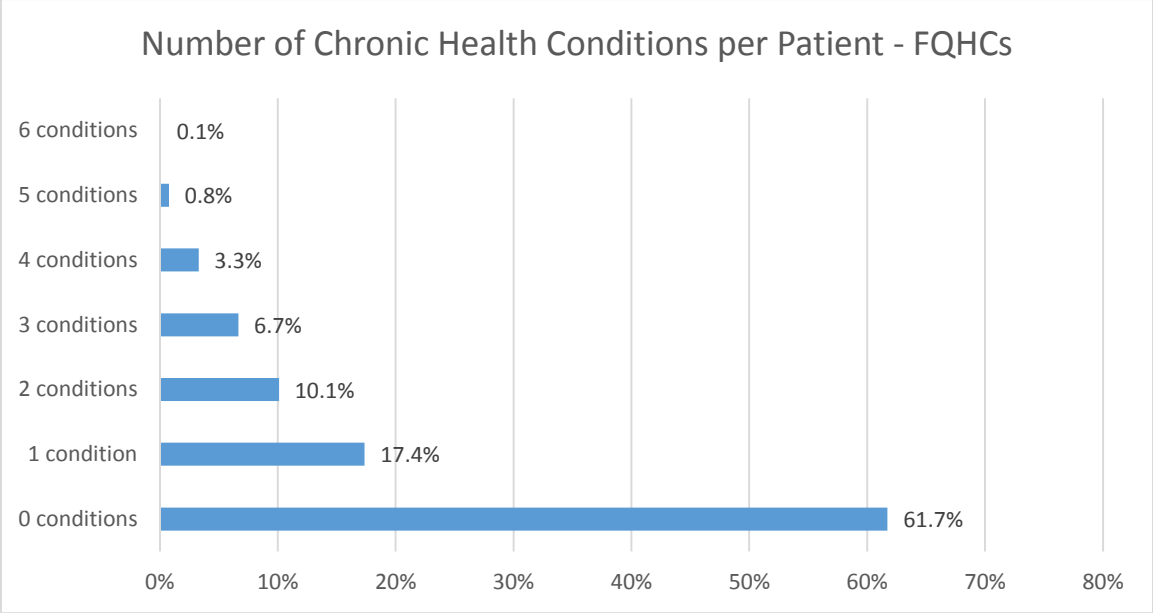


Exhibit 7 Free Clinic Visits by Month (2012)

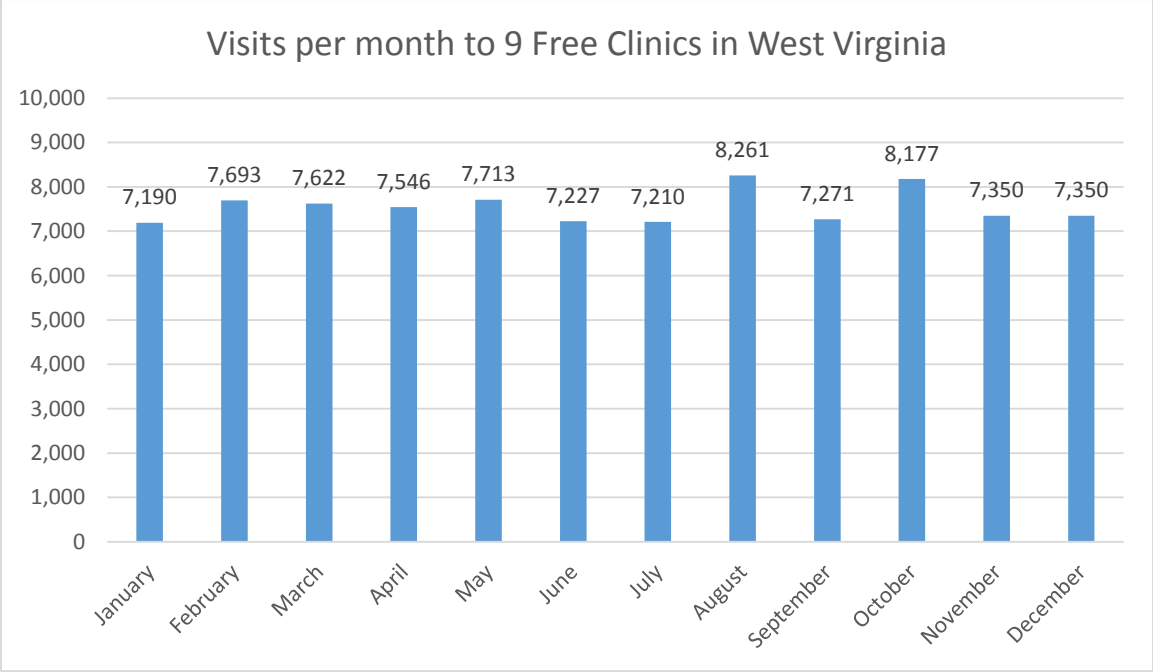


Exhibit 8 Chronic Health Conditions at Nine Free Clinics in West Virginia (Reporting period: 3/31/2011-03/31/2013)

