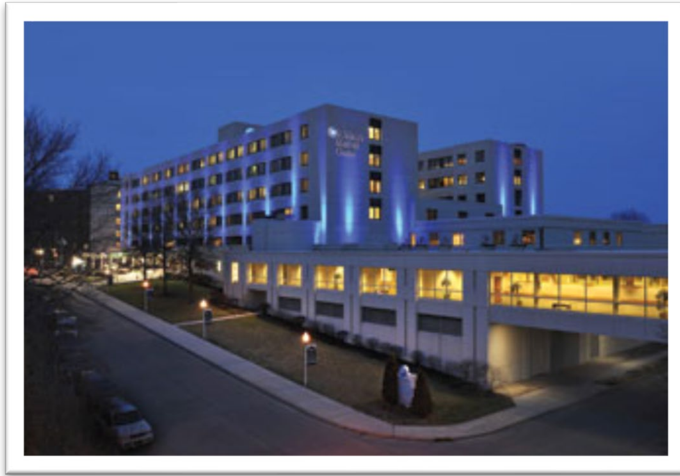
St. Mary's Medical Center



Community Health Needs Assessment

September 2013

Table of Contents

Background **1**
Community Served 1
Demographics 1

Process and Methodology **2**
Community Assets 3
Health Department Programs and Services Data 3
Trends in Public Health 3
Health Status 5
Hospital Services 5
Causes of Death 5
Chronic Disease Prevalence 6
Communicable Disease Prevalence 6
Intermediate Risk Factors 6
Behavioral Risk Factors 7
Vital Statistics 7
Community Voice 8
Key Statistics 8
County Priorities 9

Action Plan **101**

St. Mary's Medical Center
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Background

St. Mary's Medical Center, among the largest healthcare facilities in West Virginia, is a 393 bed facility located in Huntington, WV. For almost 90 years, St. Mary's has been meeting the healthcare needs of the communities it serves in Cabell County, surrounding counties and individuals from the broader geographical region.

As a teaching facility associated with the Joan C. Edwards Marshall University School of Medicine, St. Mary's trains medical residents in several specialties. The hospital campus is home to the St. Mary's School of Nursing, the St. Mary's School of Medical Imaging and the St. Mary's School of Respiratory Care. All three programs are associated with Marshall University. St. Mary's has a long tradition of caring for the needs of the many communities within its reach. As evidenced in its practices, St. Mary's continually assesses how it is serving communities and, as part of its mission, is dedicated to ongoing outreach and education regarding the health and well-being of the citizens.

In 2012 St. Mary's determined it would be of value to participate in a third party Community Health Needs Assessment (CHNA) process to augment its earlier assessments. An opportunity to work with surrounding county public health departments was seen as an important step in linking St. Mary's efforts with those at the local level. Further, with the concurrent strategic planning within the hospital, the external CHNA would serve as a cornerstone of information to ensure St. Mary's was identifying and addressing areas expressed as important by the community.

Community Served

To determine the community for the assessment, the core planning team looked at the number of discharges from St. Mary's from different counties in 2010, the latest official data available. Based on the information, the community was identified as Cabell County, WV, Wayne County, WV, Lawrence County, Ohio, and Lincoln County, WV. These four counties cumulatively represented more than 70% of population served. The percentage of the total discharges for each county is listed below:

- Cabell County 31%
- Wayne County 16%
- Lawrence County 12%
- Lincoln County 6%

Demographics

The latest statistics available were used to create a snapshot of national, state, and local demographics. While the trends of the primary socioeconomic indicators in Cabell, Lawrence, Lincoln, and Wayne counties followed the same trajectory as national trends, with the exception of the population's age distribution, the statistics indicate that the population served by St. Mary's Medical Center is disadvantaged. More poverty and lower household income combine with lower educational attainment, high unemployment, and residents concentrating

in the higher age brackets speak of a population facing moderate to severe challenges now and in the near future.

