Community Health Needs Assessment

Prepared for
WAR MEMORIAL HOSPITAL
of Valley Health

By
VERITÉ HEALTHCARE
CONSULTING, LLC

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ABOUT VERITÉ HEALTHCARE CONSULTING

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Alexandria, Virginia. The firm serves as a national resource that helps hospitals conduct community health needs assessments and develop implementation strategies that address priority needs. The firm also helps hospitals, associations, and policy makers with community benefit reporting, planning, program assessment, and policy and guidelines development. Verité is a recognized, national thought leader in community benefit and in the evolving expectations that tax-exempt healthcare organizations are being required to meet.

The community health needs assessment prepared for War Memorial Hospital was directed by the firm's Vice President and managed by a senior-level consultant. Associates and research analysts supported the work. The firm's senior-level consultants and associates hold graduate degrees in relevant fields.

More information on the firm and its qualifications can be found at www.VeriteConsulting.com

Verité Healthcare Consulting's work reflects a fundamental goal to assist in strengthening the health of communities and vulnerable populations, and the organizations that serve them

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EXECUTIVE SUMMARY

Introduction

This community health needs assessment (CHNA) was conducted by War Memorial Hospital (War or the hospital) to identify community health needs and to inform the subsequent development of an implementation strategy to address identified priority needs. The hospital's assessment of community health needs also responds to community benefit regulatory requirements.

Federal regulations require that tax-exempt hospital facilities conduct a CHNA every three years and develop an implementation strategy that addresses priority community health needs. Tax-exempt hospitals also are required to report information about community benefits they provide on IRS Form 990, Schedule H. As specified in the instructions to IRS Form 990, Schedule H, community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs.

Community benefit activities and programs seek to achieve several objectives, including:

- improving access to health services,
- enhancing public health,
- advancing increased general knowledge, and
- relief of a government burden to improve health.[1]

To be reported, community need for the activity or program must be established. Need can be established by conducting a community health needs assessment.

The 2010 Patient Protection and Affordable Care Act (PPACA) requires each tax-exempt hospital to "conduct a [CHNA] every three years and adopt an implementation strategy to meet the community health needs identified through such assessment."

CHNAs seek to identify priority health status and access issues for particular geographic areas and populations by focusing on the following questions:

- ***Who*** in the community is most vulnerable in terms of health status or access to care?
- ***What*** are the unique health status and/or access needs for these populations?
- ***Where*** do these people live in the community?
- ***Why*** are these problems present?

The question of how the organization can best use its limited charitable resources to address priority needs will be the subject of the hospital's separate implementation strategy.

[1] Instructions for IRS form 990 Schedule H, 2012.

Methodological Summary

Community health needs were identified by collecting and analyzing data and information from multiple sources. Statistics for numerous health status, health care access, and related indicators were analyzed, including comparisons to benchmarks where possible. The principal findings of recent health assessments conducted by other organizations were reviewed, as well.

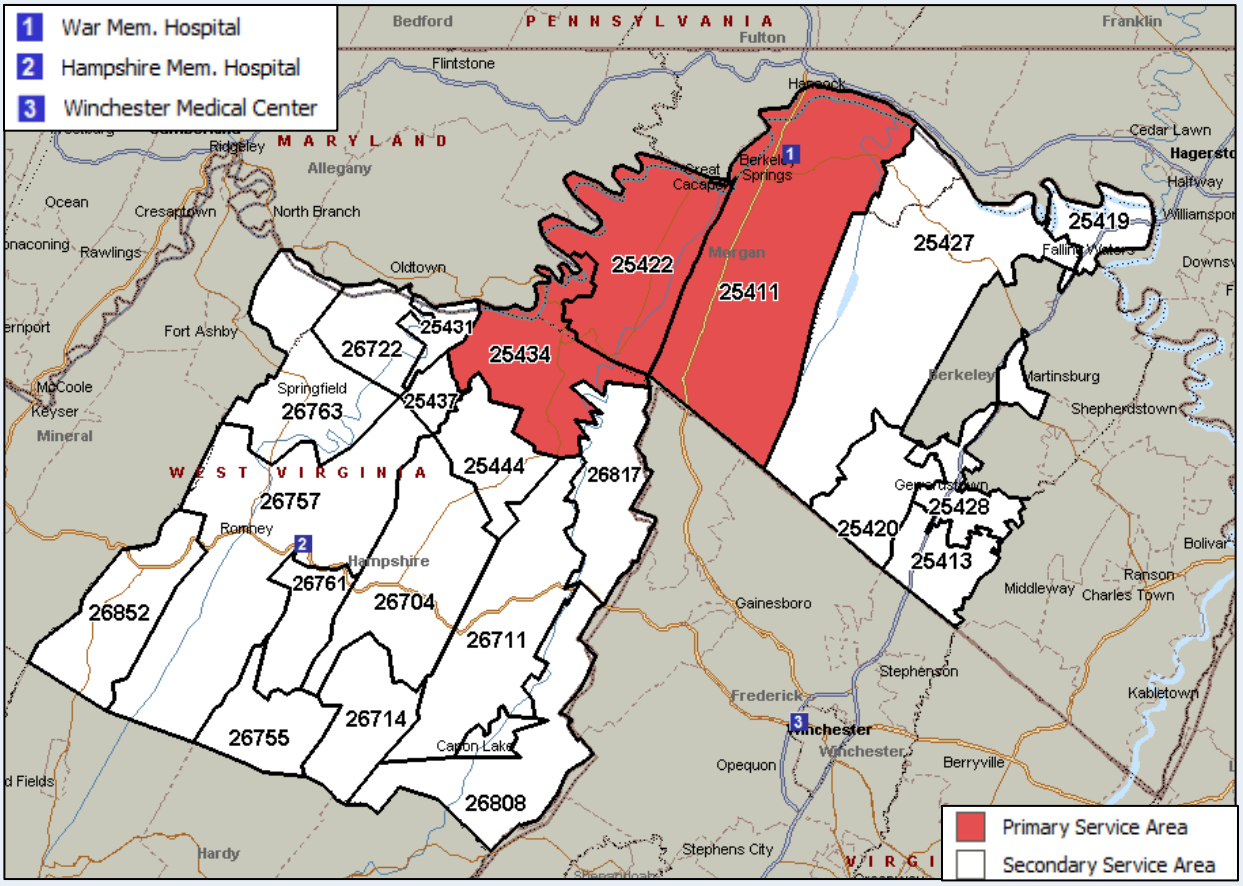
Input from persons representing the broad interests of the community, including individuals with special knowledge of or expertise in public health, were taken into account via interviews and a community response session with 44 key informants and a community survey with 165 respondents.

Verité applied a ranking methodology to help prioritize the community health needs identified, incorporating both quantitative and qualitative data throughout. Scores for the severity and scope of identified health needs were assigned and calculated using weighted averages taking into account multiple data sources. Major themes discussed in the community response session were compared to the scored health issues to aid in identifying the prioritized list of health needs.

No information gaps have affected the hospital's ability to reach reasonable conclusions regarding priority community health needs.

War Memorial Hospital collaborated with the other Valley Health hospitals for this assessment: Hampshire Memorial Hospital, Page Memorial Hospital, Shenandoah Memorial Hospital, Warren Memorial Hospital, and Winchester Medical Center.

Definition of the Community



War Memorial Hospital Community by the Numbers

- Community includes Morgan and Hampshire Counties and parts of Berkeley County in West Virginia
- Total population in 2013: 100,920
- Projected population change between 2013 and 2018: 1.8%
- Comparatively high rates of poverty, unemployment , and uninsurance in Hampshire County
- 82.5% of inpatient discharges and 80.9% of emergency department visits originated from the community
- Demographics:
  - Projected growth of 17% in 65+ population
  - 92% White in 2013, with projected growth in non-White populations

Prioritized Description of Community Health Needs

The CHNA identified and prioritized several community health needs using the data sources, analytic methods, and prioritization process and criteria described in the Methodology section. These needs are listed below in priority order and described on the following pages, with examples of the data supporting the determination of each health need as a priority. Further detail regarding supporting data, including sources, can be found in the CHNA Data and Analysis section of this report.

List of Prioritized Health Needs

1. Access to Primary and Specialty Health Care
2. Mental and Behavioral Health
3. Substance Abuse and Tobacco Smoking
4. Physical Activity, Nutrition, and Obesity-related Chronic Diseases
5. Financial Hardship and Basic Needs Insecurity
6. Maternal and Child Health
7. Oral Health and Dental Care

To provide insight into trends, a comparison to findings from War Memorial Hospital's July 2010 CHNA is included below the description and key findings of each priority need.

1. Access to Primary and Specialty Health Care

Access to primary and specialty health care services through a doctor's office, clinic or other appropriate provider is an important element of a community's health care system, and is vital for helping the community's residents to be healthy. The ability to access care is influenced by many factors, including insurance coverage and the ability to afford services, the availability and location of health care providers, and reliable personal or public transportation.

Key Findings

- Morgan County is designated a Health Professional Shortage Area (HPSA) for primary medical care. Medically Underserved Areas (MUA) are present in Hampshire and Morgan Counties.
- Primary care physician availability is below the West Virginia average in all counties.
- Morgan and Hampshire Counties were ranked in the bottom quartile of all West Virginia counties for "access to care" in the County Health Rankings; Morgan was ranked 42 out of 55 counties.
- Morgan and Hampshire Counties had higher uninsurance rates than the West Virginia and U.S. averages, at 19.4 percent and 20.7 percent, respectively.
- Concern about access to both primary and specialty care was the most frequently mentioned factor contributing to poor health in key informant interviews.

- Lack of accessible or reliable transportation to health care and a lack of providers who accept new Medicaid and even Medicare patients were the most frequently mentioned specific access to care issues in interviews, especially for low-income individuals and senior citizens.
- Nineteen percent of survey respondents across the entire community reported not being able to always get needed primary care, a figure that was 23.4 percent in Morgan County. Thirty-one percent of overall community respondents, and 36 percent in Morgan County, reported not being able to always get medical specialty care.

Comparison to July 2010 CHNA: Greater access to affordable health care, including specialists, was one of the top three priority issues identified in War's July 2010 CHNA, for reasons including: the presence of HPSAs and MUAs; low ranking on County Health Rankings' "access to care" metric; access to care and a lack of service providers mentioned in interviews and focus groups; and high unemployment rates and low incomes.

2. Mental and Behavioral Health

Mental and behavioral health includes both mental health conditions (e.g., depression, autism, bi-polar) and behavioral problems (e.g., bullying, suicidal behavior). Poor mental and behavioral health causes suffering for both those afflicted and the people around them. It can negatively impact children's ability to learn in school, and adults' ability to be productive in the workplace and to provide a stable and nurturing environment for their families. Poor mental or behavioral health frequently contributes to or exacerbates problems with physical health and illness.

Key Findings

- Hampshire County is a Health Professional Shortage Area for mental health.
- Suicide rates in Hampshire and Morgan Counties were worse than the West Virginia average. The rate in Morgan County is 16 percent worse than the state.
- Mental and behavioral health was the most frequently mentioned health status issue by key informant interview participants. Interviewees generally reported that the community's mental health needs have risen, while mental health service capacity has not.
- Interview participants described a wide range of mental health issues, including for example: bullying among youth, autism spectrum symptoms and diagnoses, depression among senior citizens, adult and family stress and coping difficulties associated with unemployment and under-employment, a lack of affordable outpatient mental health professionals, and a lack of local inpatient treatment facilities. Interviewees also noted frequent dual diagnoses of mental health problems and substance abuse.

Comparison to July 2010 CHNA: Mental health care and substance abuse together was one of the top three priority issues identified in War's July 2010 CHNA, for reasons including: the presence of mental health HPSAs; unfavorable suicide rates compared to the state and national averages; frequent mentions by interview participants of mental and behavioral health needs and

a lack of treatment options; and focus groups identifying mental health and substance abuse as the third highest health priority.

3. Substance Abuse and Tobacco Smoking

Substance abuse includes the use of: illicit substances (e.g., cocaine, heroin, methamphetamine, and marijuana); misuse of legal over-the-counter and prescription medications; and abuse of alcohol. Substance abuse affects not only the abusing individuals, but also those around them with negative impacts on health, safety and risky behaviors, risks of violence and crime, adults' productivity, students' ability to learn, and families' ability to function. Tobacco smoking is well-documented to be a risk factor for various forms of cancer, heart disease and other ailments, and to pose health risks for those exposed to secondhand smoke.

Key Findings

- A measure of alcohol use based on binge and heavy drinking placed Morgan and Hampshire Counties in the bottom (worst) quartile of all West Virginia counties, and Berkeley County in the bottom 50 percent, according to County Health Rankings.
- Rates of adult tobacco use in Morgan, Hampshire and Berkeley Counties placed them in the bottom (worst) half of counties in the state, according to County Health Rankings. Smoking across the community averaged approximately 28 percent.
- Substance abuse was the second most frequently mentioned health status issue by key informant interview participants, and was portrayed as both growing and serious. Interviewees reported perceived increases in methamphetamine use in particular, the abuse of prescription pain medications, and drug-seeking behavior in physicians' offices and hospital emergency departments. Abuse of over-the-counter medications by youth was mentioned, as well.
- Interviewees cited a lack of local treatment services, particularly inpatient facilities, for people with substance abuse problems. Some interviewees reported that substance abuse and addiction among pregnant women is creating more perinatal and neonatal health problems. As noted above for mental health needs, dual diagnoses of substance abuse and mental health problems are not uncommon.
- Tobacco use and substance abuse were two of the five most frequently mentioned "top health-related issues" in the community by survey respondents.

Comparison to July 2010 CHNA: Substance abuse and mental health care together was one of the three priority issues identified in War's July 2010 CHNA, for reasons including: all four counties ranking in the bottom quartiles in the state for alcohol use; interview participants frequently mentioning substance abuse in the community and a lack of treatment options; and focus groups identifying substance abuse and mental health as the third-highest health priority.

4. Physical Activity, Nutrition, and Obesity-related Chronic Diseases

A lack of physical activity and poor nutrition are contributing factors to overweight and obesity, and to a wide range of health problems and chronic diseases among all age groups, including

high cholesterol, hypertension, diabetes, heart disease, stroke, some cancers, and more. Nationally, the increase in both the prevalence of overweight and obesity and associated chronic diseases is well-documented, and has negative consequences for individuals and society. Low-income and poverty often contributes to poor nutrition and to hunger.

Key Findings

- The mortality rate from diseases of the heart in Morgan County was 13 percent worse than for West Virginia as a whole, and nearly double the rate in Virginia.
- Hampshire County was ranked in the bottom half of all West Virginia counties for diet and exercise, at 41 out of 55 counties, in County Health Rankings.
- Food deserts – low-income areas more than one mile from a supermarket or large grocery store in urban areas and more than 10 miles from a supermarket or large grocery store in rural areas – exist in the community in and around the municipalities of Capon Lake, Great Cacapon, and Martinsburg.
- Thirty-five schools in the War community, located in every county, had 40 percent or more of their students eligible for free and reduced-price lunches, indicating risks of poor nutrition and hunger.
- In key informant interviews, obesity and overweight was the fourth most frequently mentioned health status issue as being important to the community, and diabetes was the fifth most frequent.
- Commenting on the contributing factors to poor health status, interview participants mentioned nutrition and diet, low physical activity and exercise, and food insecurity and hunger all in the top ten. Informants commented on the relative lack of affordable, healthy food choices in some parts of the community, and on children experiencing hunger. Obesity was reported to be rising among children and youth.
- In the survey, obesity and diabetes were the second and third most frequently mentioned "top health-related issues" in the community; heart disease, poor dietary choices, and not enough exercise were in the top ten.
- In the survey, nearly 30 percent of respondents reported not being physically active, 40.2 percent reported eating less than the recommended amount of fruit, and 64.6 percent reported eating less than the recommended amount of vegetables.

Comparison to July 2010 CHNA: Physical activity, nutrition, and obesity-related chronic diseases was not one of the top health priority areas identified in War's July 2010 CHNA, but two counties ranked in the bottom two quartiles in the state for health behaviors, chronic disease and obesity were the top two health status issues reported in that assessment's survey, and the need for health education and outreach programs that focus on healthy habits was a key theme from the 2010 assessment's interviews and focus groups.

5. Financial Hardship and Basic Needs Insecurity

Income levels, employment, and degrees of economic self-sufficiency are known to be highly correlated with the prevalence of a range of health problems and factors that contribute to poor health. People with lower income or who are unemployed or underemployed are less likely to have health insurance or to be able to afford health care expenses paid out-of-pocket. Lower income is also associated with increased difficulties securing reliable transportation, including to medical care visits, and with the ability to purchase an adequate quantity of healthy food on a regular basis. For these and other reasons, the assessment identified financial hardship and basic needs insecurity as a priority health need in the community.

Key Findings

- The community as a whole has experienced a 38 percent increase in the percentage of households with incomes under $25,000 since 2009. In 2013, 32 percent of all households in the overall community, and 41 percent of households in Morgan County, had incomes below $25,000.
- Morgan and Hampshire Counties had higher uninsurance rates than the West Virginia and U.S. averages, at 19.4 percent and 20.7 percent, respectively.
- The State of West Virginia's budget for the Bureau of Medical Services declined 6.2 percent, and for the Bureau of Public Health declined 7.3 percent, in fiscal year 2014.
- Low income and poverty was the fourth most frequently-mentioned issue believed to be contributing to poor health status and to access to care difficulties, by participants in key informant interviews. Other income-related factors noted to be contributing to poor health include difficulty with transportation access, homelessness, and food insecurity and hunger.
- The economic downturn of the past several years was mentioned by interview participants as taking a toll on health in numerous ways, reducing access to health care and the ability to maintain a healthy lifestyle, and increasing stress and social instability.
- In the survey, low income and financial challenges was the most frequently mentioned "top health-related issue" in the community, ahead of every other factor. For survey respondents who reported not being able to always get the care they needed, affordability and a lack of insurance coverage were the most frequently stated reasons.

Comparison to July 2010 CHNA: Financial hardship and basic needs insecurity was not one of the top health priority areas identified in War's July 2010 CHNA, but that assessment did note several financial hardship measures relevant to health, including the impact of the economic recession. The study reported that 22 percent of households in the community had annual incomes below $25,000, and that poverty and unemployment was comparatively high in parts of the region. Lack of access to affordable health care was considered the fourth highest priority in the 2010 assessment's focus groups.

6. Maternal and Child Health

Maternal and child health indicators, including teen pregnancy and infant mortality, are essential to consider when evaluating the health of a community. The rate of teen pregnancy is an important health statistic in any community for reasons that include concerns for the health and the mother and child, the financial and emotional ability of the mother to care for the child, and the ability of the mother to complete her secondary education and to earn a living. Teen pregnancy also adds burdens on the educational system and on the families of teen mothers. Infant mortality can be a sign of deficits in access to care, health education, personal resources, and the physical environment.

Key Findings

- The teen birth rate in two of the three counties was higher than the West Virginia average, with Hampshire County nearly 14 percent higher than the state. The rates in all three counties were higher than in neighboring Virginia, by 33 to 132 percent.
- Concerns about perceptions of rising teen pregnancy, including a lowering of the ages at which some girls are becoming pregnant and a lack of adequate support systems for these young women, were raised in key informant interviews.
- The infant mortality rate in Morgan County was more than double the West Virginia rate, and in Berkeley County was 70 percent higher than the state. The percentage of pregnant women receiving no prenatal care in the first trimester in Morgan County exceeded the state rate by 25 percent.

Comparison to July 2010 CHNA: Maternal and child health indicators, including teen pregnancy and infant mortality, were not top health priority areas identified in War's July 2010 CHNA.

7. Oral Health and Dental Care

Oral health and dental health care is important for overall health, and poor dental health can have negative social, employment, and economic consequences for individuals, as well. Income levels and the presence or lack of insurance coverage for dental care are important determinants of the ability to obtain preventive and restorative dental care.

Key Findings

- Morgan County is a HPSA for dental care, as is the Capon district in Hampshire. The ratios of population-to-dentists in Hampshire and Morgan Counties were greater than 50 percent worse than the U.S. average, according to County Health Rankings.
- Oral health and dental care was the third most frequently mentioned health status issue by key informant interview participants. The issue was discussed in terms of poor dental hygiene, tooth decay in children and youth in addition to adults, and a lack of affordable, preventive dental health services.
- Interview participants stated access to dental care is very difficult for low income and uninsured individuals, particularly in less populated areas. Interview participants noted

that Medicaid covers dental care only for children and youth, and that not all dentists accept Medicaid patients. For low-income, uninsured adults needing expensive restorative care, tooth extractions are sometimes the only practical option.

- Oral health challenges were reported by interview participants as affecting people across the age spectrum, with some reporting increasing incidence of severe decay among children and others stating that access to dental care – as for access to other care – was particularly difficult for elderly members of the community who may have transportation limitations and be socially isolated.
- Lack of dental insurance (22.6 percent) and lack of affordability (43.5 percent) were cited by survey respondents as the principal barriers to dental care, by those who reported not always being able to get such care.