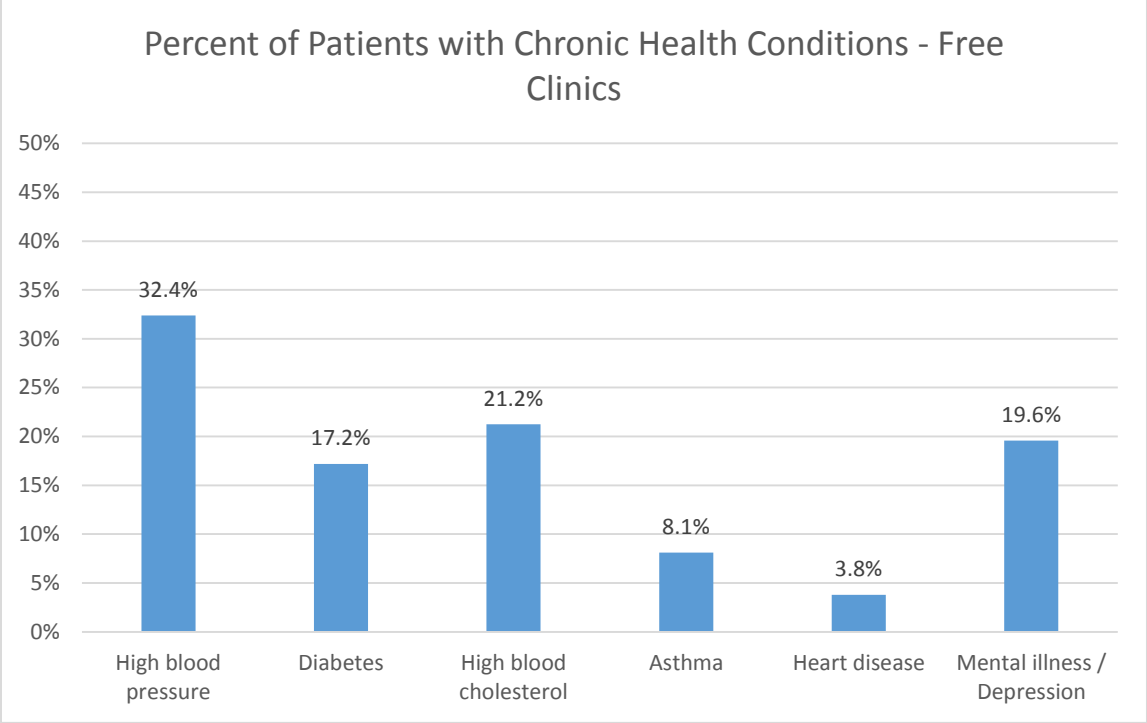


Exhibit 9 Number of Chronic Health Conditions at Nine Free Clinics in West Virginia (Reporting period: 3/31/2011-03/31/2013)

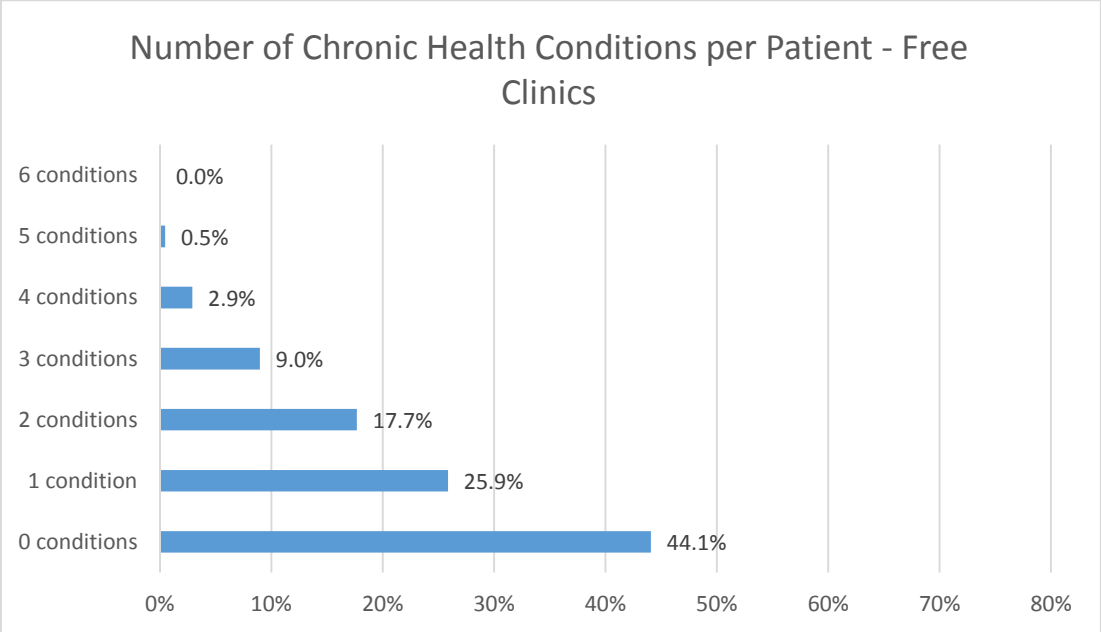
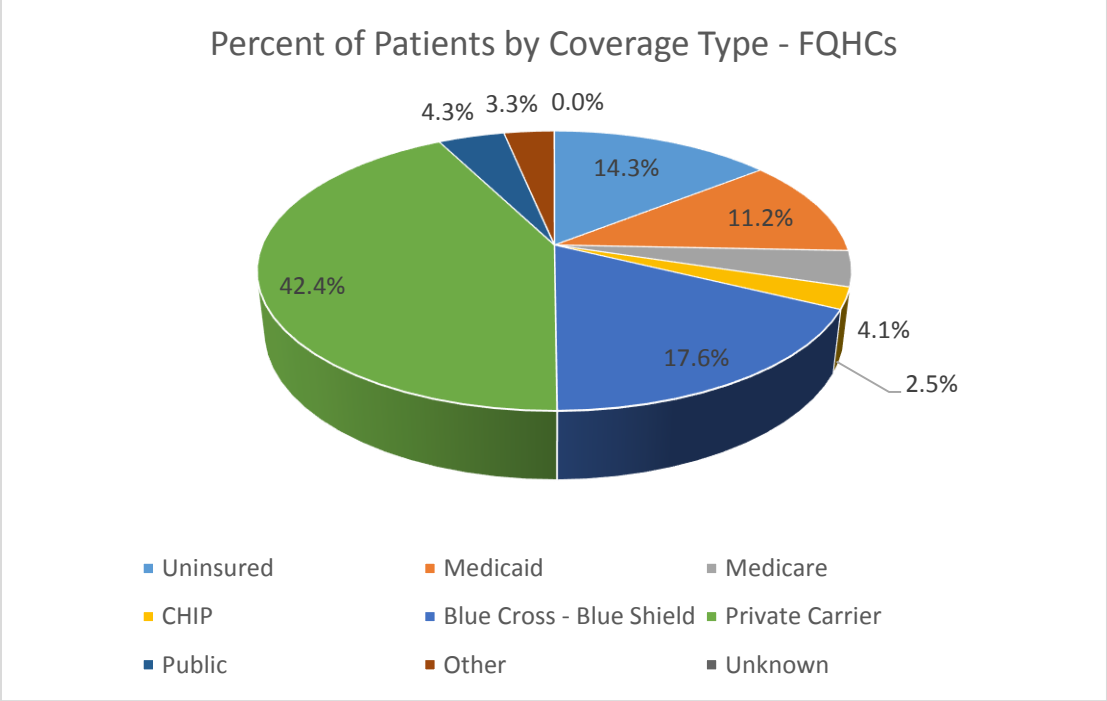