Table 1: Community Demographics

Indicator	Cabell County	Lawrence County	Lincoln County	Wayne County	West Virginia	United States
Poverty Rate	20.6%	17.7%	26.6%	20.2%	18.1%	15.3%
HS Diploma or Higher	85.7%	81.9%	66.4%	78.1%	83.2%	85.6%
Unemployment Rate	7.4%	8.6%	10.8%	8.7%	8.5%	9.6%
Median Household Income	$34,492	$37,540	$30,868	$35,079	$38,218	$50,046
Total Population	95,526	62,450	21,720	42,481	1,840,802	308,745,538
0-19	23%	26%	25%	25%	24%	27%
20-39	35%	31%	30%	30%	31%	34%
40-64	26%	28%	30%	29%	29%	26%
65+	16%	16%	26%	26%	16%	13%

The poverty rate is a solid predictor of citizens' access to resources—the information and infrastructure necessary for effective health care and security—needed to care for themselves and their families. The poverty rate in West Virginia is higher than the national average, and in most of the counties served by St. Mary's Medical Center, it is higher still. In addition, all of the counties served by St. Mary's Medical Center have lower median household income than average households throughout West Virginia, which has a household median income only 76.4% of national household income levels. Poverty correlates highly to greater health and security challenges, and the generally low educational attainment of these four West Virginia counties may magnify that effect.

Process and Methodology

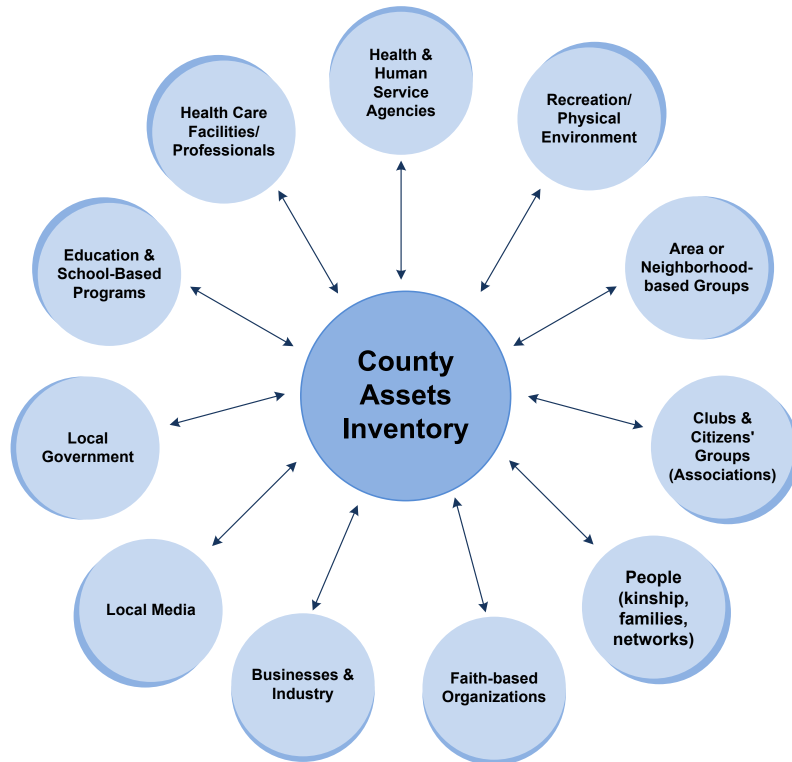
St. Mary's and the local health departments in its service area followed a comprehensive process in preparing the Community Health Needs Assessment. Cabell-Huntington Health Department and St. Mary's Medical Center worked in collaboration with Cabell Huntington Hospital to create an assessment that focused on the needs of the community.

The Community Health Needs Assessment process started in mid-2012. A third party, the Center for Entrepreneurial Studies and Development, Inc. (CESD) located in Morgantown, West Virginia, was engaged to assist in the planning and development process for the CHNA with St. Mary's. A core planning team (listed with the Table of Contents) was established within St. Mary's to assist with the process. After completion of the primary and secondary data analysis, CESD believed that the robust and inclusive assessment process produced no substantial information gaps that limited St. Mary's ability to assess the community's health needs.

Community Assets

As part of the planning process, county asset mapping was completed by local health departments to identify available resources that contribute in some way to the health and well-being of their respective county. Further, asset mapping helped identify potential community partners with whom they might work with in the future. As expected, some assets identified were already working with the hospital or local health department in some capacity. In addition, asset mapping was used to identify some key informants for interviews as well as those who could logistically support the Community Health Needs Assessment. Figure 1 on the left shows the county asset mapping framework.