Comparison to July 2010 CHNA: Oral health and dental care were not one of the top health priority areas identified in War's July 2010 CHNA, but dental HPSAs were present in all counties in the community, and a limited supply of dentists and a lack of access for low-income residents were noted as among the "biggest issues" in stakeholder interviews.

CHNA DATA AND ANALYSIS

METHODOLOGY

Data Sources and Analytic Methods

Community health needs were identified by collecting and analyzing data and information from multiple quantitative and qualitative sources. Considering information from a variety of sources is important when assessing community health needs, to ensure the assessment captures a wide range of facts and perspectives and to assist in identifying the highest-priority health needs.

Statistics for numerous health status, health care access, and related indicators were analyzed, including from local, state, and federal public agencies, community service organizations in the War community, and from Valley Health. Comparisons to benchmarks were made where possible. Details from these quantitative data are presented in the report's body, followed by a review of the principal findings of health assessments conducted by other organizations in the community in recent years.

Input from persons representing the broad interests of the community was taken into account via: interviews with 38 key informants in April and May 2013; a community survey with 165 respondents; and one "community response session" with some interviewees and six additional community stakeholders in June 2013 where preliminary findings were discussed. Interviews and the community response session included: individuals with special knowledge of or expertise in public health; local and state health and other departments, and agencies with current data or information about the health needs of the community; and leaders, representative and members of medically underserved, low-income, and minority populations, and populations with chronic disease needs. Feedback from the community response session participants helped to validate findings and prioritize identified health needs.

Prioritization Process and Criteria

Verité applied a ranking methodology to help prioritize the community health needs identified by the assessment, incorporating both quantitative and qualitative data throughout. Scores were calculated for each category of data (secondary data, previous assessments, survey, and interviews) based on the number of sources that measured each health issue and the severity of the issue as measured by the data and as indicated by community input. Scores were averaged and assigned a weight for each data category: 40 percent, 10 percent, 10 percent, and 40 percent, respectively. All identified health issues were assigned scores for severity and scope. Major themes discussed by participants in the community response session were compared to the scored health issues.

Information Gaps

No information gaps have affected the hospital's ability to reach reasonable conclusions regarding priority community health needs.

Collaborating Organizations

War Memorial Hospital collaborated with the other Valley Health hospitals for this assessment: Hampshire Memorial Hospital, Page Memorial Hospital, Shenandoah Memorial Hospital, Warren Memorial Hospital, and Winchester Medical Center.

War's internal project team included Mark Merrill, Valley Health President and Chief Executive Officer, and President of Winchester Medical Center; Neil McLaughlin, President of Hampshire and War Memorial Hospitals, and Vice President of Valley Health; Wes Williams, Vice President of Marketing and Public Relations; Todd Way, Senior Vice President of Regional Operations; Chris Rucker, Vice President of Community Health and Wellness and President of Valley Regional Enterprises; Tom Urtz, Corporate Director of Marketing and Public Relations; Gregory Hudson, Corporate Director of Planning and Business Development; and Mary Zufall, Community Health Coordinator.

War also collaborated with a variety of individuals through Valley Health's five workgroups that focus on access to primary care; health, outreach, and prevention; mental health and substance abuse; family developmental and social health; and the local environment and social work.

Additionally, lists of the interviewees and community response session participants are provided in **Exhibits 50** through **53** of the report.

DEFINITION OF COMMUNITY ASSESSED

This section identifies and describes the community assessed by War Memorial Hospital and how it was determined.

War's community is comprised of 29 ZIP codes overlapping three counties in West Virginia. The hospital's primary service area (PSA) is Morgan County. The secondary service area (SSA) is composed of Hampshire County and parts of Berkeley County (**Exhibit 1**). The hospital is located in Berkeley Springs, West Virginia.

Exhibit 1: Community Population, 2013

County and Town	Total Population 2013	Percent of Total Population 2013
PSA	**16,538**	**16.4%**
Morgan	**16,538**	**16.4%**
Berkeley Springs	12,731	12.6%
Great Cacapon	1,741	1.7%
Paw Paw	2,066	2.0%
SSA	**84,382**	**83.6%**
Berkeley	**61,584**	**61.0%**
Bunker Hill	7,393	7.3%
Falling Waters	9,680	9.6%
Gerrardstown	4,454	4.4%
Hedgesville	14,303	14.2%
Inwood	11,172	11.1%
Martinsburg	14,582	14.4%
Ridgeway	N/A	N/A
Hampshire	**22,798**	**22.6%**
Augusta	4,247	4.2%
Bloomery	1,340	1.3%
Capon Bridge	2,032	2.0%
Capon Springs	N/A	N/A
Delray	1,038	1.0%
Green Spring	757	0.8%
High View	1,507	1.5%
Junction	N/A	N/A
Levels	292	0.3%
Points	171	0.2%
Purgitsville	1,080	1.1%
Rio	401	0.4%
Romney	6,219	6.2%
Shanks	975	1.0%
Slanesville	883	0.9%
Springfield	1,653	1.6%
Yellow Spring	203	0.2%
Total	**100,920**	**100.0%**

Source: Nielsen-Claritas, via Valley Health, 2013.
* Demographic data were unavailable for Ridgeway, Capon Springs, and Junction.

The War community included 100,920 people in 2013

…

The primary service area accounts for 16% of the total community's population

In 2013, the War community was estimated to have a population of approximately 101,000 persons. Sixteen percent of the population resided in the primary service area (**Exhibit 1**).

Exhibit 2 presents the geographic origins by county of War's inpatients and emergency department encounters.

Exhibit 2: Inpatient and Emergency Department Discharges, 2012

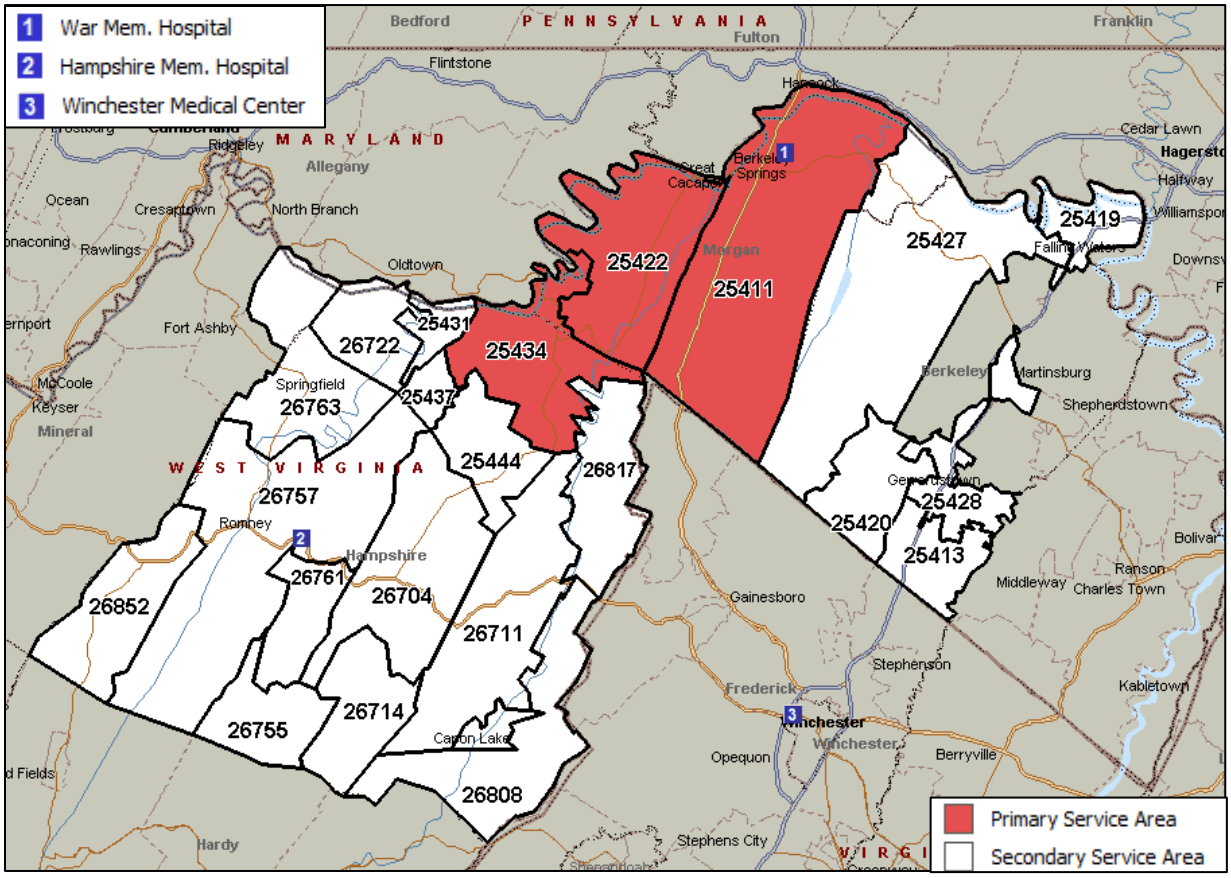
County	Number of Inpatient Discharges	Percent of Total Inpatient Discharges	Number of ED Discharges	Percent of ED Discharges
PSA	**358**	**77.5%**	**5,140**	**75.1%**
Morgan	358	77.5%	5,140	75.1%
SSA	**23**	**5.0%**	**399**	**5.8%**
Berkeley	17	3.7%	383	5.6%
Hampshire	6	1.3%	16	0.2%
PSA and SSA	**381**	**82.5%**	**5,539**	**80.9%**
Other Areas	**81**	**17.5%**	**1,308**	**19.1%**
Total	**462**	**100.0%**	**6,847**	**100.0%**

Source: Valley Health, 2012

In 2012, the community collectively accounted for 83 percent of the hospital's inpatient discharges and 81 percent of its emergency department discharges. The majority (78 percent) of the hospital's inpatients originated from Morgan County, the primary service area (**Exhibit 2**).

Exhibit 3 presents a map displaying the 29 ZIP codes that comprise War's community, including its primary and secondary service areas.

Exhibit 3: War Memorial Hospital Community



Sources: Microsoft MapPoint and Valley Health, 2012.

SECONDARY DATA ASSESSMENT

This section presents secondary data regarding health needs in War Memorial Hospital's community.

Demographics

Population characteristics and changes play a role in influencing the health issues of and services needed by communities (**Exhibit 4**).

Exhibit 4: Percent Change in Population by County and Town, 2013-2018

County and Town	Total Population 2013	Total Population 2018	Percent Change in Population 2013-2018
PSA	**16,538**	**16,471**	**-0.4%**
Morgan	**16,538**	**16,471**	**-0.4%**
Berkeley Springs	12,731	12,667	-0.5%
Great Cacapon	1,741	1,758	1.0%
Paw Paw	2,066	2,046	-1.0%
SSA	**84,382**	**86,255**	**2.2%**
Berkeley	**61,584**	**63,903**	**3.8%**
Bunker Hill	7,393	7,761	5.0%
Falling Waters	9,680	9,984	3.1%
Gerrardstown	4,454	4,745	6.5%
Hedgesville	14,303	14,643	2.4%
Inwood	11,172	11,804	5.7%
Martinsburg	14,582	14,966	2.6%
Ridgeway	N/A	N/A	N/A
Hampshire	**22,798**	**22,352**	**-2.0%**
Augusta	4,247	4,235	-0.3%
Bloomery	1,340	1,349	0.7%
Capon Bridge	2,032	2,086	2.7%
Capon Springs	N/A	N/A	N/A
Delray	1,038	1,038	0.0%
Green Spring	757	736	-2.8%
High View	1,507	1,461	-3.1%
Junction	N/A	N/A	N/A
Levels	292	291	-0.3%
Points	171	160	-6.4%
Purgitsville	1,080	1,054	-2.4%
Rio	401	385	-4.0%
Romney	6,219	5,955	-4.2%
Shanks	975	917	-5.9%
Slanesville	883	861	-2.5%
Springfield	1,653	1,629	-1.5%
Yellow Spring	203	195	-3.9%
Total	**100,920**	**102,726**	**1.8%**

Source: Nielsen-Claritas via Valley Health, 2013.

The total community population is expected to increase 1.8% from 2013-2018

…

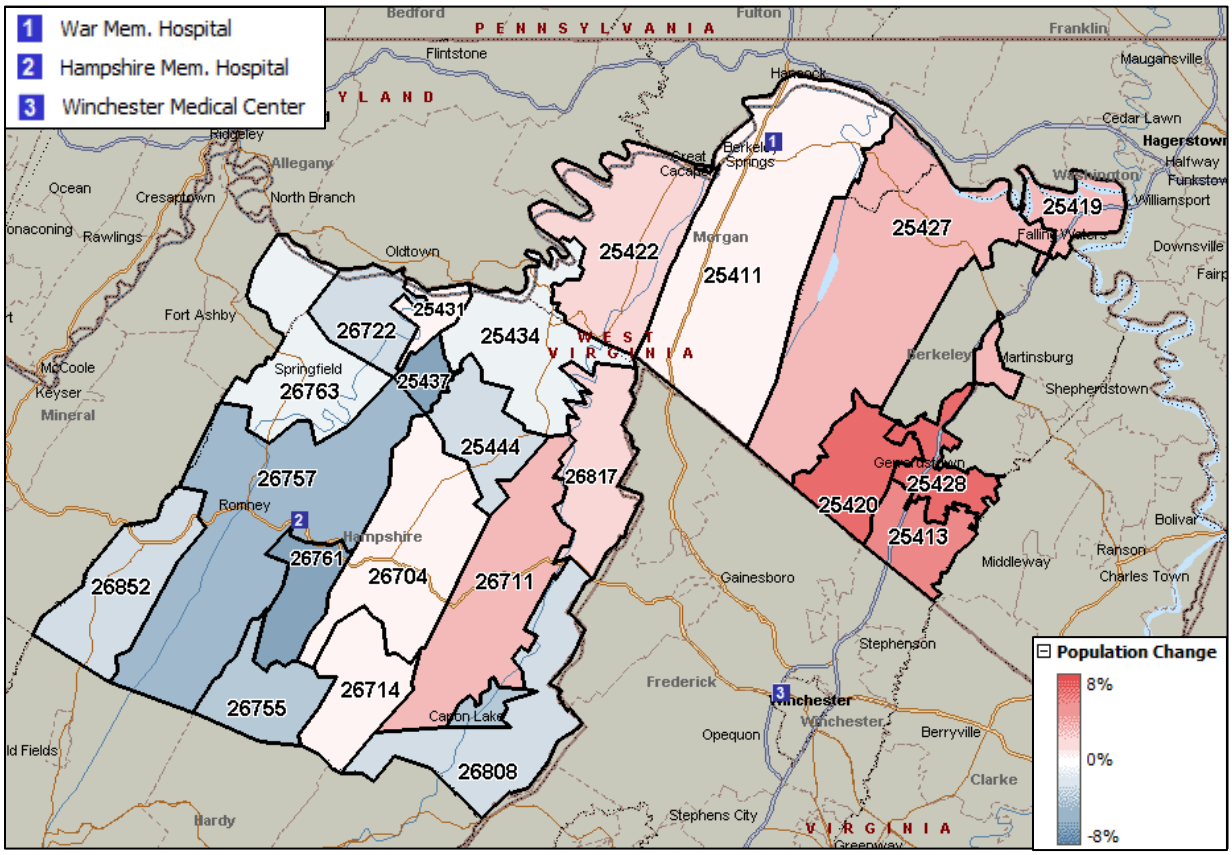
The populations of Hampshire and Morgan Counties are expected to decline in population, while the parts of Berkeley County within the community are expected to increase

Overall, the population living in the War community is expected to increase by 1.8 percent between 2013 and 2018 (**Exhibit 4**). West Virginia's total population is expected to increase by 2.2 percent between 2010 and 2020.[2]

[2]University of West Virginia College of Business and Economics. (2013). *West Virginia Population Projection by Age and Sex.* Retrieved from: http://www.be.wvu.edu/demographics/populationprojection.htm

Rates of projected population change vary by county and ZIP code **(Exhibits 4 and 5)**.

Exhibit 5: Population Change by ZIP Code, 2013-2018



Sources: Microsoft MapPoint and Nielsen-Claritas via Valley Health, 2013.

ZIP codes 25420 (Gerrardstown) and 25428 (Inwood) in Berkeley County are expecting the highest levels of growth while Hampshire County ZIP codes are expecting the steepest declines **(Exhibits 4 and 5)**.

Exhibit 6 illustrates the number of residents by age and sex in 2013 and projected for 2018.

Exhibit 6: Percent Change in Population by Age/Sex Cohort, 2013-2018

Age/Sex Cohort	Total Population 2013	Total Population 2018	Percent Change in Population 2013-2018
Female 0-17	11,342	11,249	-0.8%
Male 0-17	11,961	11,888	-0.6%
Female 18-44	16,308	15,997	-1.9%
Male 18-44	16,346	16,047	-1.8%
Female 45-64	14,669	14,673	0.0%
Male 45-64	14,781	14,661	-0.8%
Female 65+	8,322	9,746	17.1%
Male 65+	7,191	8,465	17.7%
Total	**100,920**	**102,726**	**1.8%**

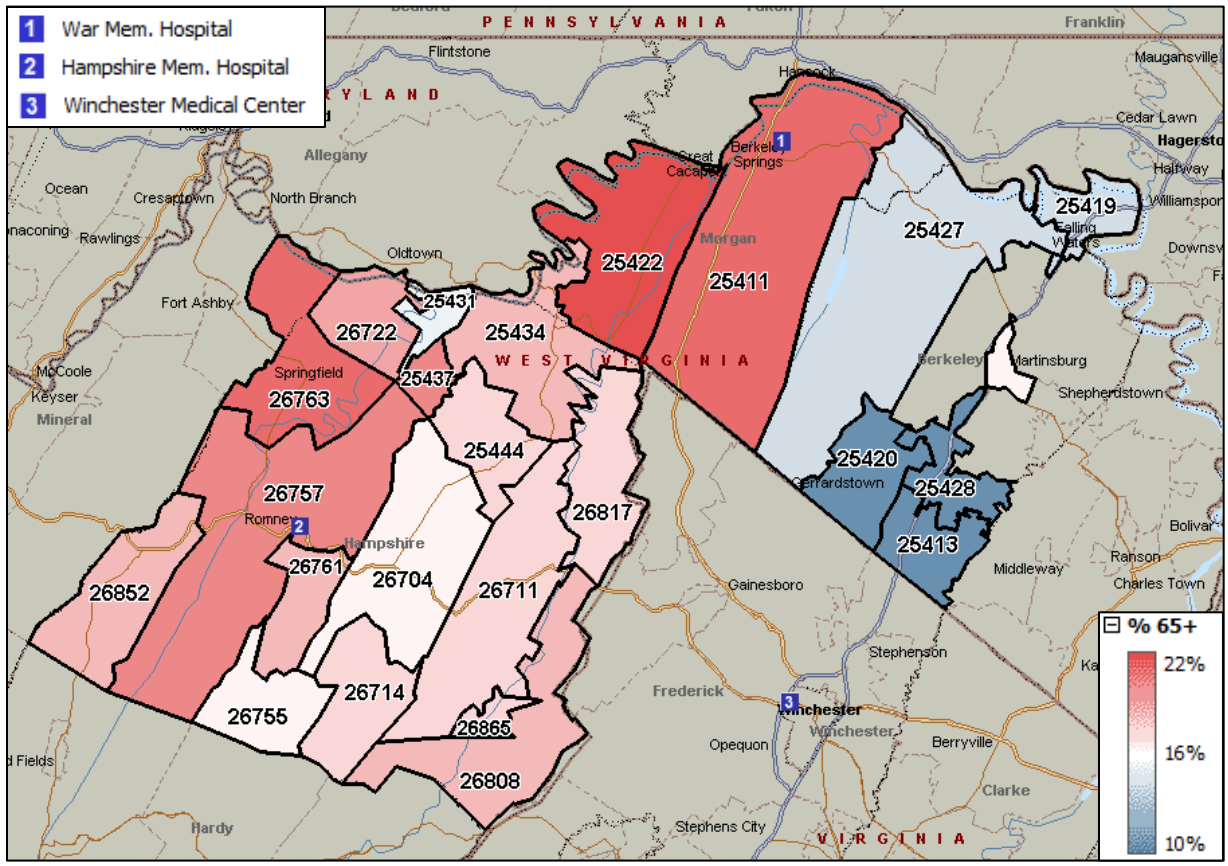
Source: Nielsen-Claritas via Valley Health, 2013.

The community population is aging

The number of residents aged 65 years and over is expected to increase rapidly while other cohorts are expected to decline. The aging of the population, coupled with the impact of anticipated health insurance coverage expansions associated with health reform, may increase demand for health services (**Exhibit 6**).

Exhibit 7 indicates the percent of the population aged 65 and over in the community.

Exhibit 7: Percent of Population Aged 65+ by ZIP Code, 2013



Sources: Microsoft MapPoint and Nielsen-Claritas via Valley Health, 2013.