Exhibit 10 Patients by Coverage Type in 24 West Virginia FQHCs (Reporting period: 3/31/2011-03/31/2013)



HCUP Baseline Data in West Virginia

There could be larger implications for specialty care in West Virginia. Because some patients may have undiagnosed chronic disease or may have access to primary care but not to free or reduced-cost specialty care, there could be a large number of individuals seeking treatment after obtaining insurance through the Marketplace or Medicaid expansion. Preliminary efforts are underway to understand the impact on diagnoses and utilization of the hospital system. Specific to West Virginia, HCUP provides state-level data related to chronic disease and inpatient hospital visits. Exhibit 11 shows this baseline information.[4]

Exhibit 11 Rank Order of CCS Principal Diagnosis Category by Number of Discharges in Community Hospitals

Ranks for Uninsured Only in WV-Year 2011	CCS Principal Diagnosis Category and Name		Total Number of Discharges
1.	657	Mood disorders	960
2.	197	Skin and subcuteous tissue infections	709
3.	218	Newborn infant	622
4.	661	Substance-related disorders	482
5.	122	Pneumonia	478
6.	660	Alcohol-related disorders	445

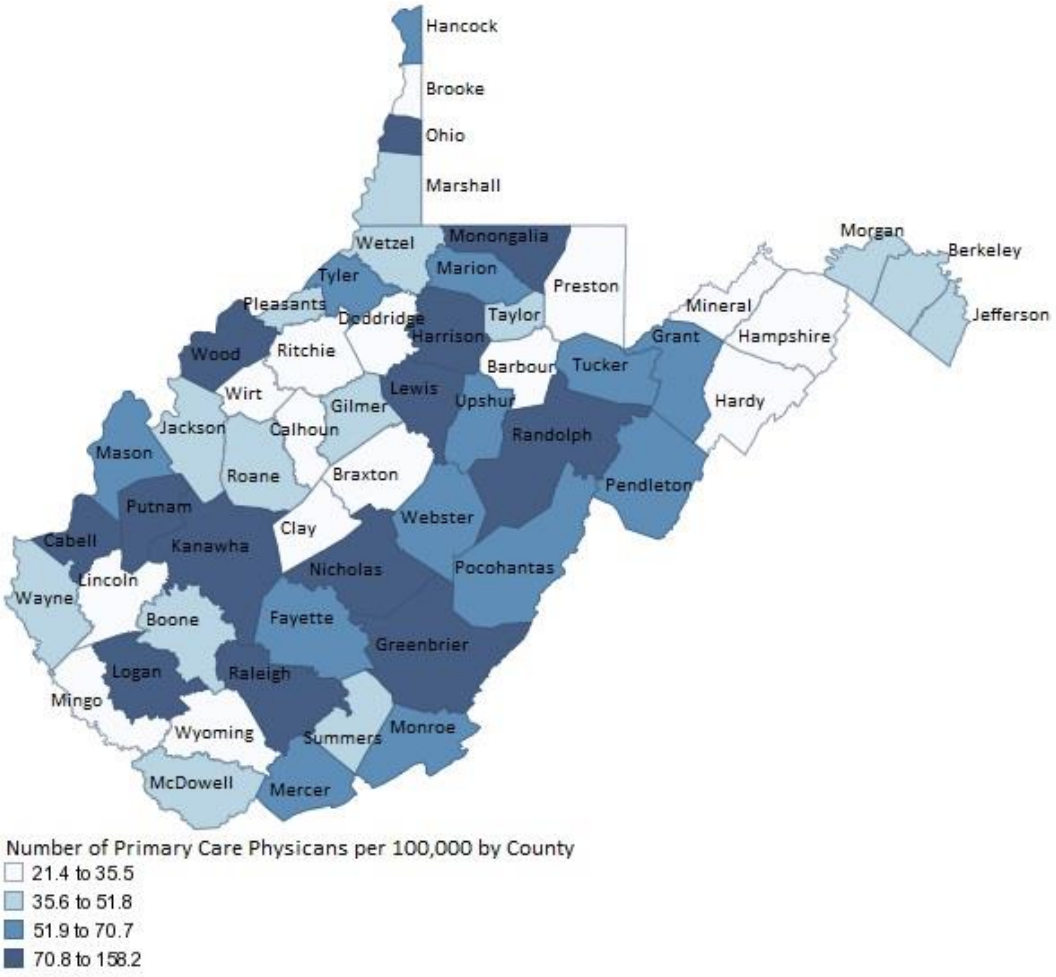
[4]The source for Exhibit 11 is the Agency for Healthcare Research and Quality, "HCUPnet," http://hcupnet.ahrq.gov/.