Figure 1: County Asset Mapping Framework



Health Department Programs and Services Data

Another planning activity focused on identifying, collecting, and analyzing operational data regarding programs and services offered by the participating local health departments. This included pulling together historical clinical and health surveillance information.

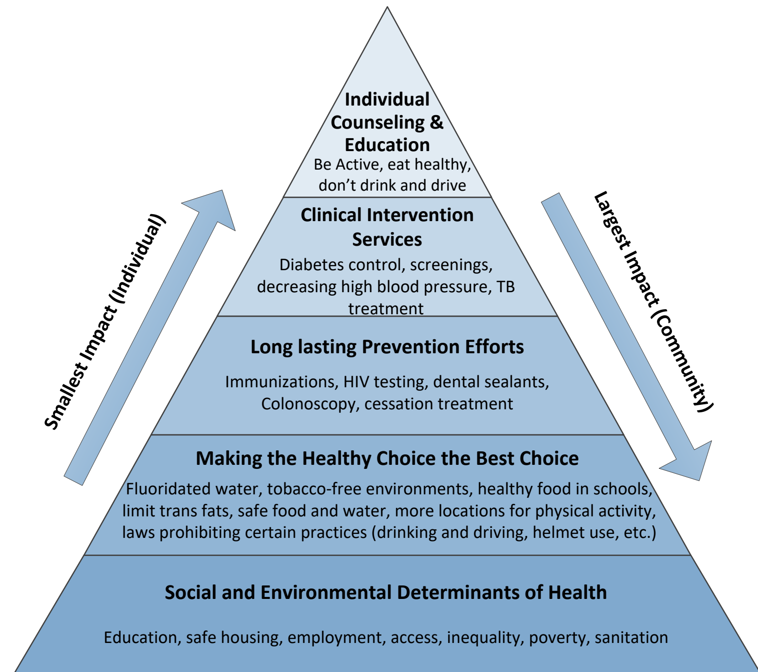
Trends in Public Health

As part of the planning process, public health industry trends were collected, reviewed analyzed with leaders of the local health departments. Some examples include the Patient Protection and Affordable Care Act, more collaboration to address community health needs, and the aging of the population.

Epidemiological data suggests that the burden of disease and related health inequities is due in large part to the conditions in which people are born, grow, live, work, and age. As a result, public health practice is shifting its focus away from individual clinical interventions to a broad population-based approach. This is clearly illustrated in the five-tiered pyramid shown. In thinking through the community health assessment process and results, this factor becomes

important for hospitals which strive to address community health concerns. This is especially true as community based hospitals reach out to work more closely with local public health organizations.

Figure 2: Pubic Health Impact Pyramid



***Adapted from CDC Health Impact Pyramid and work by Dr. Thomas Frieden, MD.**

In order to improve the health of the communities served by the hospital, there is a need to develop strategies and interventions that focus on socioeconomic factors at the bottom of the pyramid. As found in the community health needs assessment, the public focused on a broad range of issues associated with its health and well-being. These ranged from employment to safe housing and from mental health to preventive services. These population-based approaches represent interventions with the broadest potential impact for the most people in a given area (e.g., county). Individual interventions are valuable; however, their impact is limited to individual outcomes. Additionally, these types of interventions typically focus on treatment rather than prevention, which can be costlier and less sustainable. Public health has a key role in trying to address the different levels in the pyramid; however, how and to what degree at each level are challenging considerations for the traditional county health departments. Therefore, as part of the hospital and local public health collaboration, there is a need to have open discussions on how best to address the social and environmental determinants of health in each community.

Health Status

In addition to the community assessment survey and interviews, secondary data was collected using a variety of sources. Recent secondary data is presented in tabular form below and trend charts are in the *Existing Data on Community Health* supplement which is available upon request.

The supplement contains summarized data collected on more than thirty health indicators divided into six sections. The sections cover socioeconomic demographics, behavioral and intermediate risk factors, chronic disease prevalence, communicable disease prevalence, and causes of death. Within each section, data for each indicator compares Cabell, Lawrence, Lincoln and Wayne Counties with West Virginia and the United States. These comparisons are done over a period of approximately ten years.