The ZIP codes with the highest percentages of people aged 65 and over are 25422 (Great Cacapon), and 26763 (Springfield) (**Exhibit 7**).

Exhibit 8 indicates the distribution of the population by race in the War community.

Exhibit 8: Distribution of Population by Race, 2013

Race	Total Population 2013	Total Population 2018	Percent Change in Population 2013-2018
American Indian / Alaska Native	292	313	7.2%
Asian	525	606	15.4%
Black or African American	3,993	4,585	14.8%
Native Hawaiian / Pacific Islander	39	55	41.0%
Some Other Race	992	1,200	21.0%
Two or More Races	2,096	2,491	18.8%
White	92,983	93,476	0.5%
Total	**100,920**	**102,726**	**1.8%**

Source: Nielsen-Claritas via Valley Health, 2013.

The community was 92% White in 2013

Approximately 92 percent of the community's population is White. Non-White populations are expected to grow from 7.9 percent to 9.0 percent of the total population from 2013-2018 (**Exhibit 8**). The gradually growing diversity of the community is important to recognize given the presence of health disparities and barriers to access to services experienced by different groups.

Exhibit 9 indicates the distribution of the population by ethnicity.

Exhibit 9: Distribution of the Population by Ethnicity, 2013

Ethnicity	Total Population 2013	Total Population 2018	Percent Change in Population 2013-2018
Hispanic or Latino	2,888	3,494	21.0%
Not Hispanic or Latino	98,032	99,232	1.2%
Total	**100,920**	**102,726**	**1.8%**

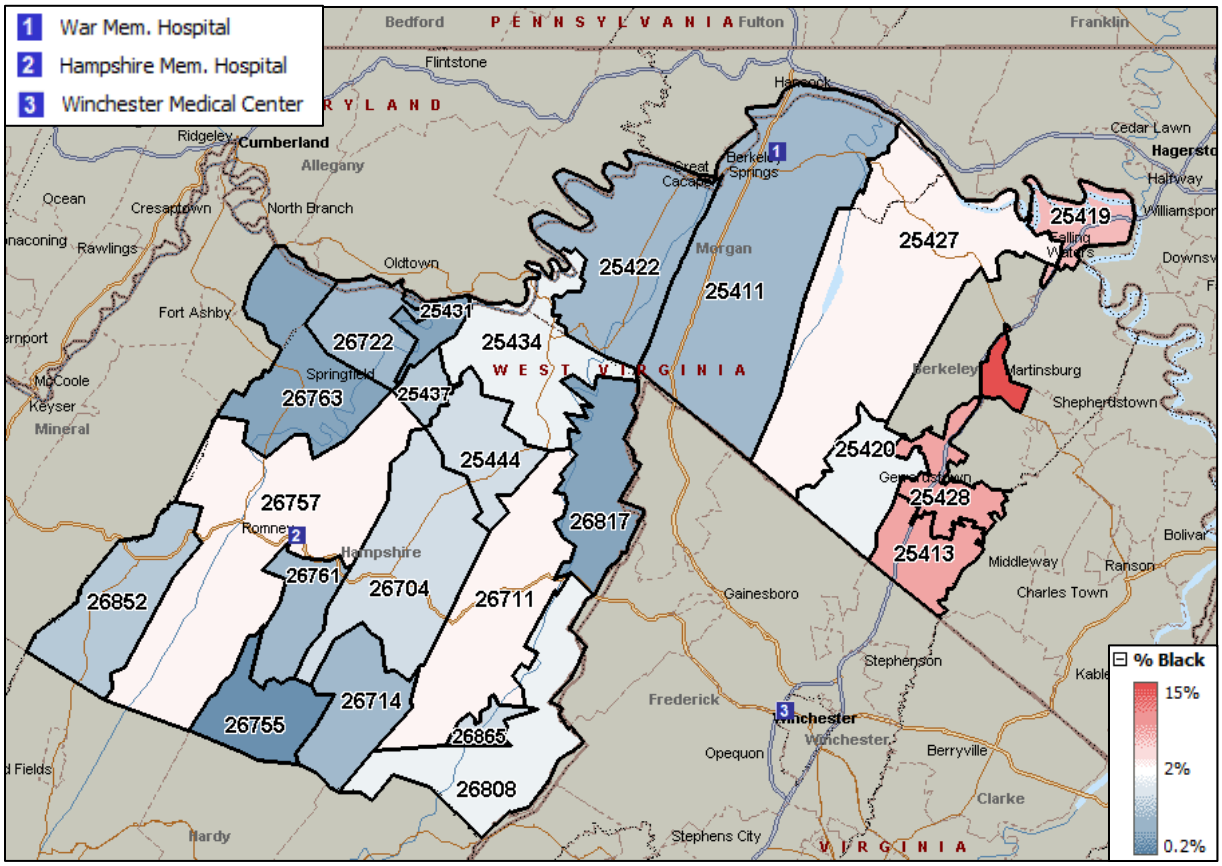
Source: Nielsen-Claritas via Valley Health, 2013.

2.9 % of the community identified as Hispanic or Latino

Projections indicate that the Hispanic or Latino population is expected to increase more rapidly than the non-Hispanic or Latino population, and to increase from 2.9 percent to 3.4 percent of the total community from 2013 to 2018 (**Exhibit 9**).

Exhibits 10 and **11** illustrate the locations in the community where the percentage of the population that is Black and Hispanic or Latino is highest. The percentage of Black and Hispanic or Latino residents is highest in ZIP codes 25401 (Martinsburg), 25428 (Inwood), and 25413 (Bunker Hill) in Berkeley County.

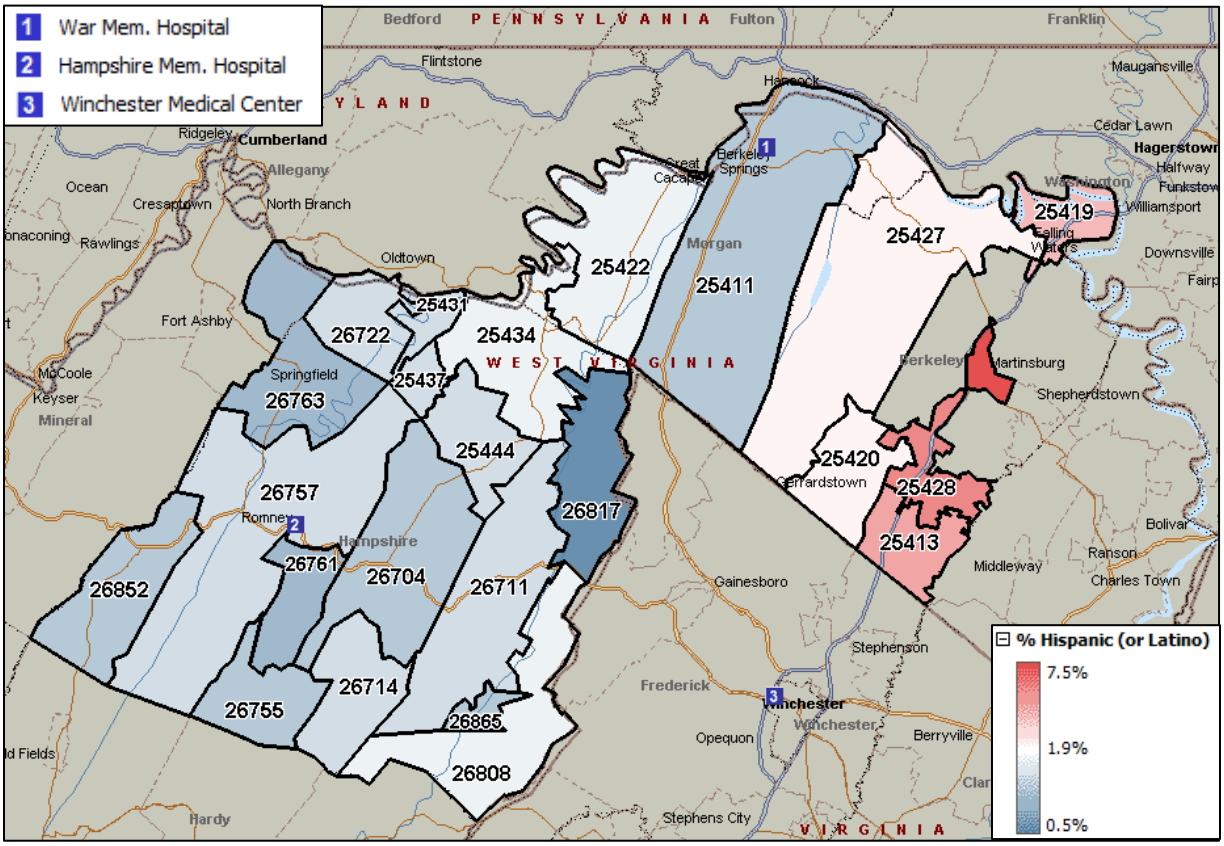
Exhibit 10: Percent of Population – Black, 2013



Sources: Microsoft MapPoint and Nielsen-Claritas via Valley Health, 2013.

At 14.2% of the population, ZIP Code 25401 (Martinsburg) had the highest proportion of Black residents

Exhibit 11: Percent of Population – Hispanic (or Latino), 2013



Sources: Microsoft MapPoint and Nielsen-Claritas via Valley Health, 2013.

Berkeley County ZIP codes 25401 (Martinsburg), 25428 (Inwood), and 25413 (Bunker Hill) had the highest percentage of Hispanic or Latino residents in the community

Other demographic indicators are presented in **Exhibit 12**.

Exhibit 12: Demographic Indicators, 2011

County	Population 25 + Without a High School Diploma	Population 5+ Who are Linguistically Isolated
PSA		
Morgan	15.9%	0.1%
SSA		
Berkeley	15.1%	1.7%
Hampshire	22.4%	0.4%
West Virginia	**17.4%**	**0.7%**
U.S.	**14.6%**	**8.7%**

Source: U.S. Census Bureau, ACS 5 year estimates, 2011.

Hampshire County had higher rates of residents aged 25+ who did not graduate from high school than the West Virginia or U.S. averages

Key findings include:

- Hampshire County had higher rates than the state and U.S. averages of residents aged 25 and older who did not graduate high school. West Virginia as a whole compares poorly to the U.S. average for this measure. Although Morgan and Berkeley Counties compare favorably to the state average, they have slightly higher rates of non-graduates than the U.S.
- Comparatively few community residents were linguistically isolated. Linguistic isolation is defined as the population aged five and older who speak a language other than English and speak English less than "very well." At nearly two percent, Berkeley County reported the highest rate of linguistic isolation.

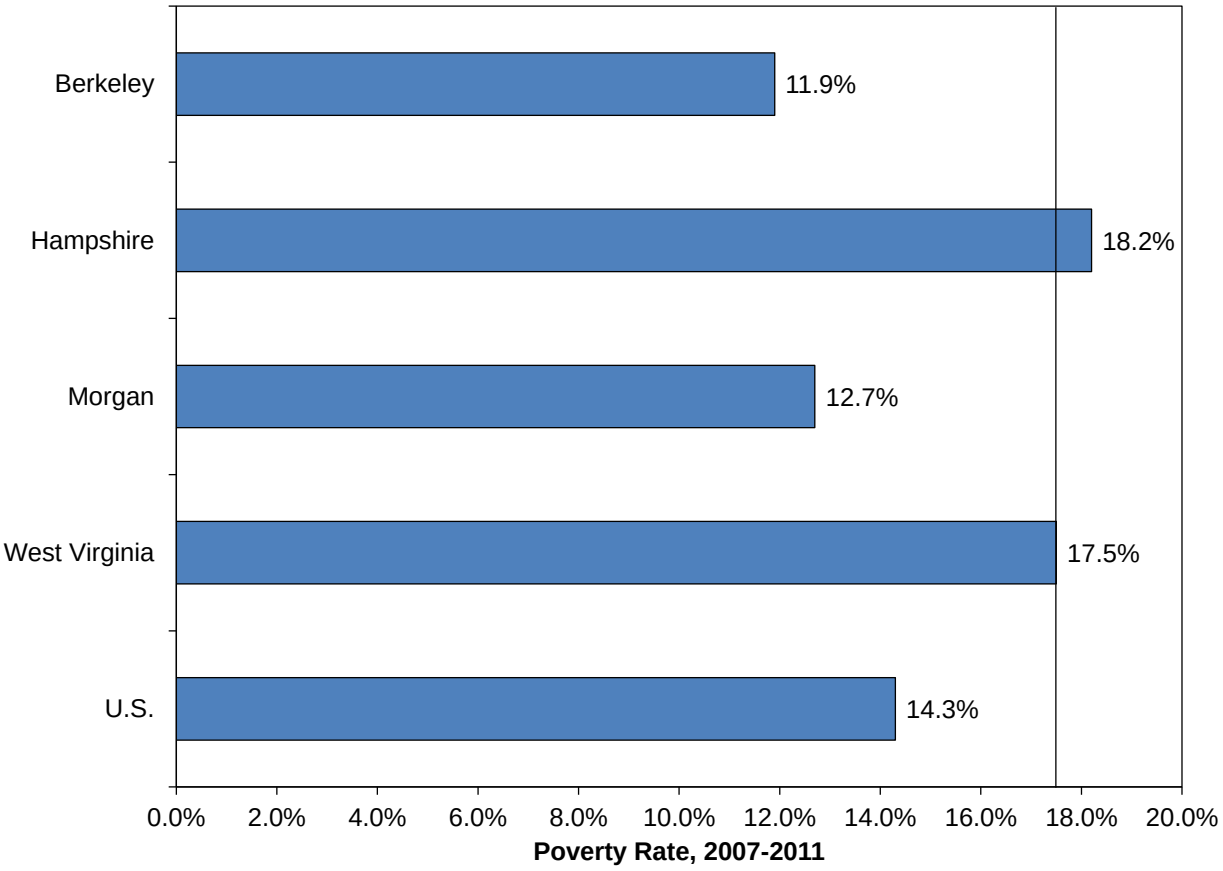
Economic Indicators

The following types of economic indicators with implications for health were assessed: (1) people in poverty; (2) household income; (3) unemployment rate; (4) crime; (5) utilization of government assistance programs; (6) insurance status; and (7) West Virginia and local budget adjustments.

1. People in Poverty

Many health needs are associated with poverty. According to the U.S. Census, in 2011 approximately 14 percent of people in the U.S. and nearly 18 percent of people in West Virginia lived in poverty (**Exhibit 13**).

Exhibit 13: People in Poverty by County, 2007-2011

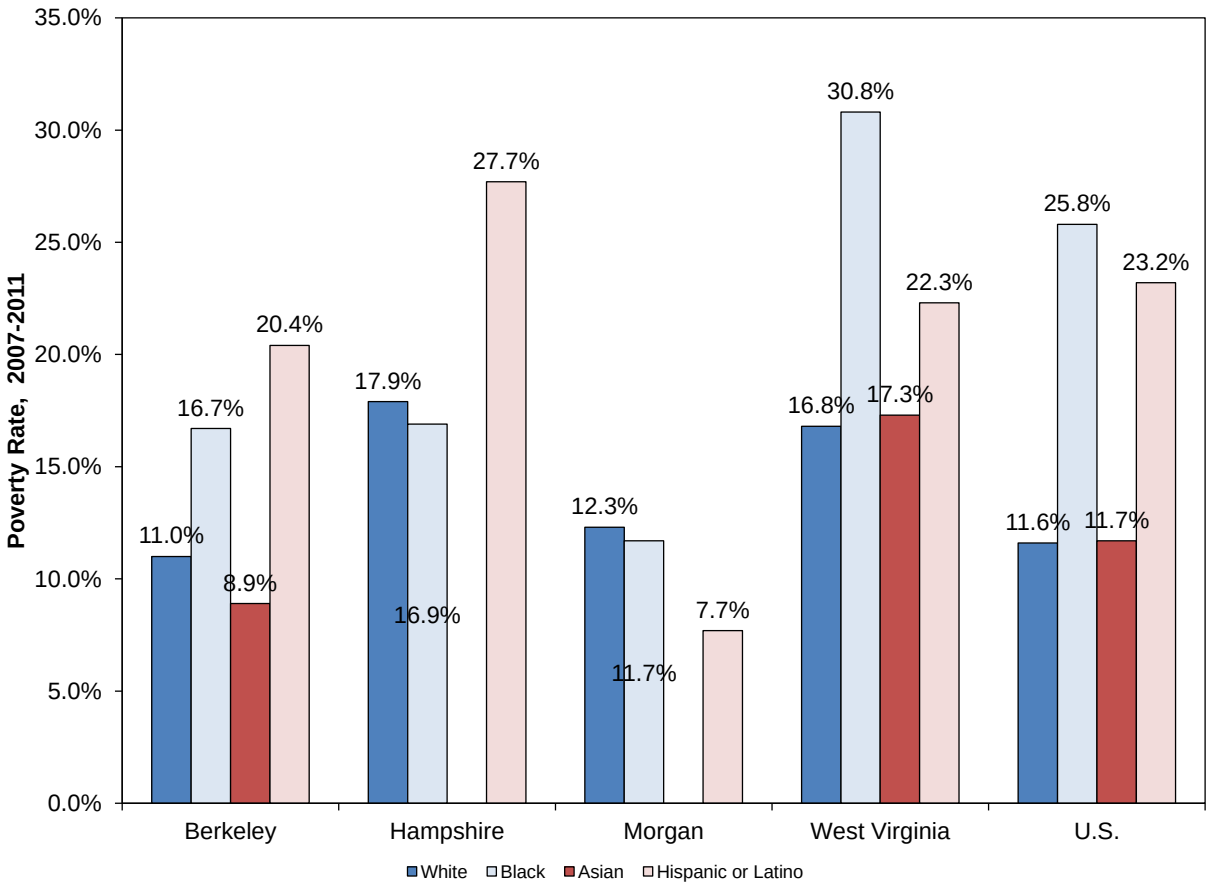


Source: U.S. Census Bureau, ACS 5 year estimates, 2007-2011.
The vertical line signifies the poverty rate in West Virginia.

Hampshire County reported poverty rates higher than the West Virginia average. Berkeley and Morgan Counties' poverty rates were lower than the state and U.S. averages (**Exhibit 13**).

Exhibit 14 presents poverty rates by race for each county in the community.

Exhibit 14: People in Poverty by Race and County, 2007-2011



Source: U.S. Census Bureau, ACS 5 year estimates, 2007-2011.
Poverty data were not available for the Asian population for Hampshire and Morgan Counties.

Poverty rates in the White population were highest in Hampshire County in 2011. The poverty rate for the Hispanic or Latino population in Hampshire and Berkeley Counties were higher than other cohorts (**Exhibit 14**).

2. Household Income

The Federal Poverty Level (FPL) is used by many public and private agencies to assess household needs for low-income assistance programs. In 2013, 32 percent of all households in War Memorial Hospital's total community, and 41 percent of households in the PSA, had incomes below $25,000, an approximation of the federal poverty level (FPL) for a family of four. The community as a whole has experienced a 38 percent increase in the percentage of households with incomes under $25,000 since 2009. Hampshire County reported the lowest average household income and the highest percentage of households with incomes under $25,000 (**Exhibit 15**).