7.	100	Heart attack (acute myocardial infarction)	360
8.	50	Diabetes mellitus with complications	332
9.	152	Pancreatic disorders other than diabetes	329
10.	102	Chest pain	284

Baseline Service Providers in West Virginia

As the ACA is implemented in the state, another question revolves around the number of service providers, their location in the state, and their ability to serve patients. The Health Area Resource File includes information at the county level on the number of primary and specialty care providers in the state. Baseline information can be seen in Exhibit 12. It is important to track these numbers over the coming years to determine the impact the law will have on service provision. As such, the HRC, in cooperation with the OHSR, has committed to tracking a panel of patients from three years prior to the Marketplace throughout the next five years. This information will allow us to track healthcare utilization and service provision among a group of people pre- and post-implementation of the Marketplace.

Exhibit 12 Primary Care Physicians per 100K Population



Source: Area Health Resource File

It is important to compare the numbers and types of primary care and specialty providers in West Virginia to the national average and track these metrics as ACA implementation continues. These providers could have an impact on availability and use of services. The numbers also help track movement into and out of medical practice within the state. While West Virginia has a high number of general/family doctors per population, the number of specialists, including dentists, lags behind the national average. Detailed information is presented in Exhibit 13.

Exhibit 13 Providers in West Virginia Compared to the United States[5]

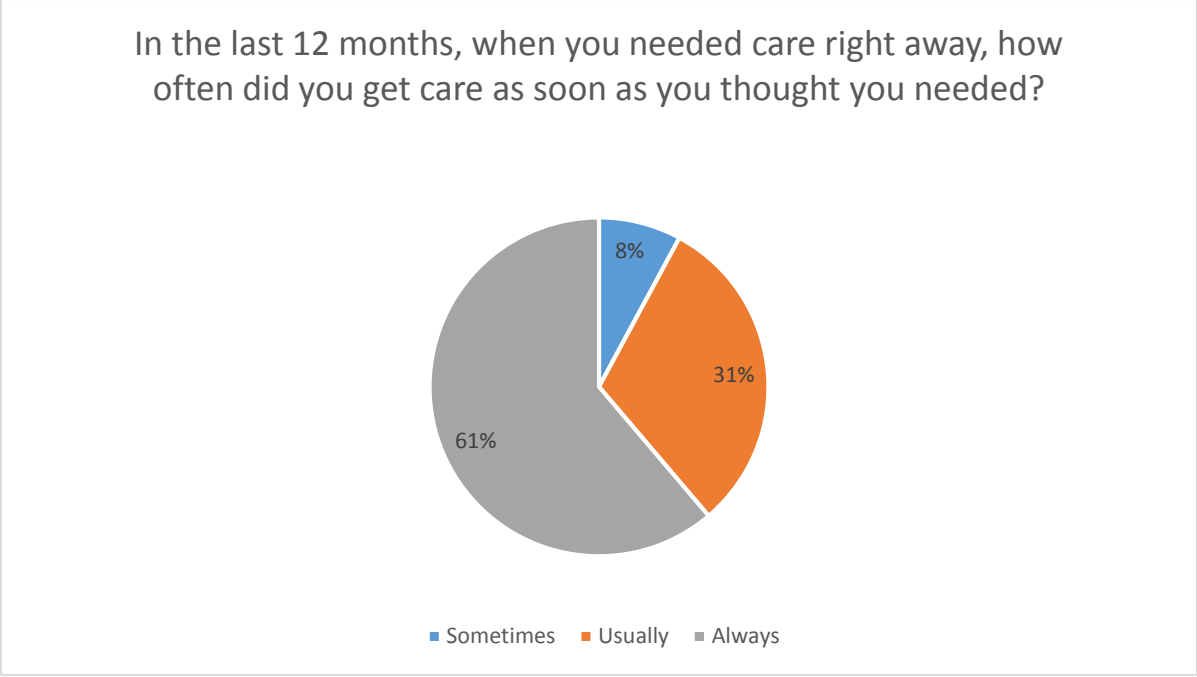
	Summary Statistics for All States					
Indicator	**Min**	**Median**	**Max**	**Half of All States between**	**United States**	**West Virginia**
Health Resources						
Primary Care Physicians	385	2,947	28,429	1,367 - 5,820	229,978	1,421
PCP Phys/100K Pop	52.6	74.4	117.2	65.1 - 82.3	73.8	76.6
General/Family Practice	140	1,294	10,451	634 - 2,345	92,609	796
Gen/Fam/100K Pop	15.2	31.4	57.1	26.8 - 41.9	29.7	42.9
Internal Medicine	89	1,031	11,795	432 - 2,325	89,522	415
Internal Medicine/100K Pop	12.2	25.0	60.8	20.1 - 32.4	28.7	22.4
Pediatricians	51	598	6,183	236 - 1,337	47,847	210
Pediatricians/100K Pop	23.4	51.6	162.5	41.7 - 62.9	57.8	48.3
Obstetricians/Gynecologists	54	454	4,097	166 - 832	33,684	157
OB/GYN /100K Pop	13.8	20.3	40.2	18.3 - 23.1	21.3	16.7
General Surgeons	60	398	2,949	171 - 663	27,004	197
General Surgeons/100K Pop	6.4	8.6	18.8	8.3 - 10.2	8.7	10.6
Psychiatrists	38	329	4,258	145 - 713	29,169	117
Psychiatrists/100K Pop	4.1	8.0	31.4	6.6 - 9.9	9.4	6.3
Dentists	284	2,179	28,682	949 - 4,472	183,286	865
Dentists/100K Pop	39.3	53.9	90.1	48.1 - 65.2	59.4	46.7
Hospitals						
Total Hospitals	12	105	592	55 - 157	6,268	66
Total Hospital Beds	1,495	14,031	86,519	5,129 - 22,710	965,667	8,408
Short-Term General Hospitals	6	75	397	42 - 119	4,751	55
STG Beds	1,348	12,324	71,365	4,360 - 18,661	800,518	7,469
Health Centers						
Community Health Centers	7	133	1,040	69 - 193	8,485	222
Federally Qualified Health Centers	9	77	614	38 - 124	5,070	152