The sources used in the collection of data are available as a separate document. Additional secondary data was used as a reference includes: *County Health Rankings and Roadmaps*, RWJF; *2009 County Health Rankings*, West Virginia Higher Education Policy Commission; and *Behavioral Health County Profiles*, WV DHHR.

Some of the key findings from the supplement are covered on the following pages.

Hospital Services

As part of the community health needs assessments, St. Mary's took a snapshot of emergency room visits during the past year. The following shows five of the most common reasons individuals came to the emergency room.

1. Heart Disease, Stroke, and other Diseases of the Circulatory System
2. Diseases of the Musculoskeletal System and Connective Tissue
3. COPD and other Diseases of the Respiratory System
4. Diseases of the Digestive System
5. Fractures, Sprains, Strains, Open Wounds, Contusions and Other Injuries

Causes of Death

Direct breakdowns of the leading causes of death help describe some of the health needs of the population, as well as clarify the general state of well-being in the counties served by St. Mary's Medical Center. As Table 2 reveals, all four counties in the survey are at greater risk in five leading causes of mortality in West Virginia.

Table 2: Causes of Death per 100,000 population

Indicator	Cabell County	Lawrence County	Lincoln County	Wayne County	West Virginia	United States
Heart Disease	237.4	243.3	270.9	243.2	276.8	195.2
Cancer	245.8	193.7	325.1	250.5	263.0	184.9
COPD & Respiratory	76.7	79.0	81.3	92.4	81.9	44.7
Accidents	55.7	51.3	90.3	46.2	51.8	38.4
Suicides	11.6	8.0	18.1	19.5	13.9	12
Homicides	6.3	5.6	9.0	19.5	5.1	5.5

Chronic Disease Prevalence

In West Virginia, every chronic disease examined, except asthma, occurs at higher rates than the national average. Even asthma occurs at a higher rate in two out of four counties, Lincoln and Wayne, than the national average.

Table 3: Chronic Disease Prevalence

Indicator	Cabell County	Lawrence County	Lincoln County	Wayne County	West Virginia	United States
Diabetes	13.2%	12.5%	14.0%	11.0%	11.7%	8.7%
Heart Disease	12.7%	17.2%	14.4%	14.4%	15.8%	11.0%
Asthma	7.9%	8.4%	11.2%	9.7%	7.3%	9.1%
Arthritis	33.0%	32.6%	40.5%	41.4%	33.9%	26.0%

Communicable Disease Prevalence

With the major exception of influenza, West Virginia and three of the four counties served by St. Mary's Medical Center are less threatened by communicable diseases. In Cabell County the chlamydia and gonorrhea rates are much higher than throughout the state, practically on par with national rates.

Table 4: Communicable Disease Cases per 1,000 Population

Indicator	Cabell County	Lawrence County	Lincoln County	Wayne County	West Virginia	United States
Chlamydia	4.3	1.6	1.6	0.8	2.0	4.2
Gonorrhea	0.8	0.3	0.1	0.2	0.3	1.0
HIV/AIDS*	345**	30	345**	345**	2,440	1,148,200
Hepatitis B (new cases)	19	3	2	2	84	3,371
Influenza	27.7	-	19.7	6.2	32.3	3.1

* Estimated number of persons living with HIV/AIDS

** District-Wide Data includes Cabell, Lincoln, Logan, Mason, Mingo and Wayne Counties

Intermediate Risk Factors

As with other categories in this report, West Virginians tend to fare more poorly in most of these particulars than people do nationwide. In most cases, the four counties served by St. Mary's Medical Center experience worse rates than residents statewide. For instance, West Virginians are 51.7% more likely to characterize their health as fair or poor than people nationwide, and according to the Behavioral Risk Factor Surveillance System, a phone survey system developed by the CDC, three of the four counties have rates higher than the statewide rate.