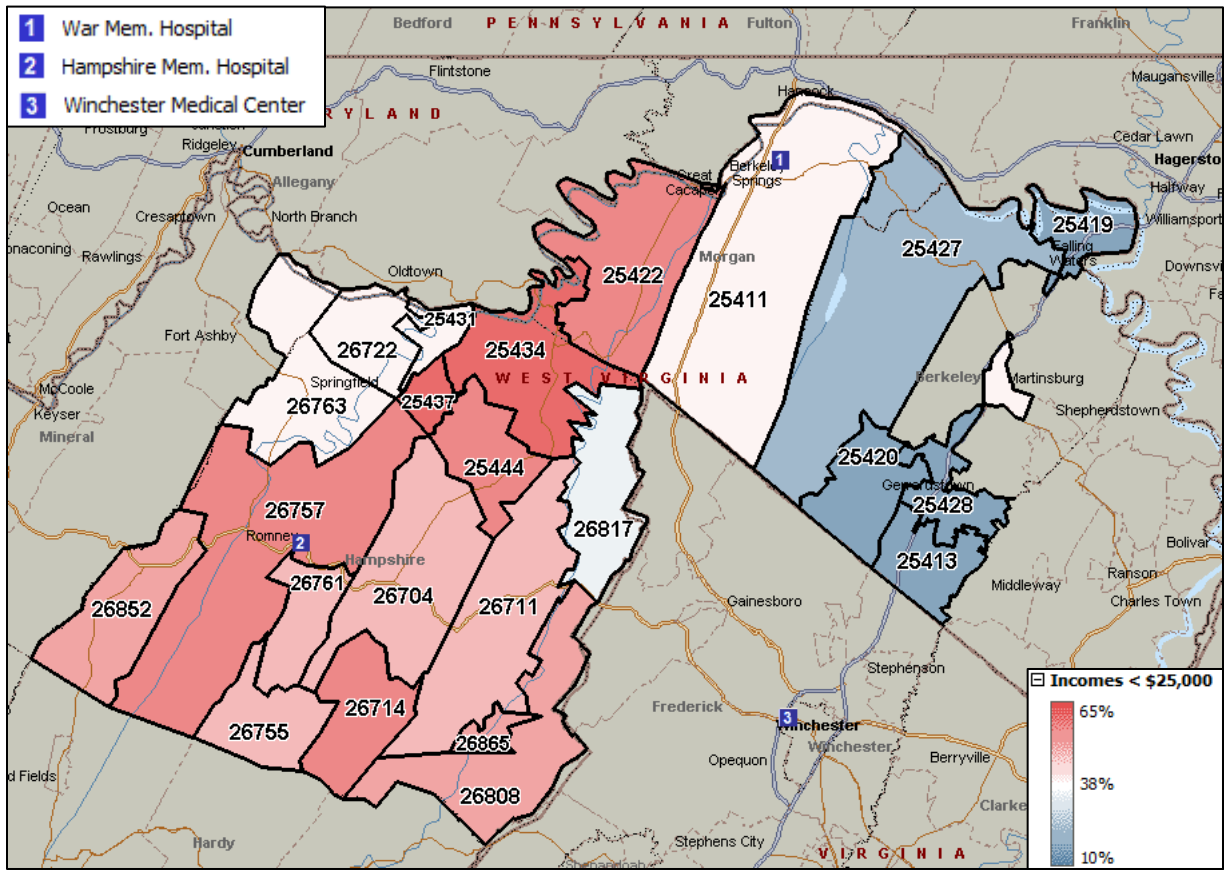
Exhibit 15: Percent of Lower-Income Households by County and Town, 2013

County and Town	Average Income	Percent Less Than $25,000 2009	Percent Less Than $25,000 2013	Percent <25,000 Increase or (Decrease) 2009-2013
PSA	**40,440**	**23.2%**	**41.1%**	**77.1%**
Morgan	**40,440**	**23.2%**	**41.1%**	**77.1%**
Berkeley	43,131	22.6%	36.2%	60.5%
Great Cacapon	34,186	27.5%	52.4%	90.6%
Paw Paw	29,783	23.7%	60.2%	153.6%
SSA	**52,769**	**23.1%**	**30.1%**	**30.1%**
Berkeley	**60,015**	**20.6%**	**23.2%**	**12.5%**
Bunker Hill	65,108	14.5%	17.8%	22.3%
Falling Waters	66,135	17.0%	18.2%	7.0%
Gerrardstown	62,807	16.4%	17.4%	5.6%
Hedgesville	63,277	16.9%	21.5%	27.5%
Inwood	63,728	16.6%	15.4%	-7.0%
Martinsburg	48,210	31.2%	36.7%	17.8%
Ridgeway	N/A	N/A	N/A	N/A
Hampshire	**33,871**	**29.8%**	**47.9%**	**61.0%**
Augusta	34,616	31.4%	46.4%	47.6%
Bloomery	43,651	27.7%	31.2%	12.7%
Capon Bridge	34,821	18.3%	47.2%	157.8%
Capon Springs	N/A	N/A	N/A	N/A
Delray	31,734	30.4%	55.6%	83.3%
Green Spring	34,252	29.2%	38.9%	33.1%
High View	34,507	16.2%	50.5%	212.0%
Levels	33,083	25.7%	38.3%	49.1%
Junction	N/A	N/A	N/A	N/A
Points	28,808	23.6%	58.5%	147.3%
Purgitsville	34,798	29.9%	49.8%	66.3%
Rio	35,613	29.9%	46.5%	55.7%
Romney	29,935	36.4%	53.8%	47.8%
Shanks	35,365	30.5%	46.2%	51.2%
Slanesville	31,468	22.8%	56.5%	148.4%
Springfield	38,247	32.3%	36.9%	14.2%
Yellow Spring	35,976	16.5%	48.8%	196.2%
Total	**50,613**	**23.1%**	**32.0%**	**38.3%**

Source: Nielsen-Claritas via Valley Health, 2013.

Exhibit 16 presents a map of the percent of households with incomes under $25,000 in the community.

Exhibit 16: Percentage of Households with Incomes under $25,000 by ZIP Code, 2013



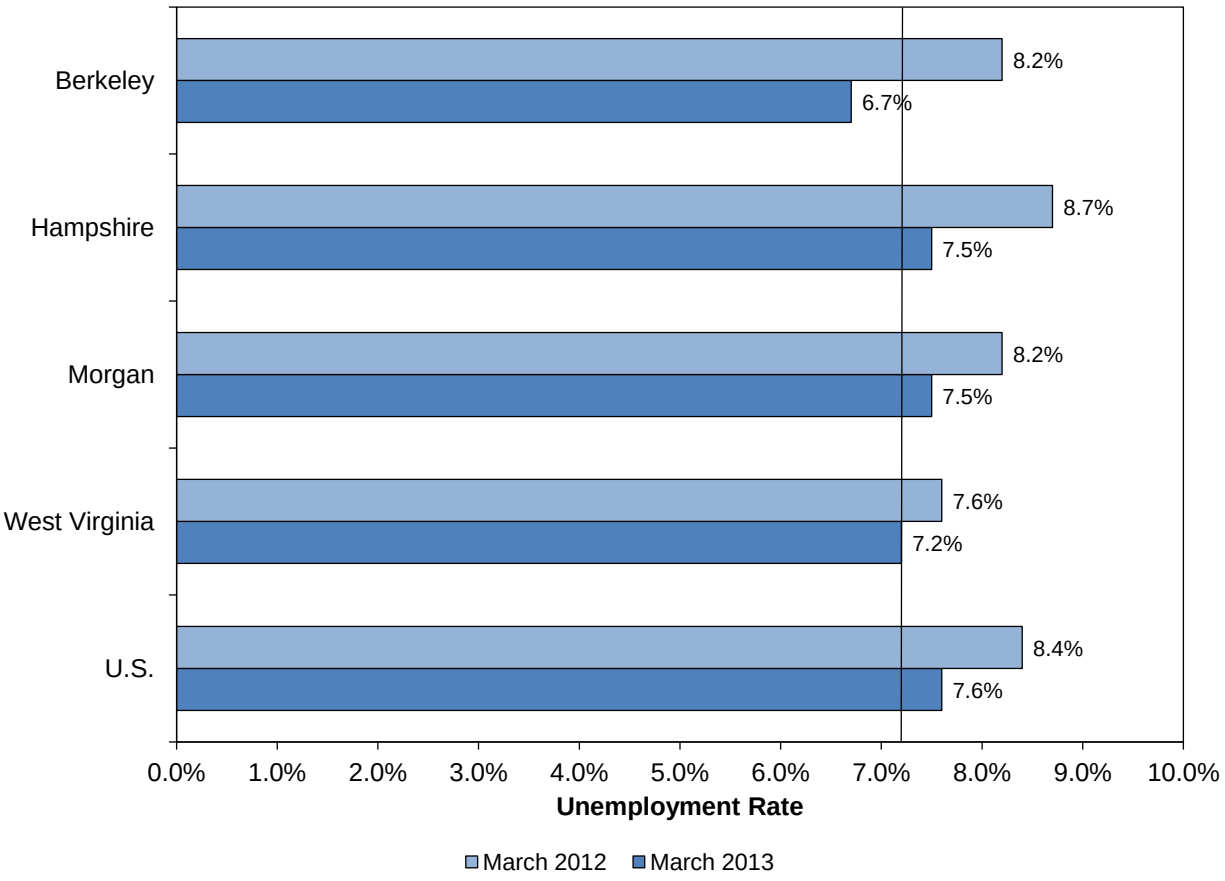
Sources: Microsoft MapPoint and Nielsen-Claritas via Valley Health, 2013.

The highest proportions of households with incomes under $25,000 in 2013 were located in Hampshire and Morgan Counties, particularly ZIP codes 25434 (Paw Paw) 25437 (Points) and 25444 (Slanesville) (**Exhibit 16**).

3. Unemployment Rates

Exhibit 17 shows the unemployment rate for each county compared to West Virginia and national averages.

Exhibit 17: Unemployment Rates by County, 2012 and 2013



Source: Bureau of Labor Statistics, 2013.
The vertical line signifies the unemployment rate in West Virginia in March 2013.

Hampshire and Morgan Counties reported higher unemployment rates than the West Virginia average in 2013 (**Exhibit 17**).

4. Crime

The Federal Bureau of Investigation reports data on violent crime in the United States (**Exhibit 18**).

Exhibit 18: Violent and Property Crime Rates per 100,000 Population, 2011

County	Population	Violent crime*	Property crime*	Burglary	Larceny-theft
PSA	**17,513**	**57.1**	**679.5**	**291.2**	**342.6**
Morgan	17,513	57.1	679.5	291.2	342.6
SSA	**126,551**	**111.4**	**751.5**	**257.6**	**459.1**
Berkeley	102,801	66.1	853.1	275.3	538.9
Hampshire	23,750	307.4	311.6	181.1	113.7
West Virginia	**1,846,372**	**40.8**	**165.5**	**55.3**	**100.6**

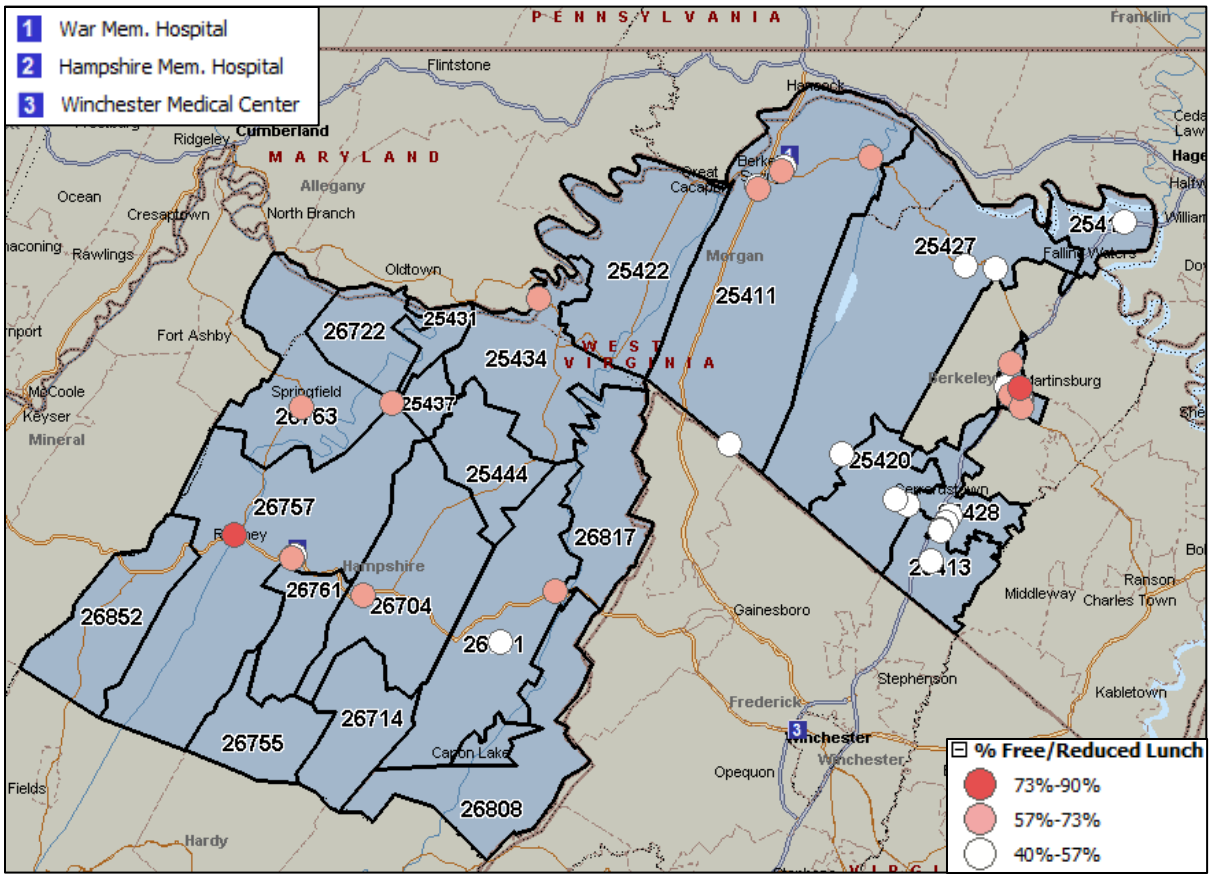
Sources: Violent crime counts retrieved from the Federal Bureau of Investigation, Uniform Crime Reports, 2012. Population 2011 estimates obtained from the U.S. Census Bureau, ACS 5 year estimates, 2007-2011. Rates calculated by Verité.
*Violent crime includes murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault; property crime includes burglary, larceny-theft, motor vehicle theft, and arson.

All counties reported higher rates of crime than the West Virginia average. Hampshire County had the highest rates of violent crime and Berkeley County reported the highest rates of property crime **(Exhibit 18)**.

5. Eligibility for the National School Lunch Program

Schools participating in the National School Lunch Program are eligible to receive financial assistance from the United States Department of Agriculture (USDA) to provide free or reduced-price meals to low-income students. Schools with 40 percent or more of their student bodies receiving this assistance are eligible for school-wide Title I funding, designed to ensure that students meet grade-level proficiency standards (**Exhibit 19**).

Exhibit 19: Public Schools with over 40 Percent of Students Eligible for Free or Reduced-Price Lunches, School Year 2012-2013



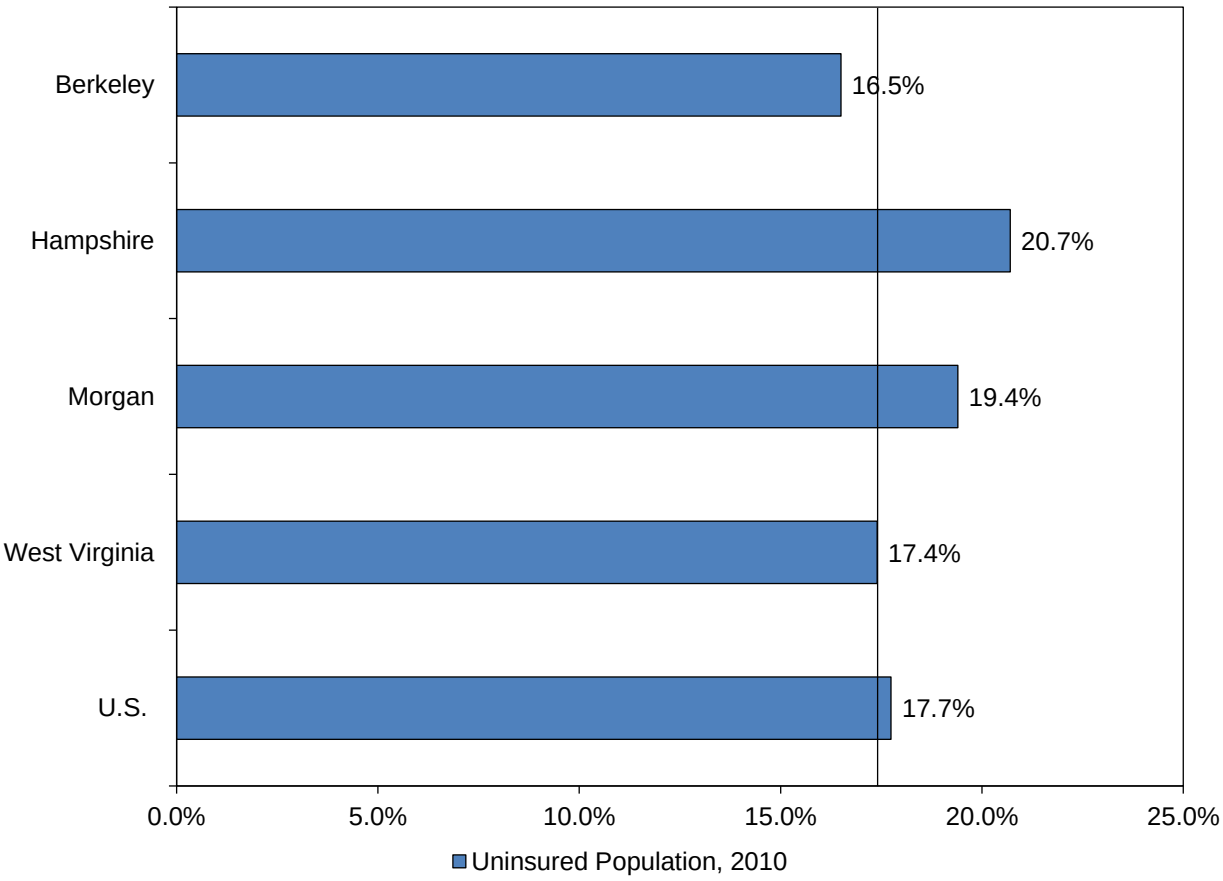
Sources: Microsoft MapPoint, Office of Child Nutrition, West Virginia Department of Education, 2012, and Office of School Nutrition Programs, West Virginia Department of Education, 2012.
* Although 35 schools have over 40 percent of their student body eligible for free or reduced lunch, due to the proximity of certain schools, fewer icons can be seen on the map.

In the War community, 35 schools, located in every county, were eligible for Title 1 funds (**Exhibit 19**).

6. Insurance Status

Exhibit 20 displays the percent of the population that is uninsured by county in the War community.

Exhibit 20: Uninsured Population by County, 2010



Source: U.S. Census Small Area Health Insurance Estimates (SAIHE), 2010.

Hampshire and Morgan Counties had higher uninsurance rates than the West Virginia and U.S. averages. Hampshire County had the highest uninsurance rate in the community **(Exhibit 20)**.

7. West Virginia and Local Budgets

The recent economic recession has had major implications for levels of state and county resources devoted to health care, public health, and social services.

West Virginia has significantly reduced funding appropriated to these services. Relevant highlights from the 2014 budget[3] include:

[3]The State of West Virginia Executive Budget Fiscal Year 2014. Retrieved on May 11, 2013 from http://www.budget.wv.gov/SiteCollectionDocuments/VIBR2014.pdf.

- The Department of Health and Human Resources (DHHR) saw an overall budget decrease of 5.0 percent.
- Budget changes for specific sections of DHHR include: Bureau for Medical Services (6.2 percent decrease); Bureau of Behavioral Health and Health Facilities (0.8 percent decrease); Bureau for Public Health (7.3 percent decrease); and Health Care Authority (4.9 percent decrease).

Highlights from county-level budgets include:

- **Berkeley County**:[4] From the general fund, the budget for mental health expenditures remained essentially steady at $55,500 in FY 2013-2014. The local health department's budget remained the same from FY 2012-2013 to FY 2013-2014 at $74,681. The total Social Services budget increased 3.1 percent in FY 2013-2014 to $108,000.
- **Hampshire County**:[5] Health and Sanitation expenditures for FY 2012-2013 totaled $65,000. Social Services expenditures were $5,000.
- **Morgan County**:[6] The Morgan County local health department's expenditures for FY 2012-2013 were $30,000. No funds were allocated to Social Services for FY 2012-2013.

Local Health Status and Access Indicators

This section examines health status and access to care data for the War community from several sources. The data include: (1) County Health Rankings; (2) West Virginia Department of Health and Human Resources; and (3) Behavioral Risk Factor Surveillance System. Indicators also were compared to Healthy People 2020 goals.

1. County Health Rankings

County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, examines a variety of health status indicators and ranks each county/city within each commonwealth or state in terms of "health factors" and "health outcomes." These health outcomes and factors are composite measures based on several variables grouped into the following categories: health behaviors, clinical care,[7] social and economic factors, and physical environment.[8] *County Health Rankings* is updated annually. *County Health Rankings 2013* relies on data from 2004 to 2012, with most data originating in 2007 to 2011.

[4] Berkeley County Budget 2013-2014. (2013). Retrieved 2013, from : http://www.berkeleycountycomm.org/pdf/financial/Levy%20Estimate%20FY%202013-2014.pdf
[5] Hampshire County 2013 Budget. (2013). Retrieved 2013, from: http://www.wvsao.gov/LocalGovernment/files/levy/county_12-13/Hampshire2013.pdf
[6] Morgan County 2013 Budget. (2013). http://www.wvsao.gov/LocalGovernment/files/levy/county_12-13/Morgan2013.pdf
[7] A composite measure of Access to Care, which examines the percent of the population without health insurance and ratio of population to primary care physicians, and Quality of Care, which examines the hospitalization rate for ambulatory care sensitive conditions, whether diabetic Medicare patients are receiving HbA1C screening, and percent of chronically ill Medicare enrollees in hospice care in the last 8 months of life.
[8] A composite measure that examines Environmental Quality, which measures the number of air pollution-particulate matter days and air pollution-ozone days, and Built Environment, which measures access to healthy foods and recreational facilities and the percent of restaurants that are for fast food.