[5] The source for Exhibit 13 is Health Resources and Services Administration, "Area Health Resources Files," http://arf.hrsa.gov/arfdashboard/HRCTstate.aspx.

Baseline CAHPS Data for West Virginia

One more important source of data related to healthcare utilization is CAHP, which provides information from self-reported surveys. Several key CAHPS questions are interesting at this baseline and should be measured over time, as the Federal Government releases more information.[6] The respondents for these surveys are the enrollees for several private healthcare plans. The data for the surveys are voluntarily submitted by the users, which may include various survey sponsors. This implies that various agencies administer the survey independently and then submit data based on specifications provided by CAHPS. Exhibit 14- 17 highlight some key findings from CAHPS. Additional CAHPs data are presented in Appendix I.

Exhibit 14 CAHPS Care Data



[6]Data used in this analysis were provided by the CAHPS Database. The CAHPS® Database is funded by the US Agency for Healthcare Research and Quality (AHRQ) and is administered by Westat under Contract No. HHSA290201300003C.

Exhibit 15 CAHPS Personal Doctor

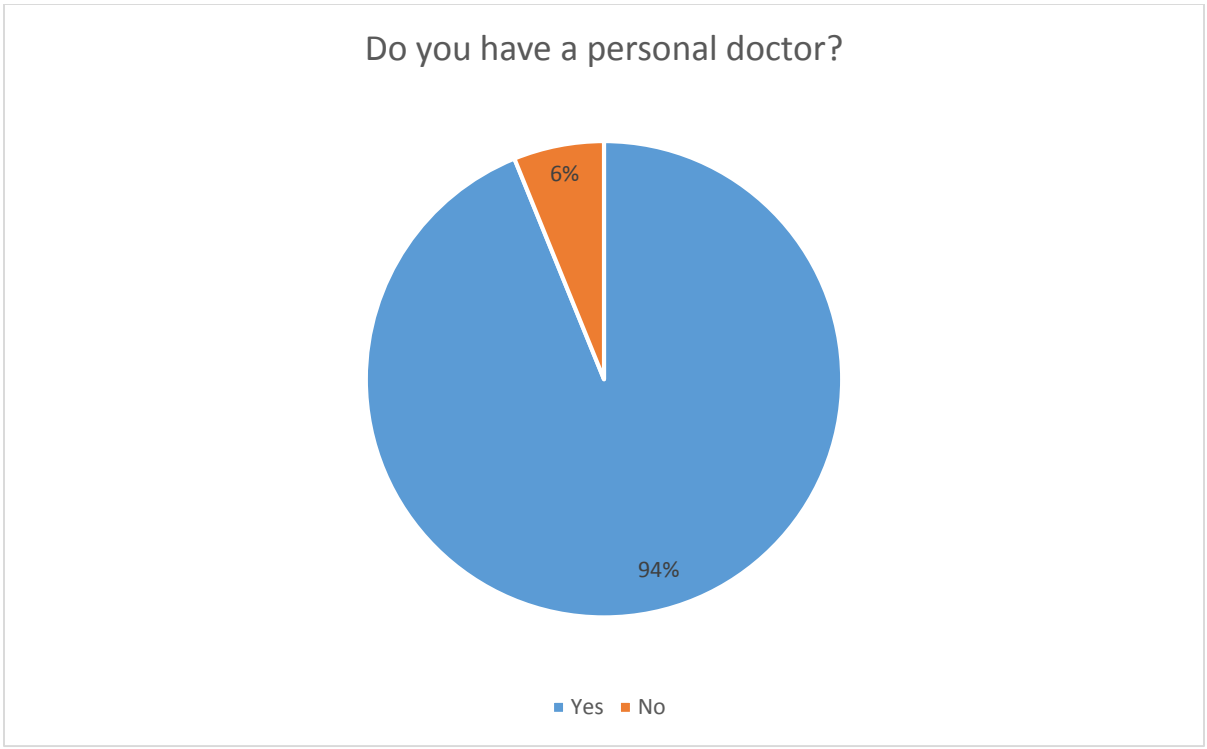
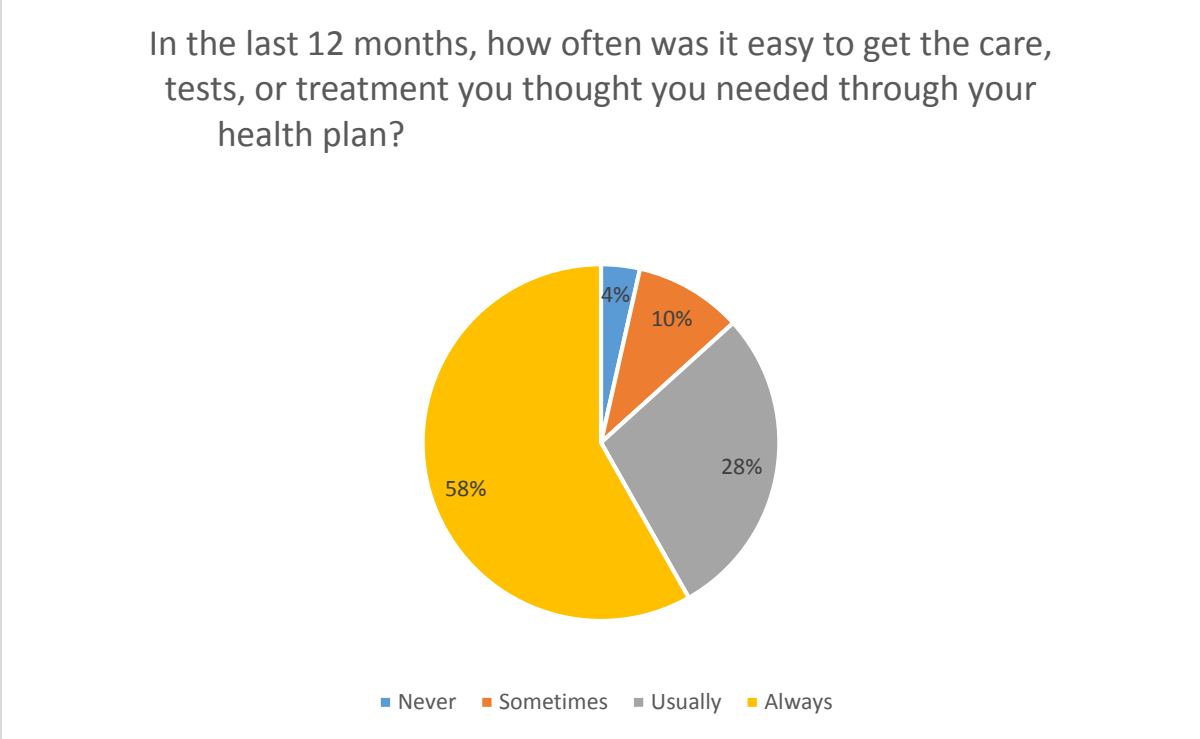


Exhibit 16 CAHPS Specialist Access

Exhibit 17 CAHPS Health Plan



Baseline West Virginia Population Health

During the summer of 2013, the WVU HRC conducted a population-wide survey of West Virginians' attitudes, awareness, and knowledge of the Marketplace. A description of the survey and methodology are available in Report One, and full results are in Appendix A. As part of this survey, we are able to demonstrate the self-reported health status of individuals who are insured and uninsured. Exhibit 18 shows these results. Exhibit 19 shows the prevalence of chronic disease among the respondents to the enrollee exit survey.

The survey also asked individuals with and without insurance whether they were unable to receive certain types of healthcare due to cost. Both those who were insured and those who were uninsured reported not being able to seek treatment because of cost. This finding indicates that an important factor for seeking medical services is not only insurance but also affordability of copays and deductibles. Appendix B, Q3 shows these results between the individuals with insurance and those without.