Table 5: Intermediate Risk Factor Prevalence

Indicator	Cabell County	Lawrence County	Lincoln County	Wayne County	West Virginia	United States
Fair or Poor Health	22.3%	-	30.8%	29.9%	23.4%	14.7%
No Health Insurance (18-64)	17.0%	14.8%	20.0%	23.6%	21.4%	17.8%
Hypertension	31.7%	34.6%	38.9%	35.4%	37.6%	28.7%
High Cholesterol	40.9%	41.7%	39.1%	41.7%	38.5%	37.5%
Obese	30.9%	39.7%	35.8%	37.8%	32.9%	27.5%
Overweight	-	35.5%	-	-	35.0%	36.2%
Severe Psychological Distress	12.6%*	6.9%	12.6%*	12.6%*	14.0%	11.3%

*Regional data includes Boone, Cabell, Clay, Kanawha, Lincoln, Logan, Mason, Mingo, Putnam and Wayne Counties

Behavioral Risk Factors

West Virginia and all four counties served by St. Mary's Medical Center have high rates of poor nutritional habits, lack of exercise, and cigarette smoking. Citizens in the defined community generally have lower rates of binge drinking and illicit drug use than people across the country.

Table 6: Behavioral Risk Factor Prevalence

Indicator	Cabell County	Lawrence County	Lincoln County	Wayne County	West Virginia	United States
Cigarette Smoking	25.2%	29.7%	29.8%	33.0%	26.8%	17.3%
Binge Drinking	10.1%	17.1%	8.9%	11.2%	9.0%	15.1%
Illicit Drug Use	8.7%*	6.5%	8.7%*	8.7%*	8.1%	8.9%
Lack of Exercise	27.3%	36.5%	35.1%	32.3%	32.9%	23.9%
Nutrition	80.2%	79.9%	84.3%	84.3%	83.8%	76.6%

*Regional data includes Boone, Cabell, Clay, Kanawha, Lincoln, Logan, Mason, Mingo, Putnam and Wayne Counties

Vital Statistics

The infant mortality numbers represent the number of infants per thousand births who died at birth or soon thereafter. The teen birth rate is the number of births per 1,000 women age 15-19. The infant mortality rate in West Virginia is consistent with the United States as a whole.

Table 7: Vital Statistics

Indicator	Cabell County	Lawrence County	Lincoln County	Wayne County	West Virginia	United States
Infant Mortality	9.7	4.0	5.8	8.5	7.7	7.8
Teen Birth Rate	49.6	58.1	65.4	47.9	44.8	34.3

Community Voice

The Community Health Needs Assessment process started in mid-2012. A third party, the Center for Entrepreneurial Studies and Development, Inc. (CESD) located in Morgantown, West Virginia, was engaged to assist in the planning and development.

An assessment survey with a short and a long version was developed to collect information from citizens in Cabell, Lawrence, Lincoln and Wayne Counties. The assessment was posted online and paper copies were distributed to many citizens of the counties. This assessment focused on a number of issues including health priorities, barriers, and activities.

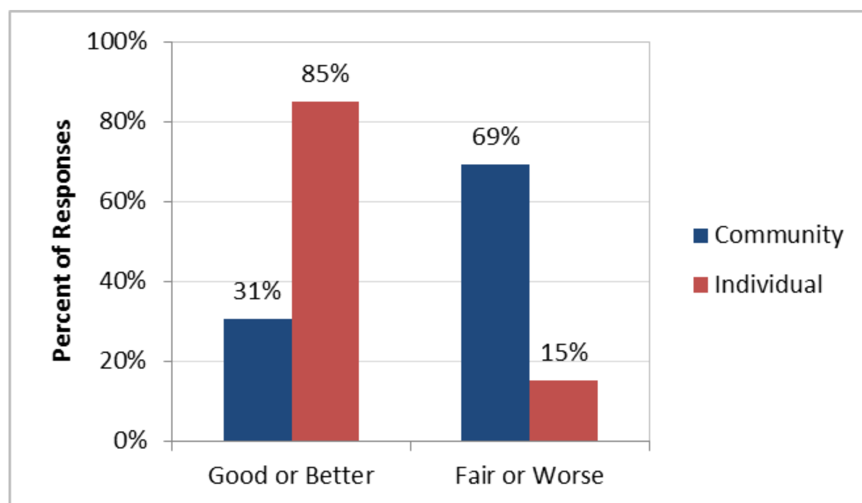
The St. Mary's planning team was responsible for approving the assessment surveys, and all responses were organized in a report for the team. More than 800 individual surveys were collected in total. 548 individual surveys were collected from Cabell County citizens; 88 individual surveys from Lawrence County citizens; 52 individual surveys from Lincoln County; and 146 individual surveys from Wayne County citizens. All written responses to the open-ended questions have been listed within each question and are in the *First Hand Data on Community Health* supplement which is available upon request. That report also summarizes responses to the open-ended questions and presents all quantitative results in graphical form.