Exhibit 21 illustrates each county's ranking for each composite category in 2013. Rankings indicate how each county in West Virginia ranked compared to the 55 counties in the state. A rank of 1 indicates the best county in West Virginia. Indicators are shaded based on the county's percentile for the state ranking. For example, Morgan County compared unfavorably to other West Virginia counties for alcohol use with a rank of 42 out of 55 counties and placing in the bottom quartile of all West Virginia counties.

Exhibit 21: County Rank among 55 West Virginia Counties, 2013

Indicator Category	Berkeley	Hampshire	Morgan
Health Outcomes	14	5	33
Mortality	21	8	34
Morbidity	10	5	24
Health Factors	13	39	8
Health Behaviors	28	41	17
Tobacco Use	32	38	37
Diet and Exercise	9	41	10
Alcohol Use	32	51	42
Sexual Activity	49	27	7
Clinical Care	10	47	21
Access to Care	15	53	42
Quality of Care	7	29	2
Social & Economic Factors	9	26	7
Education	18	39	19
Employment	18	17	23
Income	5	38	7
Family and Social Support	43	21	37
Community Safety	28	21	12
Physical Environment	35	42	3
Environmental Quality	34	29	39
Built Environment	37	46	2

Source: County Health Rankings, 2013.

Key
Top 50th percentile of WV counties (Better)
25th to 49th percentile of WV counties
Bottom 25th percentile of WV counties (Worse)

War Memorial Hospital counties frequently ranked in the bottom half of West Virginia counties for tobacco use, alcohol use, access to care,[9] and physical environment, including environmental quality [10] and built environment.[11] Hampshire County compared the least favorably, with 13 indicators ranking in the bottom half of West Virginia counties and five of those indicators ranking in the bottom 25 percent of West Virginia counties (alcohol use; clinical care, including access to care; and physical environment, including built employment). Berkeley County ranked in the bottom 25 percent of all West Virginia counties for sexual activity and family and social

[9] The percent of the population without health insurance and ratio of population to primary care physicians.
[10] The number of air pollution-particulate matter days and air pollution-ozone days.
[11] Access to healthy foods and recreational facilities and the percent of restaurants that are for fast food.

support. Morgan County ranked in the bottom quartile for alcohol use and access to care (**Exhibit 21**).

Exhibit 22 provides data for each underlying indicator of the composite categories in the County Health Rankings.[12] The County Health Rankings methodology provides a comparison of counties within a state to one another. It also is important to analyze how these same indicators compare to the national average. Cells in the tables below are shaded if the indicator for a county in the War community exceeded the national average for that indicator by more than ten percent.

[12] County Health Rankings provides details about what each indicator measures, how it is defined, and data sources at http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf

Exhibit 22: County Data Compared to U.S. Average, 2013

Indicator	Berkeley	Hampshire	Morgan
Health Outcomes			
Years of potential life lost per death before age 75 per 100,000	8,260.3	7,692.4	9,287.1
Adults reporting poor or fair health	16.7%	17.8%	22.3%
Average number of physically unhealthy days reported in the past 30 days	4.1	4.5	4.7
Average number of mentally unhealthy days reported in the past 30 days	4.1	3.1	4.4
Live births under 2500 grams (Low birth weight)	7.6%	6.7%	8.0%
Health Behaviors			
Adults reporting smoking 100 cigarettes or more and currently smoking	27.3%	28.5%	28.3%
Adults reporting BMI over 30 (obesity)	31.5%	35.2%	31.3%
Adults 20+ reporting no leisure time physical activity	29.4%	31.4%	30.8%
Reporting Binge and heavy drinking	13.0%	12.3%	10.4%
Motor vehicle crash death rate per 100,000	16.4	29.6	27.6
Chlamydia incidence rate per 100,000	262.1	112.7	85.5
Birth rate per 1,000 females aged 15-19	51.3	46.3	36.3
Clinical Care			
Population under 65 without insurance	16.5%	20.7%	19.4%
Ratio of population to primary care physicians	2,325:1	2,995:1	2,189:1
Ratio of population to dentists	2,399:1	6,117:1	5,880:1
Hospitalizations for ambulatory care sensitive conditions per 1,000 Medicare enrollees	65.6	95.3	87.2
Diabetic Medicare enrollees that receive a blood glucose screening	84.1%	84.2%	89.0%
Female Medicare enrollees that receive a mammogram	59.6%	55.7%	64.8%
Social & Economic Factors			
Number of 9th grade cohort that graduates in 4 years	80.6%	83.3%	85.5%
Adults 25-44 with some post-secondary education	51.5%	30.4%	43.0%
Population 16+ unemployed but seeking work	7.9%	7.8%	8.3%
Percent of children under 18 in poverty	21.4%	28.8%	21.7%
Percent of adults without social/emotional support	20.1%	15.6%	21.0%
Children in a single parent household	33.5%	31.7%	29.9%
Violent crime rate per 100,000	218.9	192.6	128.9
Physical Environment			
Average daily measure of fine particulate matter in the air in micrograms per cubic meter	12.8	12.7	12.9
Population exposed to water with a safety violation in the past year	0.2%	0.0%	2.0%
Recreation facilities per 100,000 population	5.7	0.0	17.1
Number of low income population not close to a grocery store	7.2%	10.2%	5.2%
Percent of restaurants classified as fast food	54.5%	41.2%	26.3%

Source: County Health Rankings, 2013.

Key	
Unreliable or missing data	-
Ranging from better than U.S. average up to 10% worse than U.S. average	
10%-50% worse than U.S average	
50-75% worse than U.S. average	
>75% worse than U.S. average	

Two or more counties in the community compared poorly to national averages for physically unhealthy days per month, smoking, motor vehicle crash death rate, the ratio of population to dentists, discharges for ambulatory care sensitive conditions, post-secondary education levels, average daily particulate matter (poor air quality), and access to recreation facilities. Hampshire and Morgan Counties reported comparatively high ratios of population to dentists (**Exhibit 22**).

2. West Virginia Department of Health and Human Services

The West Virginia Department of Health and Human Resources (WVDHHR) maintains a data warehouse that includes indicators regarding a number of health issues. In **Exhibits 23 through 27**, cells are shaded if the mortality rate for a county in the War community exceeded the West Virginia average by more than ten percent for that condition. Supplemental cancer incidence data also were gathered from the Centers for Disease Control and Prevention.

Exhibit 23 displays the leading causes of death in West Virginia and by county for the War community. It also displays the Virginia average for corresponding indicators.

Exhibit 23: Leading Causes of Death by County, 2009

Selected Causes of Death	Berkeley	Hampshire	Morgan	West Virginia 2009	Virginia 2011
Malignant neoplasms	196.4	260.0	262.4	**263.3**	**169.5**
Diseases of the heart	183.9	246.8	317.4	**280.1**	**161.3**
Hypertension and renal disease	5.8	-	0.0	**13.1**	**6.9**
Cerebrovascular diseases (stroke)	43.3	35.3	36.6	**60.1**	**41.4**
Chronic lower respiratory disease	47.2	61.7	67.1	**83.5**	**38.4**
Diabetes	30.8	39.7	30.5	**41.6**	**19.4**
Unintentional injury	57.8	61.7	48.8	**63.2**	**33.4**
Suicide	10.6	22.0	18.3	**15.8**	**12.5**
Chronic liver disease and cirrhosis	10.6	-	30.5	**13.5**	**8.1**
Alzheimer's disease	17.3	22.0	42.7	**30.7**	**23**
Influenza and pneumonia	11.6	-	0.0	**22.0**	**17.4**
Motor vehicle injury	14.4	26.4	24.4	**20.2**	**N/A**

Source: West Virginia Department of Health and Human Resources, 2009. Rates are per 100,000 population.

Key	
Rates unreliable due to small sample size sample size	-
Ranging from better than WV up to 10% worse than WV	
10-50% worse than WV	
50-75% worse than WV	
> 75% worse than WV	

West Virginia compared unfavorably to Virginia for every indicator

Morgan County compared most unfavorably to the state, reporting five indicators that were above the state average; the mortality rate related to hypertension and renal disease was more than 75 percent worse than the state average. Although the War Memorial Hospital counties compared favorably to West Virginia averages for some indicators, the state as a whole was worse than the Virginia average for every indicator **(Exhibit 23)**.

Exhibit 24 displays cancer mortality rates for West Virginia counties in the War community.

Exhibit 24: Cancer Mortality Rates by County, 2009

Cancer Mortality Rates	Berkeley	Hampshire	Morgan	West Virginia
All cancers	196.4	260.0	262.0	**263.3**
Colon	22.1	44.1	-	**21.2**
Pancreas	6.7	8.8	-	**12.7**
Trachea, bronchus, and lung	64.5	74.9	79.3	**86.4**
Breast	13.5	17.6	-	**15.6**
Prostate	7.7	8.8	-	**12.3**

Source: West Virginia Department of Health and Human Resources, 2009. Rates are per 100,000 population.

Key	
Rates unreliable due to small sample size	-
Ranging from better than WV up to 10% worse than WV	
10-50% worse than WV	
50-75% worse than WV	
> 75% worse than WV	

Hampshire County reported a colon cancer mortality rate more than double the West Virginia average. Breast cancer in Hampshire County was 13 percent worse than the state. Berkeley and Morgan Counties compared favorably to the state for cancer mortality (**Exhibit 24**).

Exhibit 25 displays cancer incidence rates from 2005 to 2009 for West Virginia counties in War's community.

Exhibit 25: Cancer Incidence Rates by County, 2005-2009

Cancer	Berkeley	Hampshire	Morgan	West Virginia
All Cancers	478.1	592.6	391.2	**490.8**
Breast	115.5	149.4	89.9	**112.2**
Colorectal	53.5	58.2	38	**52.6**
Lung	89.4	107.6	90.1	**90.4**
Melanoma	16.8	19.4	-	**19.3**
Oral	10.8	26.8	-	**11.3**
Ovary	15.4	-	-	**12.8**
Prostate	133.3	120.6	98.8	**138.4**

Source: Centers for Disease Control and Prevention, State Cancer Profiles, 2013. Rates are per 100,000 population and are age-adjusted to the 2000 U.S. standard population.

Key	
Rates unreliable due to small sample size	-
Ranging from better than WV up to 10% worse than WV	
10-50% worse than WV	
50-75% worse than WV	
> 75% worse than WV	

Hampshire County's incidence rates for five types of cancer were higher than the West Virginia average

Hampshire County reported an oral cancer incidence rate more than 75 percent worse than the West Virginia average and also reported higher incidence rates than the state average for breast,

colorectal, and lung cancers. Berkeley County's ovarian cancer rate was also higher than the state average (**Exhibit 25**).

Exhibit 26 displays communicable disease incidence rates in the West Virginia counties comprising the War Memorial Hospital community.

Exhibit 26: Communicable Disease Incidence Rates by County, 2012

County	Chlamydia	Latent Tuberculosis Incidence
Berkeley	327.4	12.5
Hampshire	162.7	-
Morgan	159.6	0.0
West Virginia	**258.1**	**13.4**

Source: West Virginia Department of Health and Human Services Bureau for Public Health, 2013.
Rates are per 100,000 population.

Key	
Ranging from better than WV up to 10% worse than WV	
10-50% worse than WV	
50-75% worse than WV	
> 75% worse than WV	

Berkeley County reported chlamydia rates that were 10 to 50 percent higher than the West Virginia average (**Exhibit 26**).

Exhibit 27 displays maternal and child health indicators for West Virginia counties in War's community. It also displays the Virginia average for corresponding indicators.

Exhibit 27: Maternal and Child Health Indicators by County, 2011

Indicator	Berkeley	Hampshire	Morgan	West Virginia 2009	Virginia 2011
Low birth weight infants	7.8%	6.8%	10.5%	**9.2%**	**8.0%**
Teen birth rate (aged 15-19)*	50.4	56.0	32.0	**49.2**	**24.1**
No prenatal care in first trimester	15.0%	13.6%	22.4%	**17.9%**	**17.3%**
Smoking during pregnancy	20.6%	28.7%	24.8%	**27.2%**	**N/A**
Infant mortality rate**	13.3	0.0	18.5	**7.8**	**6.7**

Sources: West Virginia Department of Health and Human Resources, 2009 and U.S. Census, ACS 5-year estimates, 2005-2009.
*Rates per 1,000 females aged 15-17 were calculated by Verité using U.S. Census, ACS 5-year estimates, 2005-2009.
**Rate per 1,000 live births.

Key	
Rates unreliable due to small sample size	-
Ranging from better than WV up to 10% worse than WV	
10-50% worse than WV	
50-75% worse than WV	
> 75% worse than WV	

Although most counties compare well to the state for teen pregnancy, West Virginia's rate is double that of Virginia

Berkeley and Morgan Counties reported infant mortality rates that were above the West Virginia average; Morgan County's rate was more than 75 percent worse than the state. Hampshire County reported a teen birth rate that was 14 percent higher than the state average. Although most of the counties in the community compare favorably to the state for teen pregnancy, West Virginia's rate is more than double that of Virginia (**Exhibit 27**).

3. Behavioral Risk Factors Surveillance System

Data collected by the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSSS) are based on a telephone survey that gathers data on various health indicators, risk behaviors, healthcare access, and preventive health measures. Data are collected for the entire U.S. Analysis of BRFSS data can identify localized health issues and trends, and enable county, state (or commonwealth), or nation-wide comparisons.

Exhibit 28 compares BRFSS indicators by county to state and U.S. averages.

Exhibit 28: BRFSS Indicators and Variation from West Virginia, 2011

Indicator		Berkeley	Hampshire	Morgan	WV	U.S.
Health Behaviors	Binge drinkers*	6.0%	4.6%	4.3%	**6.9%**	**12.0%**
	Heavy drinkers**	1.9%	4.6%	2.2%	**3.1%**	**5.3%**
	Current smoker	18.5%	26.2%	26.1%	**23.8%**	**16.7%**
	No physical activity in past 30 days	31.5%	38.5%	32.6%	**37.0%**	**25.7%**
	Sometimes, seldom, or never wear seat belt	7.4%	9.2%	6.5%	**7.6%**	**5.7%**
Access	Unable to visit doctor due to cost	16.2%	20.0%	10.9%	**17.6%**	**12.7%**
	No personal doctor/healthcare provider	14.8%	13.8%	15.2%	**18.3%**	**14.4%**
	Do not have health care coverage	11.1%	7.7%	21.7%	**14.6%**	**10.8%**
Health Conditions	Overweight or obese	64.8%	56.9%	71.7%	**65.2%**	**60.6%**
	Told have asthma	9.7%	13.8%	6.5%	**11.3%**	**12.9%**
	Told have coronary heart disease or angina	10.6%	7.7%	10.9%	**8.3%**	**6.0%**
	Told have diabetes	16.2%	6.2%	10.9%	**14.4%**	**12.4%**
Mental Health	Poor mental health > 21 days/month	11.1%	6.2%	4.3%	**9.3%**	**N/A**
Overall Health	Poor physical health > 21 days/month	15.7%	18.5%	8.7%	**12.9%**	**N/A**
	Limited by physical, mental, or emotional problems	32.2%	38.5%	37.0%	**35.4%**	**28.5%**
	Reported poor or fair health	24.1%	36.9%	19.6%	**27.8%**	**19.6%**

Source: CDC BRFSS, 2011.
*Adult males having five or more drinks on one occasion; adult females having four or more drinks on one occasion.
**Adult men having more than two drinks per day; adult women having more than one drink per day.

Key	
Ranging from better than WV up to 10% worse than WV	
10-50% worse than WV	
50-75% worse than WV	
> 75% worse than WV	

In the community, Hampshire County compared most unfavorably with six indicators that were worse than the West Virginia average; four indicators in Berkeley County and two indicators in Morgan County were 10 to 50 percent worse than the state. No indicators were more than 50 percent worse than the state (**Exhibit 28**).

4. Healthy People 2020 Goals

Health People 2020 (HP 2020) is a project of the U.S. Department of Health and Human Services (HHS). HP 2020 identifies national health priorities and works to improve public awareness regarding problematic health concerns.

Exhibit 29: Healthy People 2020 Indicators and Goals

Indicator	Berkeley	Hampshire	Morgan	HP 2020
Population with health insurance	83.5%	79.3%	80.6%	100.0%
Population with a usual source of primary care	85.2%	86.2%	84.8%	83.9%
Cancer mortality rate	196.4	260.0	262.4	160.6
Diabetes mortality rate	30.8	39.7	30.5	65.8
Heart disease mortality rate	183.9	246.8	317.4	100.8
Stroke mortality rate	43.3	35.3	36.6	33.8
Chronic liver disease and cirrhosis mortality rate	10.6	-	30.5	8.2
Unintentional injury mortality rate	57.8	61.7	48.8	36.0
Suicide mortality	10.6	22.0	18.3	10.2
Colorectal cancer incidence	53.5	58.2	38.0	38.6
Population reporting seat belt use	92.6%	90.8%	93.5%	92.4%
Binge drinkers	6.0%	4.6%	4.3%	24.3%
Heavy drinkers	1.9%	4.6%	2.2%	25.3%
Current smokers	18.5%	26.2%	26.1%	12.0%
Population reporting no leisure time physical activity	31.5%	38.5%	32.6%	32.6%
Infant mortality rate	13.3	-	18.5	6.0
Low birth weight infants	7.8%	6.8%	10.5%	7.8%
Very low birth weight infants	-	-	-	1.4%
Pregnant women receiving 1st trimester prenatal care	85.0%	86.4%	77.6%	77.9%
Pregnant mothers abstaining from smoking	79.4%	71.3%	75.2%	98.6%
Drinking water safety	99.8%	100.0%	98.0%	91.0%

Sources: CDC BRFSS, 2012; CDC State Cancer Profiles, 2013; County Health Rankings, 2013; West Virginia Department of Health and Human Services, 2012.
Rates are per 100,000 population, aside from infant mortality, which is per 1,000 live births.

Key	
Unreliable or missing data	-
Ranging from better than HP 2020 up to 10% worse than HP 2020	
10%-50% worse than HP 2020	
50-75% worse than HP 2020	
>75% worse than HP 2020	

All counties in the community were greater than 50% worse than the Healthy People 2020 goal for heart disease mortality rate and smoking

Heart disease mortality and smoking rates were more than 50 percent worse than the Healthy People 2020 goal across all three counties. Several of the counties also benchmarked poorly for health insurance coverage, cancer mortality, unintentional injury mortality, suicide, infant mortality rates, and smoking during pregnancy. Berkeley and Morgan Counties reported ten indicators each which were worse than the HP 2020 goals **(Exhibits 29)**.

Ambulatory Care Sensitive Conditions

This section examines the frequency of discharges for Ambulatory Care Sensitive Conditions (ACSC) throughout the counties in War Memorial Hospital's community and at the hospital.

ACSC are sixteen health "conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease." As such, rates of hospitalization for these conditions can "provide insight into the quality of the health care system outside of the hospital," including the accessibility and utilization of primary care, preventive care and health education. Among these conditions are: diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

Disproportionately high rates of discharges for ACSC indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.

1. County-level Analysis

Exhibit 30 indicates the percentage of hospital discharges in the War community that were for ACSCs, by payer.[13]

Exhibit 30: Discharges for ACSC by County and Payer, 2012

County	Government	Medicaid	Medicare	Other	Private	Self-Pay	Total
PSA	**25.0%**	**15.2%**	**21.9%**	**0.0%**	**13.5%**	**18.0%**	**18.9%**
Morgan	25.0%	15.2%	21.9%	0.0%	13.5%	18.0%	18.9%
SSA	**9.4%**	**10.7%**	**19.5%**	**13.3%**	**8.1%**	**18.3%**	**14.1%**
Berkeley	9.5%	7.7%	16.1%	4.8%	6.5%	21.1%	11.1%
Hampshire	9.1%	13.1%	22.8%	20.8%	12.0%	15.7%	18.0%
Total	**12.7%**	**11.3%**	**20.4%**	**9.3%**	**10.2%**	**15.3%**	**15.4%**

Source: Verité analysis of data from Valley Health, using AHRQ software, 2012.