Exhibit 18 Self-Reported Health Status among Population Survey Respondents in Percent (2013)

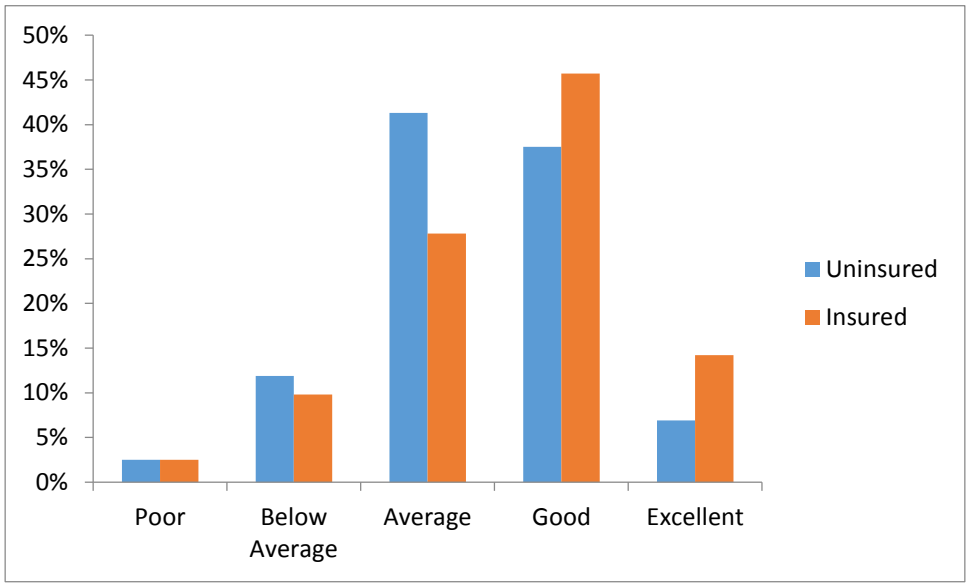
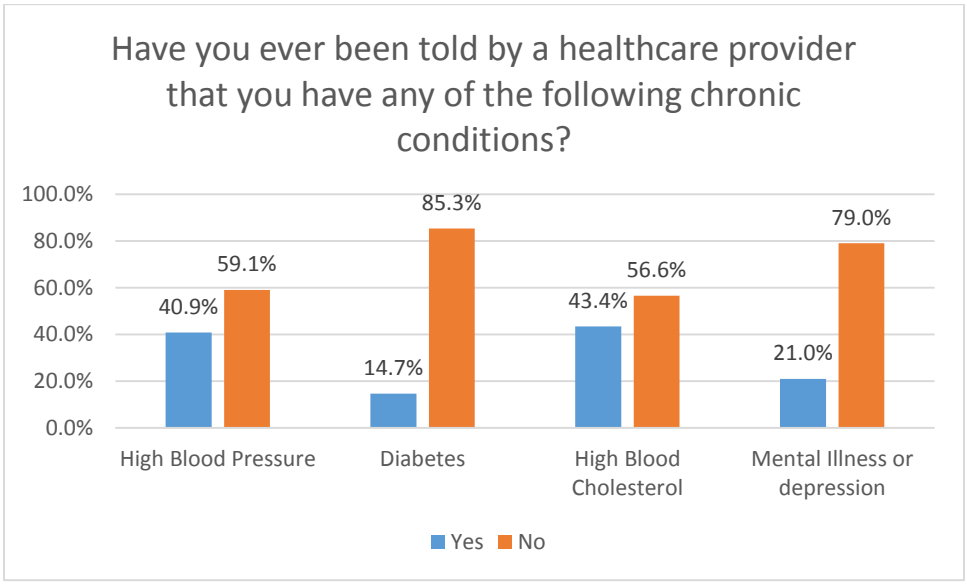


Exhibit 19 Population Survey: Self-Reported Chronic Conditions



Also as part of the population survey, we asked respondents how often they had to skip medical care because of cost. Exhibit 20 and 21 break this down among those who were most likely to enroll in the Marketplace.

Exhibit 20 Population Survey: Likely to go without seeing a healthcare provider for an illness

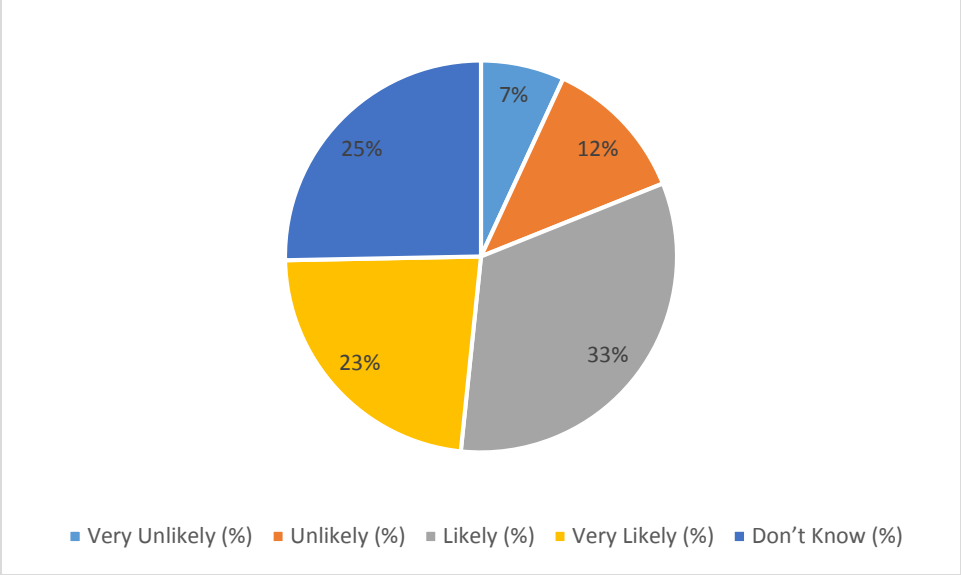
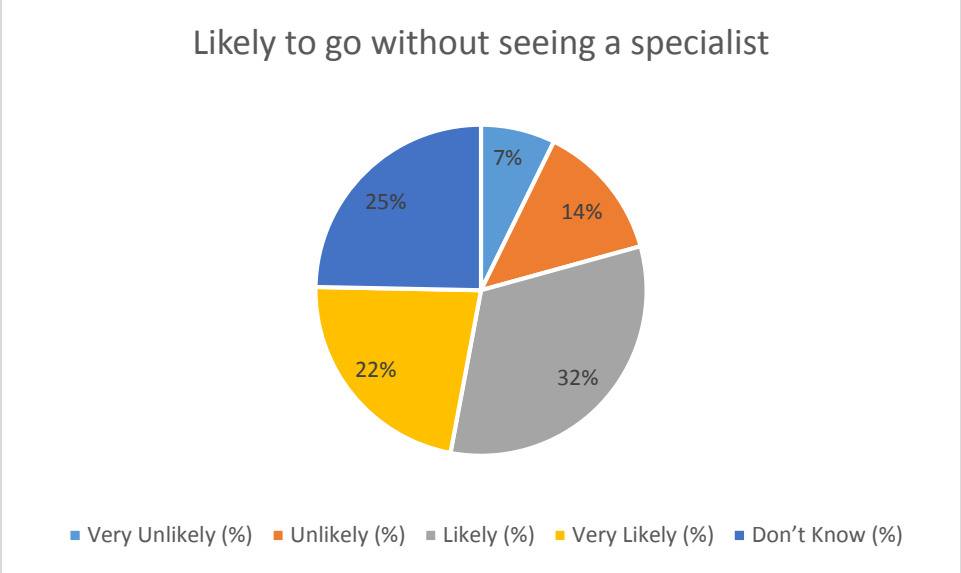