To augment the survey process, telephone interviews were completed for selected individuals identified as individuals living or working in the county that had considerable involvement in the community. Key informants included interested citizens, health care providers, community program leaders, elected officials, and public health experts. Overall, these interviews often confirmed the results of the survey responses.

Key Statistics

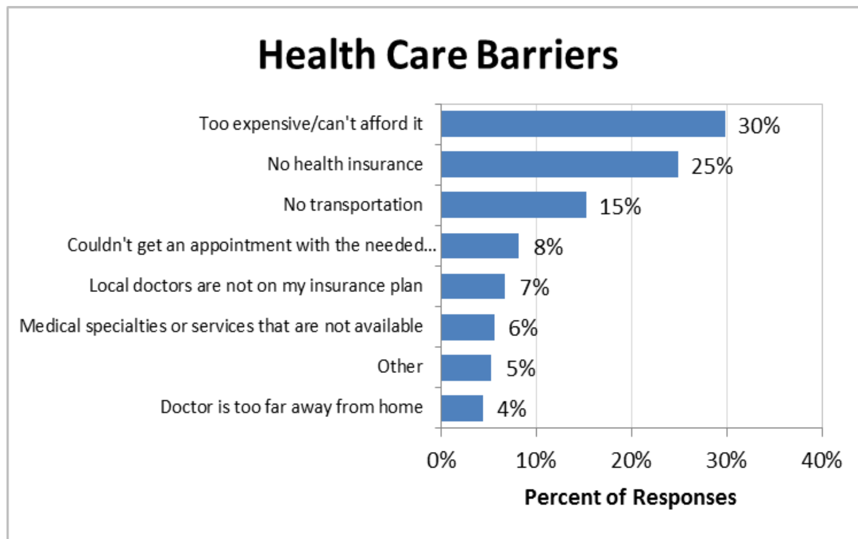
When asked to rate the present state of health and well-being for citizens of their respective county and their own health and well-being (considering general quality of life, non-smoking, exercise, access to quality foods, sick days, environmental safety, etc.), survey respondents overwhelmingly rated their own health status to be better than that of the community. The responses are summarized in Figure 3.

Figure 3: Perceived Health Status



Survey respondents also commented on concerns that keep them or other Cabell, Lawrence, Lincoln and Wayne County residents from getting the health care they need. As seen in Figure 4, the cost of health care and lack of health insurance were major barriers. The introduction of the health