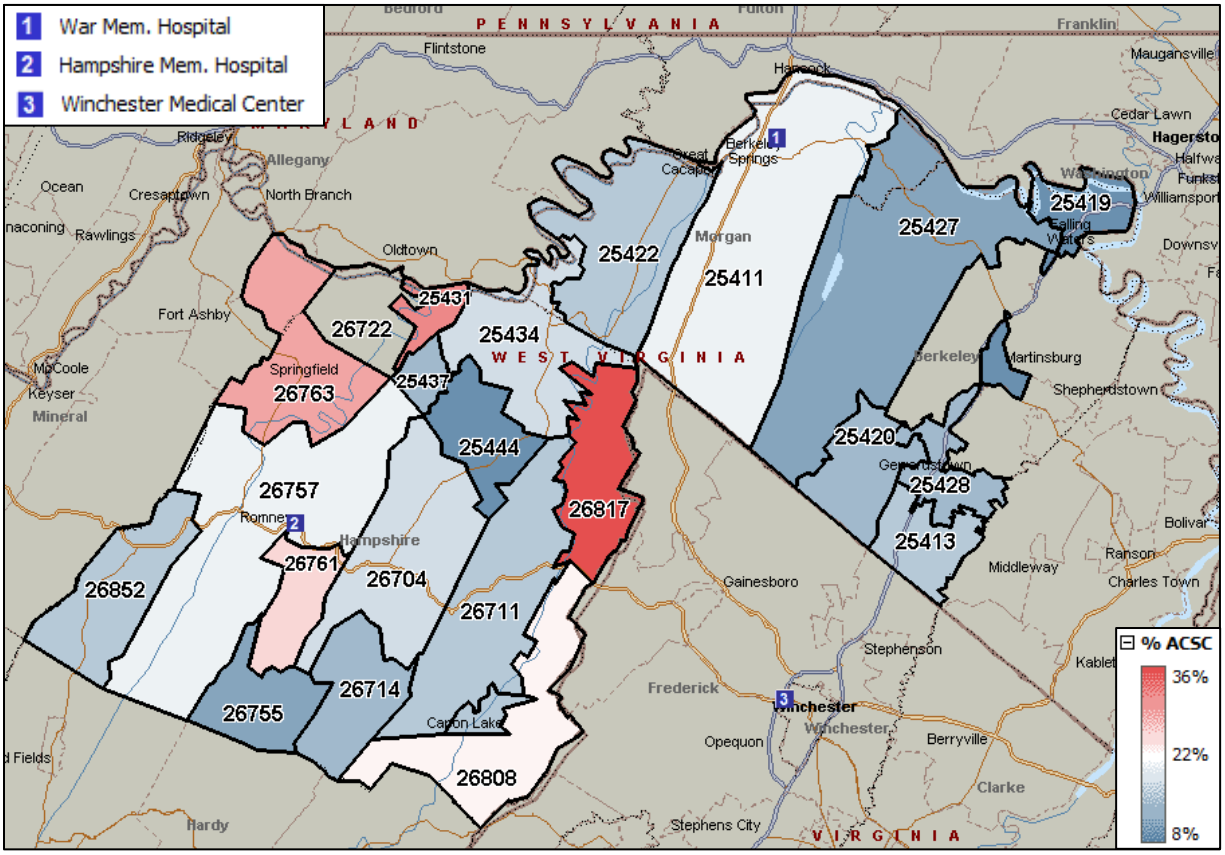
The table indicates that 15 percent of Valley Health's discharges were for ACSCs in 2012. Medicare patients had the highest proportion of discharges for ACSCs. Self-pay patients (typically uninsured individuals), had an ACSC rate slightly less than the overall figure. Morgan and Hampshire Counties had the highest percentage of discharges for ACSC (**Exhibit 30**).

[13] Discharges from all Valley Health hospitals.

2. ZIP Code-Level Analysis

Exhibit 31 illustrates the percentage of discharges for all community residents that were for ACSCs, by ZIP code.

Exhibit 31: Discharges[14] for ACSC by County/City and ZIP Code, 2012*



Sources: Microsoft MapPoint and Verité analysis of data from Valley Health, using AHRQ software, 2012.
*ZIP codes with fewer than ten discharges were excluded.

The percentage of discharges that were for ACSC was highest in Hampshire County in the following ZIP codes: 26817 (Bloomery), 25431 (Levels), and 26763 (Springfield) (**Exhibit 31**).

[14] Discharges are from all Valley Health hospitals.

3. Hospital-Level Analysis

Exhibit 32 displays the percent of discharges for ACSC from each hospital in the Valley Health system.

Exhibit 32: ACSC Discharges by Hospital, 2012

Hospital	Percent ACSC	Total Discharges
Hampshire	33.6%	470
Page	34.0%	903
Shenandoah	25.3%	1,911
War	32.5%	462
Warren	20.1%	3,145
Winchester	12.7%	26,346
Total	**15.3%**	**33,237**

Source: Verité analysis of data from Valley Health, using AHRQ software, 2012.

Of all Valley Health facilities, War Memorial Hospital had the third highest proportion of ACSC discharges

War Memorial Hospital had the third highest percent of discharges which were ACSC of all hospitals in the Valley Health system, at nearly 33 percent (**Exhibit 32**).

Exhibit 33 portrays discharges by ACSC by condition.

Exhibit 33: Discharges for ACSC by Condition, War Memorial Hospital, 2012

Condition	0 to 17	18 to 39	40 to 64	65+	Total
Bacterial pneumonia		8.0%	32.0%	60.0%	50
COPD or Asthma in Older Adults			12.1%	87.9%	33
Urinary tract infection		4.0%	8.0%	88.0%	25
Congestive heart failure			8.3%	91.7%	24
Dehydration		14.3%	42.9%	42.9%	7
Diabetes long-term complication			14.3%	85.7%	7
Asthma in Younger Adults		100.0%			1
Diabetes short-term complication			100.0%		1
Hypertension				100.0%	1
Uncontrolled diabetes				100.0%	1
Total	**0.0%**	**4.7%**	**19.3%**	**76.0%**	**150**

Source: Verité analysis of data from Valley Health, using AHRQ software, 2012.

The top four ACSC conditions at War Memorial Hospital were: bacterial pneumonia, COPD or asthma in older adults, urinary tract infection, and congestive heart failure. Patients aged 65 years and over had the highest percentage of discharges for ACSC conditions (**Exhibit 33**).

Community Need Index™ and Food Deserts

1. Dignity Health Community Need Index

Dignity Health, a California-based hospital system, developed and has made widely available for public use a *Community Need Index*™ that measures barriers to health care access by county/city and ZIP code.[15] The index is based on five social and economic indicators:

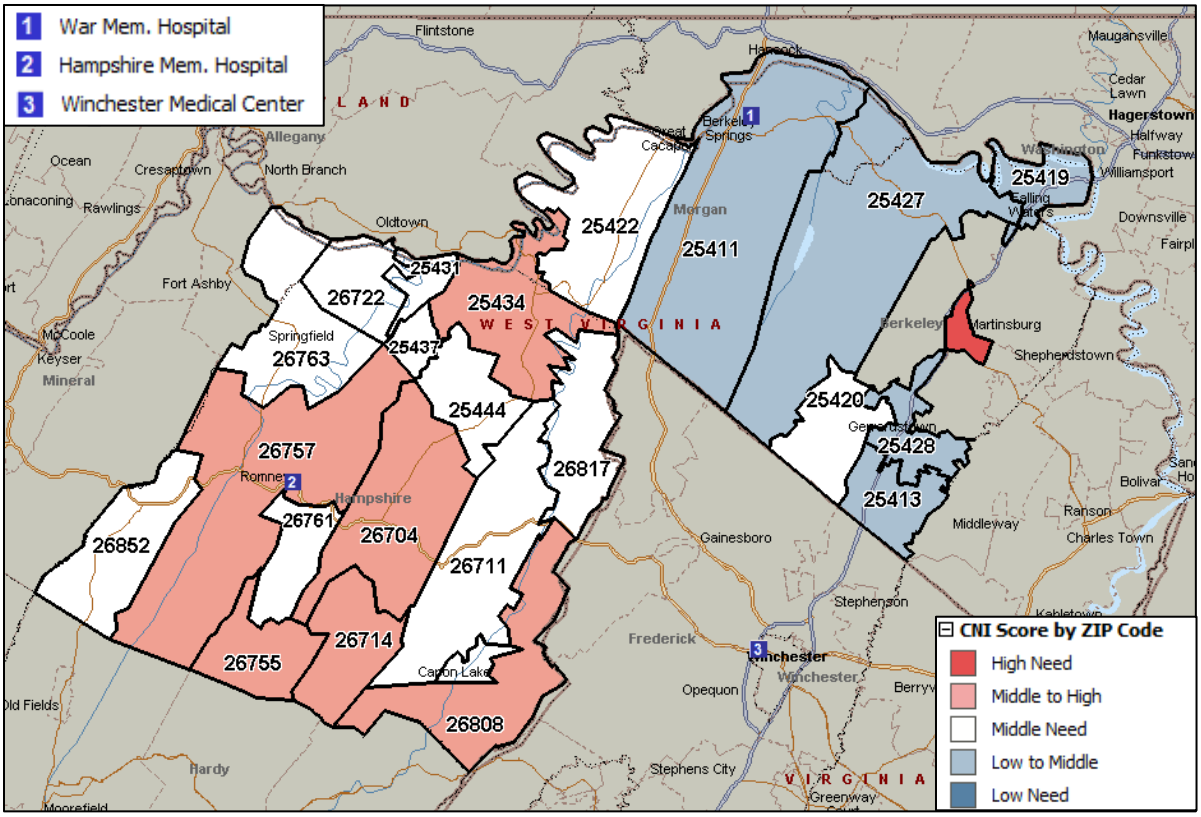
- The percentage of elders, children, and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White;
- The percentage of the population without a high school diploma;
- The percentage of uninsured and unemployed residents; and
- The percentage of the population renting houses.

The *Community Need Index*™ calculates a score for each ZIP code based on these indicators. Scores range from "Lowest Need" (1.0-1.7) to "Highest Need" (4.2-5.0).

[15] Accessed online at http://cni.chw-interactive.org/ on June 28, 2013.

Exhibit 34 presents the *Community Need Index™* (CNI) score of each ZIP code in the War community.

Exhibit 34: Community Need Index™ Score by ZIP Code



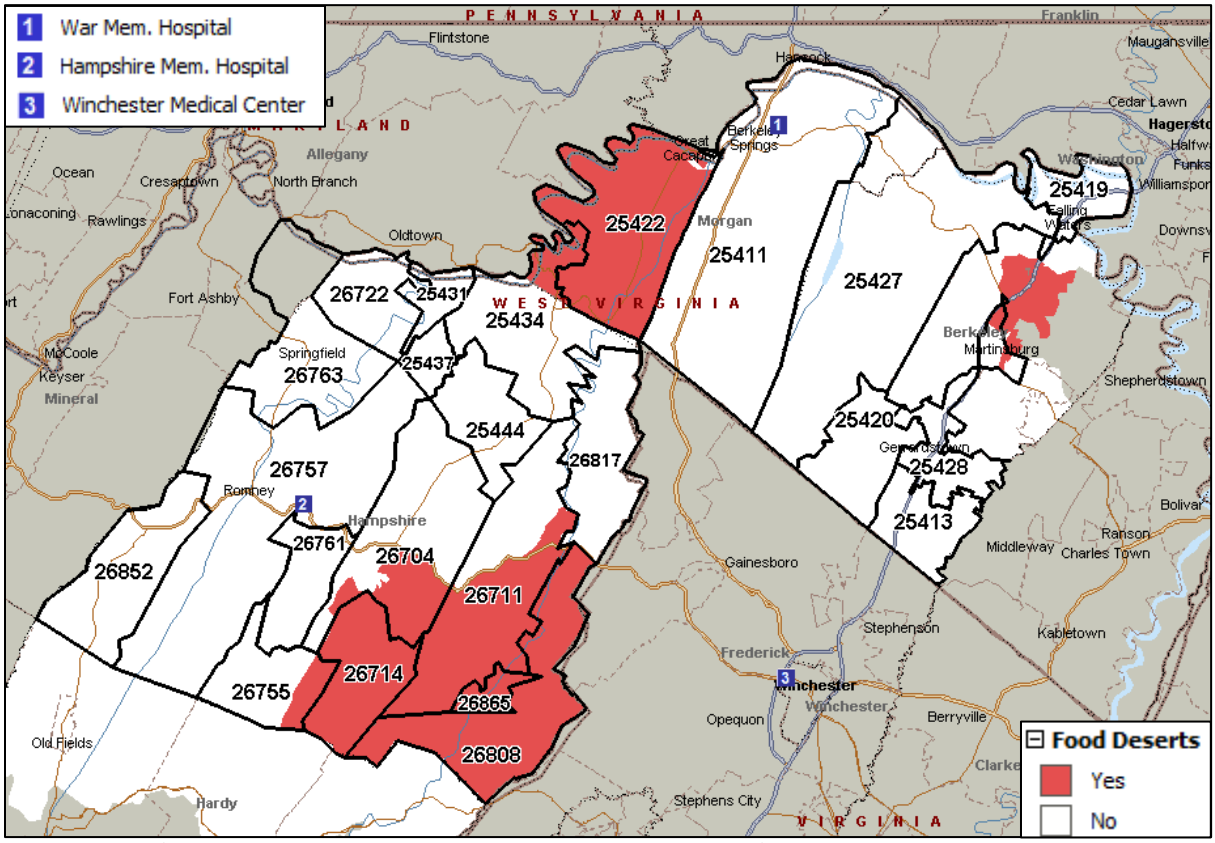
Sources: Microsoft MapPoint and Dignity Health, 2013.

ZIP codes in the War community ranged in the middle need categories with the exception of ZIP code 25401 (Martinsburg) which scored as high need. Areas of middle to high need are located in substantial parts of Hampshire County (**Exhibit 34**).

2. Food Deserts (Lack of Access to Nutritious and Affordable Food)

The U.S. Department of Agriculture's Economic Research Service estimates the number of people in each census tract that live in a "food desert," defined as low-income areas more than one mile from a supermarket or large grocery store in urban areas and more than 10 miles from a supermarket or large grocery store in rural areas. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these food deserts. **Exhibit 35** illustrates the location of food deserts in the War community.

Exhibit 35: Food Deserts by Census Tract



Sources: Microsoft MapPoint and the Economic Research Services, U.S. Department of Agriculture, 2013

War Memorial Hospital's community contains four census tracts identified as food deserts. These are located in and around the municipalities of Capon Lake, Great Cacapon, and Martinsburg (**Exhibit 35**).

Overview of the Health and Social Services Landscape

This section identifies geographic areas and populations in the community that may be facing barriers accessing care due to medical underservice or a shortage of health professionals.

The section then summarizes various assets and resources available to improve and maintain the health of the community.

1. Medically Underserved Areas and Populations

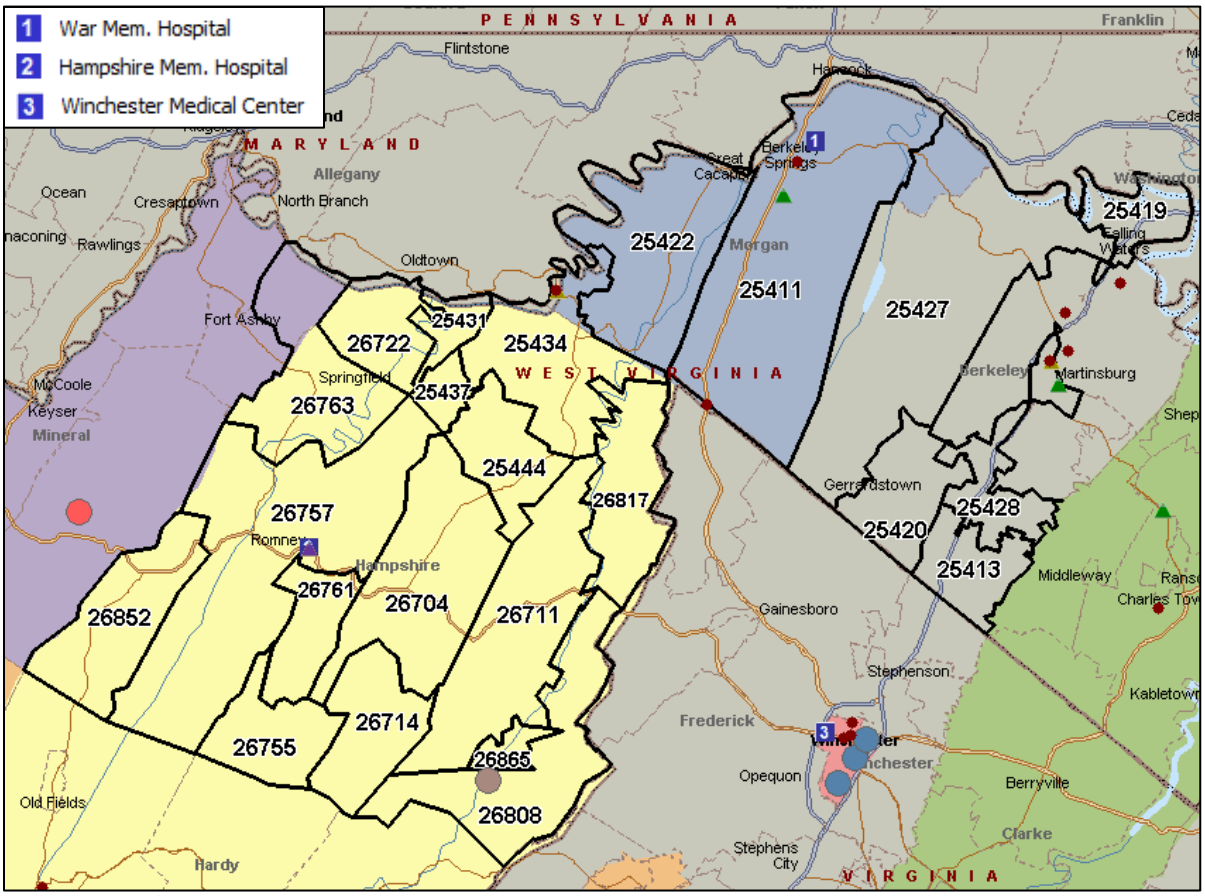
The Health Resources and Services Administration (HRSA) calculates an Index of Medical Underservice (IMU) score for communities across the U.S. The IMU calculation is a composite of the ratio of primary medical care physicians per 1,000 persons, the infant mortality rate, the percentage of the population with incomes below the poverty level, and the percentage of the population greater than age 64. IMU scores range from zero to 100, where 100 represents the least underserved and zero represents the most underserved.[16]

Any area or population receiving an IMU score of 62.0 or less qualifies for Medically Underserved Area (MUA) or Medically Underserved Population (MUP) designation. Federally Qualified Health Centers (FQHCs) may be established to serve MUAs and MUPs. Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. When a population group does not qualify for MUP status based on the IMU score, Public Law 99-280 allows MUP designation if "unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the state where the requested population resides."[17]

Exhibit 36 shows areas designated by HRSA as medically underserved. Hampshire County is designated as an MUA. The low-income population of Morgan County is an MUP.

[16] U.S. Health Resources and Services Administration. (n.d.) *Guidelines for Medically Underserved Area and Population Designation.* Retrieved 2012, from http://bhpr.hrsa.gov/shortage/muaps/index.html.
[17] *Ibid.*

Exhibit 36: Medically Underserved Areas and Populations and Health Professional Shortage Areas, 2012



Sources: Microsoft MapPoint and the Health Resources and Services Administration, 2013.

- FQHC Locations
- **MUA/MUP - District or Census Tract**
  - MUA
  - MUP
- **Type of HPSA and MUA/P - County**
  - Dental HPSA
  - Mental and Dental HPSA
  - Mental HPSA, MUA
  - MUA
  - Primary and Dental HPSA, MUP (low income)
  - Primary, Mental, and Dental HPSA
- **HPSA - County District**
  - Dental
  - Primary
- **HPSA Facility**
  - Mental
  - Mental and Dental
  - Primary
  - Primary, Mental, and Dental

Hampshire County is an MUA and the low income population of Morgan County is an MUP

…

The community contains mental health, dental health, and primary medical care HPSAs and five HPSA facilities

2. Health Professional Shortage Areas

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is found to be present.

In addition to areas and populations that can be designated as HPSAs, a health care facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental health services.

HPSAs can be: "(1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility."[18]

Areas and populations in the War Memorial Hospital community are designated as HPSAs (**Exhibit 36**). Morgan County is designated as a primary medical care and dental HPSA. Hampshire County is a mental health HPSA. Capon District in Hampshire County is also a dental health HPSA.

3. Description of Other Facilities and Resources within the Community

The War community contains a variety of resources that are available to meet the health needs identified in this CHNA. These resources include facilities designated as HPSAs, hospitals, FQHCs, health professionals, and other agencies and organizations.

Exhibit 37 displays the five facilities that are designated as HPSAs in the War community.

Exhibit 37: Information on HPSA Facilities in the War Memorial Hospital Community

County	Name	Type of HPSA
PSA		
Morgan	Mountaineer Community Health Center, Inc.	Primary Medical Care, Mental Health, Dental Health
	East Ridge Health Systems - Berkeley Springs	Mental Health
SSA		
Berkeley	Shenandoah Valley Medical Center	Primary Medical, Mental Health, Dental Health
	East Ridge Health Systems - Martinsburg	Mental Health
Hampshire	Hampshire Memorial Hospital	Mental Health, Dental Health

Source: Health Resources and Services Administration, 2013.

[18] U.S. Health Resources and Services Administration, Bureau of Health Professionals. (n.d.). *Health Professional Shortage Area Designation Criteria*. Retrieved 2012, from http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/index.html

Exhibit 38 identifies the four hospitals in the War Memorial Hospital community.

Exhibit 38: List of Hospitals in the War Memorial Hospital Community

County	Hospital Name
PSA	
Morgan	War Memorial Hospital
SSA	
Berkeley	Berkeley Medical Center
	Martinsburg VA Medical Center
Hampshire	Hampshire Memorial Hospital

Source: Centers for Medicare & Medicaid Services, 2013.