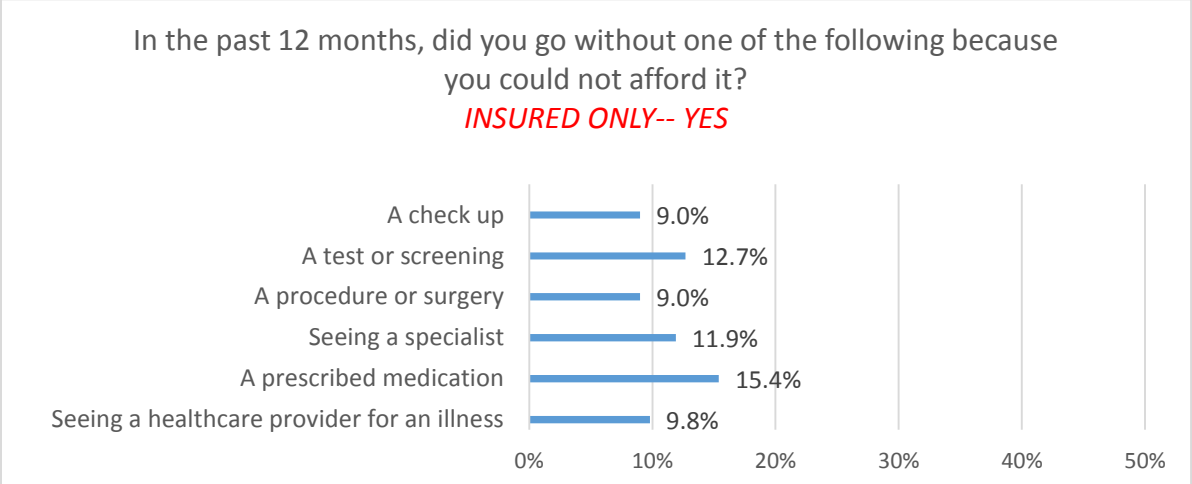
Exhibit 21 Population Survey: Likely to go without seeing a specialist



Underinsurance has traditionally been difficult to define and measure from a researcher standpoint. Using the population survey, we decided to measure underinsurance in terms of individuals who were insured but still unable to receive services because of cost. Exhibit 22 shows specific services respondents with insurance reported not being able to receive because of cost. This may be because their insurance does not cover the service, or that copays or coinsurance are perceived as too high to pay. It will be interesting to see whether these

numbers change over time.

Exhibit 22 Insured Who Reported Inability to Receive Services Because of Cost



Baseline West Virginia Emergency Room (ER) Utilization Pilot Study

Changes in insurance coverage have the potential to impact emergency room (ER) use among the population. Research outside of West Virginia has shown mixed effects of healthcare reform on ER use, with some studies identifying an increase in use while others indicate a decrease. The WVU HRC, in collaboration with the Department of Emergency Medicine, implemented a pilot project to understand why individuals were visiting the ER at Ruby Memorial. Students were able to collect surveys directly from patients who were in the ER. Appendidx F shows key results from the ER utilization study, including the reasons individuals reported going to the ER broken down by insurance status. This pilot project will be repeated in fall 2014, with potential to examine secondary data from electronic health records to further explore ER use pre- and post-Marketplace implementation.

Conclusion

This report provides information for public health practitioners and educators, healthcare providers, and insurance carriers. Over the next four years of this evaluation, these indicators will be tracked and compared to baseline data. With rigorous statistical methodologies, hypothesis driven questions, and qualitative interviews with health practitioners, we hope to untangle the effects of the Health Insurance Marketplace in West Virginia on the health of the population.