Figure 4: Health Care Barriers



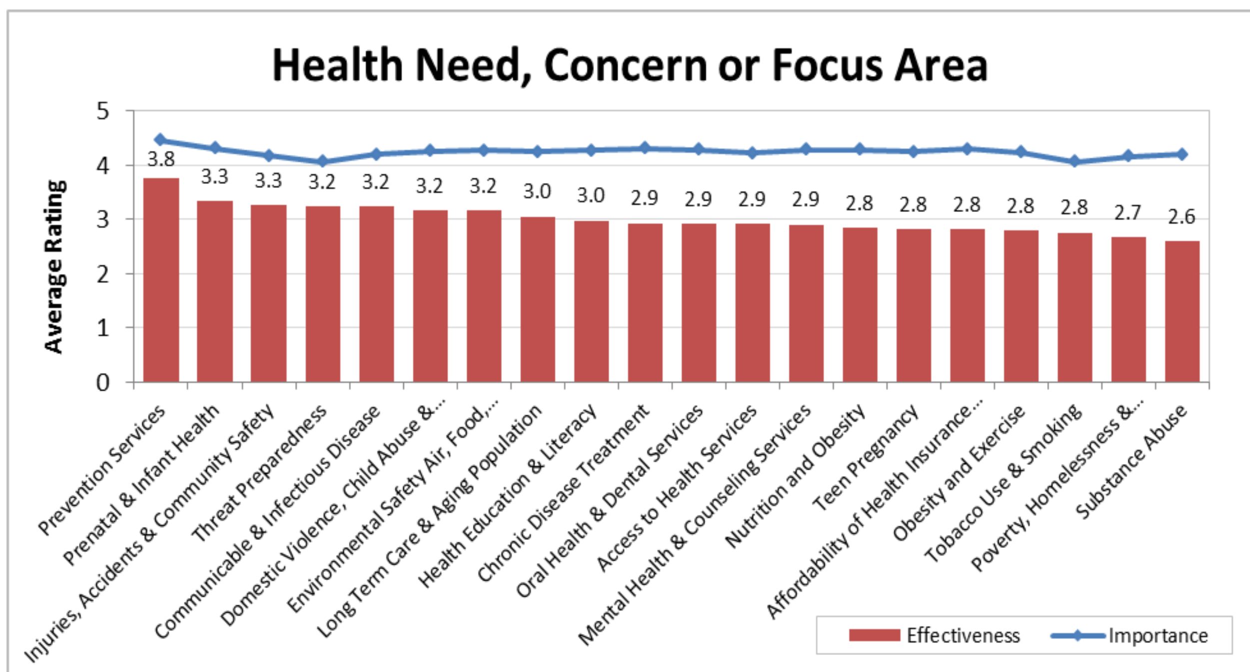
insurance marketplaces should positively affect these barriers. Transportation and availability of physicians and specialists are barriers that were also frequently mentioned.

While not identical from county to county, the perceived health status and health barriers followed similar patterns in each county within the community.

County Priorities

A major outcome for this assessment is compiled in Figure 5, which is an analysis of how respondents rated two aspects of a list of health needs, concerns, or focus areas. First was a rating of how important the item was for the county's health and well-being. The second was to rate how effectively those needs, concerns, or focus areas are currently being addressed. The blue line shows the averages of the Importance, while the red bars show the average effectiveness of each. The graph is presented from most effective item (left) to the least effective item (far right).

Figure 5: Importance and Effectiveness of Health Needs, Concerns or Focus Areas



Staff members from Wayne, Lincoln and Cabell-Huntington Health Departments reviewed the primary and secondary data summaries for each of their respective counties to identify common themes and priority areas. The primary data summary included the survey results and key informant interview notes specific to their programs and services. Priorities for Lawrence County were interpolated by the assessment facilitators. The priority areas below repeatedly showed up in both qualitative and quantitative responses and were selected as the priority areas for the county listed.

Table 8: County Health Department Priorities

County Health Priority	Cabell County	Lawrence County	Lincoln County	Wayne County
Obesity, Nutrition and Exercise	✓	✓	✓	✓
Substance Abuse and Mental Health	✓	✓	✓	✓
Poverty, Homelessness, Unemployment	✓	✓	✓	✓
Tobacco Use and Smoking	✓	✓		✓
Teen Pregnancy	✓		✓	✓
Threat Preparedness	✓	✓		
Access to Affordable Health Services		✓	✓	
Chronic Disease Treatment		✓		✓
Domestic Violence, Child Abuse and Neglect			✓	
Health Education and Literacy				✓
Prenatal and Infant Health			✓	

Action Plan

Members of St. Mary's planning team also reviewed the primary and secondary data from each of the four counties in its community. Taking into account the data reviewed and the priorities identified by each of the counties, they recognized the priority areas listed below.

The Action Plan, which outlines the planned activities for each priority area, is contained in a separate document. Three overarching goals related to **building a network of collaboration**, **enhancing education and awareness activities**, and **tailoring interventions for specific demographic groups** - with an emphasis on senior services - are also discussed in the Action Plan.

Priority Area 1: Chronic Disease

Priority Area 2: Obesity, Nutrition and Exercise

Priority Area 3: Access to Health Services

Priority Area 4: Health Education and Literacy

Priority Area 5: Tobacco Use and Smoking

Priority Area 6: Substance Abuse and Mental Health

Priority Area 7: Teen Pregnancy

Priority Area 8: Prenatal and Infant Health

Priority Area 9: Poverty, Homelessness and Unemployment

Priority Area 10: Threat Preparedness