The two hospitals in Morgan and Hampshire Counties are critical access hospitals (**Exhibit 38**).

Federally Qualified Health Centers (FQHCs) were created by Congress to promote access to ambulatory care in areas designated as "medically underserved." These clinics receive cost-based reimbursement for Medicare and many also receive grant funding under Section 330 of the Public Health Service Act. FQHCs also receive a prospective payment rate for Medicaid services based on reasonable costs.

Exhibit 39: Information on Federally Qualified Health Centers in the War Memorial Hospital Community

County	FQHC Name	Ownership
PSA		
Morgan	Mountaineer Community Health Center, Inc.	Independent
	Shenandoah Maternity- Berkeley Springs	Shenandoah Valley Medical System
	SVMS Behavioral Health, Berkeley Springs	Shenandoah Valley Medical System
SSA		
Berkeley	Shenandoah Behavioral Health	Shenandoah Valley Medical System
	Shenandoah CHC- Women's Center	Shenandoah Valley Medical System
	Shenandoah Community Health Center	Shenandoah Valley Medical System
	Shenandoah Valley Medical System, Inc.	Shenandoah Valley Medical System

Source: Health Resources and Services Administration, 2013.

Although there are seven FQHCs in the community, they are managed by two primary systems: Shenandoah Valley Medical System and Mountaineer Community Health Center (**Exhibit 39**).

Exhibit 40 presents the numbers of primary care physicians, mental health providers, and dentists per 100,000 population.

Exhibit 40: Health Professionals Rates per 100,000 Population by County

County	Primary Care Physicians		Mental Health Providers		Dentists	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
PSA	**8**	**45.7**	**0**	**0.0**	**3**	**17.1**
Morgan	8	45.7	0	0.0	3	17.0
SSA	**53**	**41.2**	**3**	**2.3**	**48**	**37.3**
Berkeley	45	43.0	3	2.9	44	41.7
Hampshire	8	33.4	0	0.0	4	16.3
West Virginia	**1,416**	**76.4**	**167**	**9.0**	**826**	**43.4**

Source: Data provided by County Health Rankings, 2013, via HRSA Area Resource File, 2011-2012.

All provider rates are below the West Virginia average in all counties (**Exhibit 40**).

A number of other agencies and organizations are available in each county in the War Memorial Hospital community to assist in meeting health needs. In addition to the organizations listed below, see **Exhibits 50** through **53** for a listing of community organizations represented by individuals participating in key informant interviews and the community response session.

- Community organizations that provide services to specific populations:
  - Breast Cancer Awareness Cumberland Valley
  - Mary Babb Randolph Cancer Center
  - Patriots Path
- Community organizations that provide services relating to domestic violence:
  - Shenandoah Women's Center
- Community organizations that provide free or reduced cost health care:
  - Affordable Dentures
  - Eastridge Health Systems
  - Good Samaritan Free Clinic
  - Healthy Smiles Community Oral Health Center
  - Potomac Highland Mental Health Guild
  - St. Vincent de Paul
- Community organizations that provide housing support or shelter for homeless residents:
  - Bethany House
  - Immanuel's House
  - Martinsburg Housing Authority

    - Martinsburg Union Rescue Mission
    - Mission Serve Group
    - St. Vincent de Paul
- Community organizations that provide hunger reduction services:
    - Amazing Grace Baptist Church
    - Angel Food Ministries First United Methodist Church
    - Community Fellowship Church
    - Community Food Pantry in Great Cacapon
    - God's Storehouse
    - MCIEC Food Pantry
    - Meal Time Communion Kitchen
    - Morgan County Interfaith Emergency Care
    - Romney First United Methodist Church
- Community organizations that provide family planning, maternal, and child health services:
    - Abba Care
    - Care Pregnancy Center of the Eastern Panhandle
    - Healthy Families of Northern Shenandoah Valley
    - Petersburg Elementary and High School-Based Health Center
    - Preventive Women's Health
- Local chapters of national organizations, such as the American Cancer Society, American Kidney Association, American Red Cross, Habitat for Humanity, Boys and Girls Club, Meals on Wheels, and United Way
- Local first responders, including fire departments, police departments, and Emergency Medical Services (EMS)
- Local government agencies, Chambers of Commerce, and City Councils
- Local public health departments
- Local schools, colleges, and universities

Findings of Other Recent Community Health Needs Assessments

Verité also considered the findings of other needs assessments published since 2012. Five such assessments conducted in the War Memorial Hospital area are referenced here, with highlights and summary points below.

1. AmeriMed Consulting, 2012

AmeriMed Consulting produced a "Physician Needs Assessment"[19] on the patient market, medical staff, and physician market to help Valley Health evaluate and plan for the community's medical staffing needs. Primary data included physician interviews and medical staff interviews, while secondary data was from the U.S. Census and Medical Group Management Association (MGMA).

Key findings relevant to this CHNA include:

- Thirteen percent of primary care physicians reported no longer accepting new Medicaid patients, and between 31 and 57 percent (depending on the state payor type) reported not accepting new Medicare patients;
- Among medical specialties, there is a need for psychiatry, obstetrics/gynecology, cardiology and dentistry; and
- Nearly 30 percent of physicians have reached age 55, and many retire or leave their careers early.

2. Bartlett and Buck, 2013

Bartlett and Buck completed the "Mobilizing for Action through Planning and Partnerships: Berkeley, Jefferson and Morgan Counties, West Virginia Community Health Status Assessment" on health status, quality of life, and risk factors.[20] Secondary sources for the assessment included U.S. Census and county health department websites. Primary sources included a community survey, informant interviews, and focus groups.

The study identified the following eight priority subjects for planning and intervention:

1. "Strategies to reduce disparities in maternal/child health, particularly in the area of infant mortality;
2. Access to and the quality of behavioral health providers and services, including substance use prevention and intervention;
3. Regional economic development that includes the creation of higher paying jobs with insurance benefits…;
4. Strategies to improve citizen safety, including targeted interventions in higher crime areas, improved road safety and illicit substance use and abuse;

[19] AmeriMed Consulting. (2012). *Physician Needs Assessment*. Retrieved 2013, from Valley Health.
[20] Bartlett, Tina and Buck, Joy. (2013, February). *Mobilizing for Action through Planning and Partnerships: Berkeley, Jefferson and Morgan Counties West Virginia*. Retrieved 2013, from: www.hsc.wvu.edu/eastern/SON/Bridges/Forms/Mapp-Form.aspx

5. Chronic illness self-management, particularly acute and community-based diabetes care, heart failure and chronic obstructive pulmonary disease (COPD).
6. Early detection and timely intervention in cancer targeting both breast cancer and the links between environment, behavior and the incidence of lung cancer among women;
7. Enhanced collaboration with public health and community-based initiatives…;
8. Better access to healthy foods, including community gardens, increased access to farmer's markets and healthier options in restaurants and schools."

3. Morgan County, West Virginia, 2012

Morgan County produced the "Morgan County Behavioral Health Profile"[21] that details various health conditions, behaviors, and risk factors of the county. Secondary data included West Virginia Behavioral Risk Factor Survey, West Virginia Bureau for Public Health, and the Fatality Analysis Reporting System.

The document compares Morgan County, West Virginia to Berkeley, Hampshire and Mineral Counties on a range of health risk behaviors and health status indicators, documenting county-by-county differences and comparisons with statewide averages and rates. Specific topics include: smoking and smokeless tobacco use; binge drinking and DUI arrests; substance abuse; diabetes; cancer; mental health (including suicide); and homelessness.

Because it draws from some of the same data sources as this CHNA, many of its findings are comparable. Two items of particular note:

- Since 2001, Hampshire County has seen an increase of 300 percent in deaths from prescription drug overdose, Morgan County has seen a 200 percent increase, Berkeley County has seen a 150 percent increase, and West Virginia has seen an increase of 230 percent.
- The study documented the association of poor mental health and substance abuse with homelessness. Nearly 68.2 percent of the homeless population in Morgan County was identified as having poor health status from substance abuse, compared to 43.2 percent of Berkeley County, and 17.7 percent of Hampshire County. About 11.5 percent of the homeless population was referred to a mental health provider in Morgan County, compared to 15.0 percent of the homeless population in Berkeley County.

[21] Morgan County. (2012). Morgan County Behavioral Health Profile. Retrieved 2013, from: http://www.dhhr.wv.gov/bhhf/sections/programs/ProgramsPartnerships/AlcoholismandDrugAbuse/Research/Documents/Morgan%20County.pdf

4. West Virginia Community Action Partnership, 2012

The West Virginia Community Action Partnership assessed the priority needs of two regions, Jefferson and Berkeley Counties and Grant, Hampshire, Hardy, Mineral, Morgan, and Pendleton Counties, in "Believing in West Virginia"[22] by grouping counties that were in close proximity to each other. The assessment incorporated secondary data from sources such as the U.S. Census.

Key findings relevant to this CHNA include:

- The top poverty-related issues in Jefferson and Berkeley Counties were affordable housing, services for the homeless, and health and dental care. The top issues in the other counties were employment, job training, and transportation.
- The three most problematic health diseases for West Virginia residents were heart disease at 24.6 percent of the population, cancer at 21.5 percent of the population, and chronic lower respiratory disease, at 7.4 percent.
- About 20.0 percent of the employed residents in West Virginia do not have health insurance.
- The obesity rate in West Virginia is the second highest in the U.S., at 32.5 percent.

5. West Virginia Health Statistics Center, 2012

The West Virginia Department of Health and Human Resources and Bureau for Public Health conducted a telephone survey of West Virginia households and published a report of findings:[23] the "Believe in West Virginia: Assessment of Needs Report." The survey asked about health status, health care access, rates of physical inactivity, nutrition, obesity and overweight, tobacco use, hypertension, cholesterol, alcohol consumption, oral health, immunization, and other health indicators. The secondary data included were from Behavioral Risk Factor Surveillance System data. Comparisons were made between 2009-2010 survey data and data from 1984 to 2010.

Because it presents some of the same health indicators as this CHNA, many of its findings are comparable. Items of particular note include:

- There are strong correlations between low income, low educational attainment and high rates of uninsurance, lesser affordability of care, higher smoking rates and lesser consumption of fruits and vegetables.
- Obesity and overweight prevalence did not vary dramatically by age, income, or education.
- Alcohol consumption did not differ significantly by income or educational attainment.

[22] West Virginia Community Action Partnership. (2012). *Believing in West Virginia*. Retrieved 2013, from: http://www.wvcommunityactionpartnership.org/pdfs/2012needsassesment.pdf

[23] West Virginia Community Action Partnership. (2012). *Believe in West Virginia: Assessment of Needs Report*. Retrieved, 2013 from: http://www.wvcommunityactionpartnership.org/pdfs/2012needsassesment.pdf

PRIMARY DATA ASSESSMENT

Community Survey Findings

War Memorial Hospital's survey of community health consisted of questions about a range of health status and access issues, as well as respondent demographic characteristics. The survey was made available for six weeks in April and May 2013 on Valley Health's web site and was widely publicized via mailings, e-mail lists, newspaper and local media ads, and dissemination through partner health and community service organizations. The questionnaire was available in English and Spanish, and paper copies were available on request.

1. Respondent Characteristics

The survey questionnaire was completed by 165 residents from the War Memorial Hospital community. Survey responses were received from residents of 22 of the War Memorial Hospital community's 29 ZIP codes.

About 81 percent of respondents were female, and 73 percent were between the ages of 35 and 64. Ninety-four percent were White, and one percent identified as Hispanic (or Latino). The majority of respondents reported being in good, very good, or excellent overall health (91 percent), married (73 percent), employed full time (60 percent), privately insured (67 percent), and having an undergraduate degree or higher (52 percent). The majority (99 percent) of respondents spoke only English in the home. Thirteen percent of residents reported living alone.

Exhibit 41 presents the percentage of respondents by county.

Exhibit 41: Survey Respondents by County, 2013

County	Number of Responses	Percent of Respondents	Percent of Total Population 2013
PSA	**48**	**29.1%**	**16.4%**
Morgan	48	29.1%	16.4%
SSA	**117**	**70.9%**	**83.6%**
Berkeley	36	21.8%	61.0%
Hampshire	81	49.1%	22.6%
Total	**165**	**100.0%**	**100,920**

Source: Valley Health Community Survey, 2013.

Hampshire County had the highest percentage of respondents. Residents from the PSA accounted for 29 percent of respondents (**Exhibit 41**).

2. Access Issues

The majority of survey respondents reported visiting a primary care provider regularly. Eighteen percent did not. Ten percent of respondents reported not having a primary care provider.

Exhibit 42 indicates where respondents usually received care.

Exhibit 42: Locations Where Respondents Received Routine Healthcare

Response	Number of Responses	Percent of Responses
No routine healthcare received	10	4.7%
Free or low-cost clinic or health center	11	5.2%
Private doctor's office	139	65.9%
Urgent care facility or store-based walk-in clinic	33	15.6%
Hospital emergency room	13	6.2%
School-based clinic	0	0.0%
Soup kitchen	0	0.0%
Homeless shelter	0	0.0%
Other	5	2.4%

Source: Valley Health Community Survey, 2013. Total community responses (N=211).

Exhibit 42 shows that 66 percent of families received routine (non-emergency, non-specialty) healthcare services from a private doctor's office and 16 percent received routine care from an urgent care facility or store-based walk in clinic. Approximately 11 percent received services from a free or low-cost clinic or health center or hospital emergency room.

Exhibit 43 indicates whether respondents felt that they were able to get needed care.

Exhibit 43: Respondent Ability to Receive Needed Care, by Type of Care

Response	Primary Care	Vision Care	Dental Care	Mental Health Care	Medical Specialty Care	Medicine, Medical Supplies, and Equipment	Prevention and Wellness Services
Total Community							
Always	81.1%	73.2%	75.3%	55.6%	68.7%	79.2%	57.5%
Sometimes	14.0%	14.0%	16.7%	20.6%	16.5%	14.6%	20.0%
Rarely	4.3%	8.9%	6.2%	4.8%	8.7%	3.8%	14.2%
Never	0.6%	3.8%	1.9%	19.0%	6.1%	2.3%	8.3%

Source: Valley Health System Community Survey, 2013. Primary Care (N=164), Vision Care (N=157), Dental Care (N=162), Mental Health Care (N=63), Medical Specialty Care (N=115), Medicine, Medical Supplies, and Equipment (N=130), Prevention and Wellness Services (N=120).

Exhibit 43 suggests that about half of respondents felt that they did not "always" receive mental health care or prevention and wellness services. More residents responded that they always received primary care, vision care, dental care, and medicine, medical supplies, and equipment.

Exhibit 44 presents the percentage of respondents who reported "not always" being able to get needed care by county. Data indicate that access varies by type of care and locality.

Exhibit 44: Respondents Not Always Able to Receive Care, by County

County	Primary Care	Vision Care	Dental Care	Mental Health Care	Medical Specialty Care	Medicine, Medical Supplies, and Equipment	Prevention and Wellness Services
PSA	**23.4%**	**28.3%**	**29.8%**	**42.9%**	**36.1%**	**29.3%**	**55.9%**
Morgan	23.4%	28.3%	29.8%	42.9%	36.1%	29.3%	55.9%
SSA	**17.1%**	**26.1%**	**22.6%**	**45.2%**	**29.1%**	**16.9%**	**37.2%**
Berkeley	11.1%	17.1%	17.1%	60.0%	33.3%	23.1%	36.0%
Hampshire	19.8%	30.3%	25.0%	37.0%	27.3%	14.3%	37.7%
Total	**18.9%**	**26.8%**	**24.7%**	**44.4%**	**31.3%**	**20.8%**	**42.5%**

Source: Valley Health System Community Survey, 2013. Primary Care (N=164), Vision Care (N=157), Dental Care (N=162), Mental Health Care (N=63), Medical Specialty Care (N=115), Medicine, Medical Supplies, and Equipment (N=130), Prevention and Wellness Services (N=120).

Across all counties, more people reported not always being able to access mental health care (44 percent), prevention and wellness services (43 percent), and medical specialty care (31 percent) than other services. The highest percentage of respondents reporting that they are not always able to receive mental health care services was in Berkeley County (60 percent) (**Exhibit 44**).

Respondents indicating that they were not always able to get care were asked to identify barriers to access (**Exhibit 45**).

Exhibit 45: Barriers to Receiving Needed Care

Response	Primary Care	Vision Care	Dental Care	Mental Health Care	Medical Specialty Care	Medicine, Medical Supplies, and Equipment	Prevention and Wellness Services
I don't have insurance	15.7%	27.1%	22.6%	9.4%	14.5%	18.9%	10.1%
I can't get an appointment	3.9%	2.1%	3.2%	1.9%	3.6%	0.0%	2.9%
I can't afford it / too expensive	33.3%	43.8%	43.5%	24.5%	25.5%	43.2%	30.4%
The hours are inconvenient	9.8%	6.3%	9.7%	5.7%	10.9%	2.7%	13.0%
These services are not available in my area	2.0%	2.1%	3.2%	5.7%	10.9%	8.1%	7.2%
I don't have transportation	2.0%	2.1%	1.6%	0.0%	1.8%	0.0%	1.4%
I don't trust the doctor	7.8%	2.1%	1.6%	1.9%	3.6%	2.7%	2.9%
The doctors and staff do not speak my language	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
I can't take time off from work or from caring for others	9.8%	4.2%	6.5%	5.7%	9.1%	5.4%	8.7%
Other	15.7%	10.4%	8.1%	45.3%	20.0%	18.9%	23.2%

Source: Valley Health System Community Survey, 2013. Primary Care (N=51), Vision Care (N=48), Dental Care (N=62), Mental Health Care (N=53), Medical Specialty Care (N=55), Medicine, Medical Supplies, and Equipment (N=37), Prevention and Wellness Services (N=69).

Key	
Top two barriers by care type	

Cost and lack of insurance were the most frequently reported barriers to care. Among those choosing "other," most responses cited a lack of need for services as the reason they did not access care (**Exhibit 45**).

3. Health Issues

Exhibit 46 presents the top health issues identified by survey respondents.

Exhibit 46: Top Health Issues

Health Issue	Total Community
Low income / financial challenges	13.0%
Obesity	11.3%
Diabetes	9.2%
Tobacco use	7.8%
Substance abuse / addiction	7.6%
Heart disease	6.6%
Not enough exercise	6.6%
Poor dietary choices	6.6%
Cancer	6.5%
Unemployment	5.3%
Mental health (such as depression, bipolar, autism)	3.6%
Access to healthy food is limited	3.0%
Chronic obstructive pulmonary disease (COPD)	2.7%
Affordable housing	2.1%
Dental health issues	2.1%
Alzheimer's or dementia	1.6%
Asthma	1.3%
Domestic violence	0.8%
Homelessness	0.7%
Stroke	0.6%
Unsafe sex	0.6%
Unsafe neighborhoods	0.3%
Poor air quality	0.1%
Other (please specify)	0.1%

Source: Valley Health Community Survey, 2013. The N varies for each answer, as people were able to select several issues as top concerns. Total Number of Responses: (N=867)

Key	
Top five health issues	

Respondents most often selected low income or financial challenges, obesity, diabetes, tobacco use, and substance abuse and/or addiction (**Exhibit 46**).

Exhibit 47 indicates, of survey respondents who have certain health conditions, whether they are getting needed care, choose not to get care, or do not know where or how to get care. For example, 84 percent of the 37 respondents who said they have asthma felt as if they are getting the care they need.

Exhibit 47: Receiving Care for Health Conditions

Health Condition	Receiving Needed Care	Choose not to Get Care at this Time	Don't Know Where or How to Get Care for this Condition
Asthma	83.8%	0.0%	16.2%
Cancer	96.4%	0.0%	3.6%
Chronic obstructive pulmonary disease (COPD)	92.9%	0.0%	7.1%
Diabetes	94.2%	1.9%	3.8%
High blood pressure	98.1%	0.0%	1.9%
Heart disease	92.1%	0.0%	7.9%
Mental health issues	87.0%	2.2%	10.9%
Obesity / overweight	76.4%	10.1%	13.5%

Source: Valley Health System Community Survey, 2013. Asthma (N=37), Cancer (N=28), Chronic obstructive pulmonary disease (N=14), Diabetes (N=52), High blood pressure (N=108), Heart disease (N=38), Mental health issues (N=46), and Obesity / overweight (N=89).

Care was accessed most for high blood pressure (98 percent), cancer (96 percent), diabetes (94 percent), chronic obstructive pulmonary disease (93 percent), and heart disease (92 percent). Many respondents stated not choosing to get care and / or not knowing where to get care for obesity / overweight, asthma, and mental health issues (**Exhibit 47**).

4. Health Behaviors

Exhibit 48 portrays various health behaviors reported by survey respondents in the War Memorial Hospital community.

Exhibit 48: Health Behaviors

Health Behavior	Total Community
Not physically active	29.9%
Eat less than recommended amounts of fruit	40.2%
Eat less than recommended amounts of vegetables	64.6%
Never or rarely shop at farmer's market	58.0%
Travel 5 miles or more for fresh produce	62.2%
Drank alcohol 10+ days in the past month	11.0%
Ever used prescription drugs belonging to friends or family	8.6%

Source: Valley Health System Community Survey, 2013. Not physically active (N=164), Eat less than recommended amounts of fruit (N=164), Eat less than recommended amounts of vegetables (N=164), Never or rarely shop at farmer's market (N=162), Travel 5 miles or more for fresh produce (N=164), Drink alcohol 10+ days in the past month (N=164), Ever used prescription drugs belonging to friends or family (N=163).

Thirty percent of respondents reported not being physically active. A large percentage of respondents reported that they were not eating the recommended amount of vegetables, they never or rarely shopped at a farmer's market, and they traveled five miles or more for fresh produce. The principal reasons stated for not shopping at a farmer's market were that respondents found the hours inconvenient, the markets were too far away, and the food was too expensive. Most respondents (53 percent) reported purchasing their groceries in a grocery store, while respondents were least likely to buy groceries at a convenience store (two percent) (**Exhibit 48**).

Respondents were asked to identify health topics that children in various age groups needed to know more about. **Exhibit 49** examines the health topics that respondents chose for children in the War community.

Exhibit 49: Important Health Information Topics for Children and Youth

Topic	Ages 0-5	Ages 6-10	Ages 11-15	Ages 16-19
Dental hygiene	23.1%	9.8%	5.9%	5.7%
Nutrition	18.3%	10.3%	6.7%	6.7%
Bullying	12.3%	10.1%	6.5%	6.3%
Getting enough sleep	11.2%	7.6%	6.4%	6.3%
Tobacco	6.3%	8.6%	7.2%	7.1%
Eating disorders	5.4%	7.6%	6.6%	6.9%
Asthma management	5.0%	6.7%	4.4%	4.4%
Diabetes management	4.8%	6.6%	5.1%	5.1%
Alcohol	4.4%	7.4%	7.2%	7.0%
Drug abuse	4.2%	8.5%	7.3%	7.0%
Mental Health Issues	1.9%	5.2%	7.2%	7.3%
Suicide prevention	1.0%	3.7%	7.4%	7.3%
Sexual intercourse	0.8%	3.6%	7.4%	7.4%
Sexually transmitted diseases	0.6%	3.3%	7.7%	7.4%
Reckless driving / speeding	0.4%	0.6%	6.5%	7.7%
Other	0.4%	0.4%	0.5%	0.4%

Source: Valley Health System Community Survey, 2013. Ages 0-5 (N=520), Ages 6-10 (N=1,647), Ages 11-15 (N=1,647), Ages 16-19 (N=1,544).

Key	
Top three issues by age group	

Among children aged 0 to 10 years, health topics such as dental hygiene, nutrition, and bullying were seen as important. Sexually transmitted diseases and sexual intercourse were two of the primary suggested educational topics for youth aged 11 to 19. Education relating to suicide prevention also was recommended for youth aged 11 to 15, and more information regarding reckless driving / speeding was recommended for youth aged 16 to 19 (**Exhibit 49**).

Summary of Interview Findings

Key informant interviews were conducted face-to-face and by telephone by Verité Healthcare Consulting in April and May 2013. The interviews were designed to obtain input on health needs from persons who represent the broad interests of the community served by War Memorial Hospital, including those with special knowledge of or expertise in public health.

Interviews were held with 38 individuals (some in group interviews), including: persons with special knowledge of or expertise in public health; health and other public departments or agencies with data or information relevant to the health needs of the community; and leaders, representatives and members of medically underserved, low-income, and minority populations, and of populations with chronic disease needs; and representatives of the educational and business communities. An annotated list of individuals providing community input is in the following section of this report.

Interviews were conducted using a structured questionnaire. Informants were asked to discuss community health issues and encouraged to think broadly about the social, behavioral and other determinants of health. Interviewees were asked about issues related to health status, health care access and services, chronic health conditions, populations with special needs, and health disparities.

The frequency with which specific issues were mentioned and interviewees' perceptions of the severity (how serious or significant) and scope (how widespread) of each concern were assessed. The following health status issues and contributing factors were reported to be of greatest concern. The items in each list are presented in order of stated importance, although the differences in some cases are relatively minor.

Health Status Issues

1. **Mental and behavioral health**: Mental and behavioral health was the most frequently-citied health issue in the community, and one with significant severity. Interviewees generally reported that the community's mental health needs have risen, while mental health service capacity has not. They described a wide range of mental health issues, including for example: bullying among youth, autism spectrum symptoms and diagnoses, depression among senior citizens, adult and family stress and coping difficulties, a lack of affordable outpatient mental health professionals, and a lack of local inpatient treatment facilities. Interviewees also noted frequent dual diagnoses of mental health problems and substance abuse.
2. **Drug and substance abuse**: Substance abuse was the second most frequently mentioned health status issue, and was portrayed as both growing and serious. In addition to use of illicit substances (with methamphetamine a growing concern), interviewees reported recent increases in the abuse of prescription pain medications, and drug-seeking behavior in physicians' offices and hospital emergency departments. Abuse of over-the-counter medications by youth was mentioned. Interviewees cited a lack of local treatment services, particularly inpatient facilities, for people with substance abuse problems. Some interviewees reported that substance abuse and addiction among pregnant women is creating more perinatal and neonatal health problems. As noted above for mental

health needs, dual diagnoses of substance abuse and mental health problems are not uncommon.

3. **Oral health and dental care**: Oral health and dental care for all ages was the third most frequently mentioned health status issue by key informant interview participants. The issue was discussed in terms of poor dental hygiene, tooth decay in children and youth in addition to adults, and a lack of affordable, preventive dental health services. Interview participants stated that access to dental care is very difficult for low income and uninsured individuals, particularly in less populated areas. While Medicaid covers dental care for children and youth, not all dentists accept Medicaid patients. For low income, uninsured adults needing expensive restorative care, tooth extractions are sometimes the only available or practical option.
4. **Obesity**: Obesity and overweight was the fourth most frequently mentioned health status issue. This was true for all ages, but noted to be rising among children and youth. Commenting on related contributing factors, interview participants mentioned nutrition and diet, low physical activity and exercise, and food insecurity and hunger.
5. **Diabetes**: Diabetes was the most frequently mentioned chronic disease in the interviews, and was often paired with a discussion of the condition of obesity and overweight. There was widespread recognition of the toll it takes on health, its impact on the health care system, and the importance of not only treatment but also health behavior change in addressing the disease, as well as concern about younger adults and youth beginning to be diagnosed with the condition.
6. **Smoking and tobacco**: Smoking and tobacco use was frequently mentioned in the context of concerns about drug and substance abuse. Smoking was viewed as a significant health issue that has been in existence for some time, but that is not becoming notably worse.
7. **Pregnancy-related health issues**: Interview participants raised two primary concerns with respect to pregnancy health and related perinatal and neonatal health. The first is a perceived increase in teen pregnancies and a lowering of the ages at which some girls are becoming pregnant. The other is concern about the effects of substance use and abuse by pregnant women on their unborn and newborn children, which was stated to cause serious and potentially lifelong health deficits in these children.
8. **Cancer**: There was some concern about increasing prevalence of some cancers, about ensuring adequate early screening and detection, and about people having to or choosing to leave the immediate community for some cancer treatments.

Factors Contributing to Health Status and Access to Care

In addition to discussing health status issues and health conditions in the community, interview participants addressed the factors or conditions they believe most contribute to poor health status. A rank-ordered list of the major contributing factors raised, some of them inter-related, is below:

1. **Access to health care**: Interview participants cited a wide range of difficulties with access to care, including availability of primary care and specialty providers, cost and affordability of care, significant transportation barriers in War Memorial Hospital's largely rural community, and language or cultural barriers for a small portion of the community.

2. **Preventive health services and preventive health behaviors**: Interview participants raised prevention of illness and disease in two distinct but related ways, which are connected to other factors on this list. First was a lack of use of preventive health services such as regular physical exams and health screenings – due variously to access difficulties and to a tendency not to seek care unless one is experiencing an acute condition. Second was a lack of preventive health behaviors, including but not limited to specific ones on this list. In both cases, the lack of prevention was viewed as contributing to more advanced stages of illness.
3. **Poor nutrition and diet**: Among health behaviors that contribute to or inhibit good health, dietary habits and nutrition were mentioned most frequently as major factors in obesity, diabetes, heart disease, and related conditions and chronic diseases.
4. **Low income and poverty**: Issues related to income and financial resources were frequently stated to limit access to care, contribute to poor diet and nutrition, and create stresses that negatively impact health.
5. **Lack of physical activity and exercise**: Among health behaviors that contribute to or inhibit good health, a lack of physical activity and exercise was mentioned as a concern for all age groups, from youth through senior citizens. Interview participants recognized that reasons for limited activity and strategies to increase it differ across the life span.
6. **Low educational levels and a lack of health education and knowledge**: Factors linked generally to educational attainment and specifically to health education were noted by interview participants as impeding both the ability to effectively seek and manage health care, and to adopt and practice healthy behaviors.
7. **Homelessness**: Interview participants mentioned homelessness as a risk factor for poor health, and some made particular note of those who are newly homeless as a consequence of the recent economic recession. Homelessness creates stresses and practical challenges to maintaining one's health and seeking or obtaining needed health care.
8. **Risk-factors among Elderly Residents**: Some interview participants highlighted the particular health risks experienced by older residents in the community. Seniors not uncommonly experience lower incomes, transportation barriers, advanced chronic diseases, and social isolation that can negatively impact health status.
9. **Food insecurity and hunger**: Closely linked to, but different from, poor nutrition and diet was interview participants' observations that low income – brought on by unemployment, underemployment, and other economic insecurity – can contribute to malnourishment and to obesity, with significant health consequences.

Individuals Providing Community Input

The CHNA took into account input from many people who represent the broad interests of the community served by the hospital, via interviews with 38 individuals and one "community response session" that included many of the interviewees and six additional participants. These 44 stakeholders were comprised of public health experts; individuals from health or other departments and agencies; leaders or representatives of medically underserved, low-income, and minority populations; and other individuals representing the broad interests of the community **(Exhibits 50, 51, 52,** and **53**).

1. Public Health Experts

Individuals interviewed with special knowledge of or expertise in public health, some of whom also participated in a community response session, include those in **Exhibit 50**:

Exhibit 50: Public Health Experts Interviewed

Name	Title	Affiliation or Organization	Special Knowledge/Expertise or Nature of Leadership Role	Interview or Response Session
Carol Lindsey	Local Health Administrator	Hampshire County Health Department	Expertise in public health needs of Hampshire County residents	Both
Dr. Diana Gaviria	Health Officer	Berkeley County Health Department	Expertise in public health needs of Berkeley County residents.	Interview

2. Health or Other Departments or Agencies

Several interviewees were from departments or agencies with current data or other information relevant to the health needs of the community (**Exhibit 51**). This list excludes the public health experts identified in **Exhibit 50**, who also meet this criterion.

Exhibit 51: Individuals from Health Departments or Agencies Interviewed

Name	Title	Affiliation or Organization	Interview or Response Session
Cynthia Hinkle	Specialist, Adolescent Pregnancy Prevention Initiative	West Virginia Department of Health and Human Resources	Interview

3. Community Leaders and Representatives

The following individuals were interviewed because they are leaders or representatives of medically underserved, low-income, and/or minority populations (**Exhibit 52**). This list excludes the public health experts identified in **Exhibit 50**.

Exhibit 52: Community Leaders and Representatives Interviewed

Name	Title	Affiliation or Organization	Special Knowledge/Expertise or Nature of Leadership Role	Interview or Response Session
Dianna Herionimus	Office Manager	Winchester Family Health Center	Special knowledge regarding health needs of the indigent populations in the community.	Interview
Dr. Timothy Caraher	Physician	Winchester Family Health Center	Special knowledge regarding health needs of the indigent populations in the community.	Interview
Holly Cowie	West Virginia Affiliate	Susan G. Komen	Special knowledge of breast cancer-related health needs in the community.	Response Session
Katy Pitcock	Co-Chair and Coordinator Community Prenatal and Language Access	Virginia Medical Interpreting Collaborative	Special knowledge of health needs of populations that have limited in English proficiency.	Both
Kevin Tephabock	State Vice President	American Cancer Society (ACS)	Special knowledge of cancer-related health needs in the community.	Response Session
Pamila Wilsor	Clinical Nurse Manager	Winchester Family Health Center	Special knowledge regarding health needs of the indigent populations in the community.	Interview
Steve Herring	SVMS Finance Director	Shenandoah Valley Medical Systems	Special knowledge regarding health needs of the indigent populations in the community.	Interview
Tina Burns	Director, Clinical Recruitment	Shenandoah Community Health Center	Special knowledge regarding health needs of the indigent populations in the community.	Interview

4. Persons Representing the Broad Interests of the Community

Exhibit 53A: Other Interviewees Representing the Broad Interests of the Community

Name	Title	Affiliation or Organization	Interview or Response Session
Anita Scandurra	Director	Wellness Services	Interview
Bill Haire	Chief Operating Officer	Winchester Medical Center	Interview
Bryan Rosati	Operations Manager - Winchester	Valley Regional Enterprise	Interview
Carolyn Knowles	Dispatch Manager	Valley Medical Transport	Interview
Chris Rucker	VP Community Health and Wellness, President of Valley Regional Enterprises	Valley Health	Both
Connie Nutter	President	NAMI Winchester	Interview
David Cunsolo	Lead Pastor	Victory Church	Interview
Dena Kent	President, Valley Regional Enterprises (retired)	Valley Health	Interview
Desiree Brunell	Director, Nursing Resources	Winchester Medical Center	Interview
Donald (Don) Price	Executive Director	Access Independence	Interview
Dr. Charles Bess	Physician, Family Practice	Private Practice	Interview
Dr. Gerald Bechamps	Vice President of Medical Affairs	Hampshire Memorial Hospital and War Memorial Hospital	Interview
Dr. Jack Potter	Medical Director of Emergency Services	Valley Health	Interview
James Keresztury	Director, Cancer Prevention and Control	Mountains of Hope Cancer Coalition	Response Session
Jeff Jeran	Director	Valley Health Wellness and Fitness	Both
Jodi Young	Clinical Manager	Winchester Medical Center	Interview
Julie Alexander	Outreach Coordinator	Winchester Medical Center	Both
Kari Spaid	Director of Nursing	Hampshire Memorial Hospital	Response Session
Lisa Wells	Trauma Coordinator	Winchester Medical Center	Interview
Lisa Zerull	Academic Liaison & Program Manager Faith-Based Services	Winchester Medical Center	Interview
Lyn Goodwin	Community Relations Manager	War Memorial Hospital	Interview
Neil McLaughlin	President	Hampshire Memorial Hospital and War Memorial Hospital	Both
Patty Fields	Office Data Specialist	Hampshire Memorial Hospital	Interview
Randy Reed	Program Director	Winchester Medical Center	Interview
Reen Markland	Regional Parish Nurse Coordinator	Winchester Medical Center	Both
Renee Smith	Membership Director & Peer Recovery Expert	NAMI Winchester	Interview

Exhibit 53B: Other Interviewees Representing the Broad Interests of the Community

Name	Title	Affiliation or Organization	Interview or Response Session
Sandra Viselli	Director	Hampshire County Committee on Aging, Inc.	Interview
Sherry Watts	Director of Workforce Development	Eastern WV Community & Technical College	Response Session
Stacey Rice	Clinical Manager	Winchester Medical Center	Interview
Stephanie Dirckx	Executive Director, Heart and Vascular	Winchester Medical Center	Interview
Susan Rogers	Director of Nursing	Grant County Nursing Home	Response Session
Todd Way	Sr. Vice President	Valley Health	Both
Trina Cox	Director	Hampshire Wellness Center	Both

SOURCES

111th U.S. Congress. (2010, March). Patient Protection and Affordable Care Act (PPACA).

Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators, accessed online at http://archive.ahrq.gov/data/hcup/factbk5/factbk5d.htm on June 28, 2013.

AmeriMed Consulting. (2012). *Physician Needs Assessment*. Retrieved 2013, from Valley Health.

Bartlett, Tina and Buck, Joy. (2013, February). *Mobilizing for Action through Planning and Partnerships: Berkeley, Jefferson and Morgan Counties West Virginia.* Retrieved 2013, from: www.hsc.wvu.edu/eastern/SON/Bridges/Forms/Mapp-Form.aspx

Berkeley County Budget 2013-2014. (2013). Retrieved 2013, from : http://www.berkeleycountycomm.org/pdf/financial/Levy%20Estimate%20FY%202013-2014.pdf

Centers for Medicare and Medicaid Services. (2013). *Hospital General Information.* Retrieved 2013, from https://data.medicare.gov/Hospital-Compare/Hospital-General-Information/v287-28n3

Dignity Health. (n.d.). *Community Needs Index*. Retrieved from http://cni.chw-interactive.org/

Economic Research Service (ERS), U.S. Department of Agriculture (USDA). (2010). *Food Access Research Atlas*. Retrieved 2013, from http://www.ers.usda.gov/data-products/food-access-research-atlas.aspx

Federal Bureau of Investigation. (2011). *Uniform Crime Reports: Violent and Property Crime Offenses*. Retrieved 2013, from http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/tables-by-title

Hampshire County 2013 Budget. (2013). Retrieved 2013, from: http://www.wvsao.gov/LocalGovernment/files/levy/county_12-13/Hampshire2013.pdf

Internal Revenue Service. (2012). Instructions for Schedule H (Form 990).

Morgan County 2013 Budget. (2013). http://www.wvsao.gov/LocalGovernment/files/levy/county_12-13/Morgan2013.pdf

Morgan County. (2012). Morgan County Behavioral Health Profile. Retrieved 2013, from: http://www.dhhr.wv.gov/bhhf/sections/programs/ProgramsPartnerships/AlcoholismandDrugAbuse/Research/Documents/Morgan%20County.pdf

Nielsen-Claritas. (2013). Demographic and Households Data.

Office of Child Nutrition, West Virginia Department of Education. (2012). *Percent Needy 2012*. Retrieved 2013, from http://wvde.state.wv.us/child-nutrition/school-nutrition-programs/forms-reference-tools.html

Office of Epidemiology and Prevention Services. (2012). STD Surveillance Data. Retreived 2013, from http://www.dhhr.wv.gov/oeps/std-hiv-hep/stds_stis/Pages/STDSurveillance.aspx

Office of Epidemiology and Prevention Services. (2012). *WV TB Profile 2012.* Retrieved 2013, from http://www.dhhr.wv.gov/oeps/tuberculosis/Pages/TBStatistics.aspx

The State of West Virginia Executive Budget Fiscal Year 2014. Retrieved on May 11, 2013 from http://www.budget.wv.gov/SiteCollectionDocuments/VIBR2014.pdf.

U.S. Bureau of Labor Statistics. (2013). *Unemployment Rates*. Retrieved 2013, from http://www.bls.gov/

U.S. Census Bureau. (2011). *Demographic Data: ACS 5 Year Estimates.* Retrieved 2013, from http://www.census.gov/

U.S. Centers for Disease Control and Prevention. (2011). *Behavioral Risk Factor Surveillance System*. Retrieved 2013, from http://www.cdc.gov/brfss/

U.S. Centers for Disease Control and Prevention's National Program of Cancer Registries Cancer Surveillance System. (2009). *State Cancer Profiles: Incidence Rates Report.* Retrieved 2013, from http://statecancerprofiles.cancer.gov/incidencerates/index.php

U.S. Department of Health and Human Services. (2009). *Community Health Status Indicators Project*. Retrieved 2013, from http://www.communityhealth.hhs.gov/homepage.aspx?j=1

U.S. Health Resources and Services Administration. (2013). *Find A Health Center*. Retrieved 2013, from http://findahealthcenter.hrsa.gov/Search_HCC.aspx

U.S. Health Resources and Services Administration. (2013). *Shortage Areas.* Retrieved 2013, from http://bhpr.hrsa.gov/shortage/shortageareas/index.html

University of West Virginia College of Business and Economics. (2013). *West Virginia Population Projection by Age and Sex.* Retrieved from: http://www.be.wvu.edu/demographics/populationprojection.htm

University of Wisconsin Population Health Institute and Robert Wood Johnson Foundation. (2013). *County Health Rankings: Mobilizing Action Toward Community Health*. Retrieved 2013, from http://www.countyhealthrankings.org/

Valley Health System. (2012). Emergency Department Data.

Valley Health System. (2012). Inpatient Discharge Data.

West Virginia Community Action Partnership. (2012). *Believe in West Virginia: Assessment of Needs Report.* Retrieved, 2013 from: http://www.wvcommunityactionpartnership.org/pdfs/2012needsassesment.pdf

West Virginia Community Action Partnership. (2012). *Believing in West Virginia.* Retrieved 2013, from: http://www.wvcommunityactionpartnership.org/pdfs/2012needsassesment.pdf

West Virginia Department of Health and Human Resources. (2009). *2009 West Virginia Vital Statistics.* Retrieved 2013, from http://www.wvdhhr.org/bph/hsc/statserv/