



Susquehanna Health  
Muncy Valley Hospital

## **Muncy Valley Hospital**

Community Health Needs Assessment

June 2013

**Muncy Valley Hospital**  
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## Consultant's Report

Ms. Jan Fisher  
Executive Vice President/Chief Operating Officer  
Susquehanna Health  
Muncy Valley Hospital  
Muncy, Pennsylvania 17756

On behalf of Muncy Valley Hospital, (MVH) we have assisted in conducting a Community Health Needs Assessment (CHNA) consistent with the scope of services outlined in our engagement letter dated August 9, 2012. The purpose of our engagement was to assist the System in meeting the requirements of Internal Revenue Code §501(r)(3). We relied on the guidance contained in IRS Notice 2011-52 when preparing your report. We also relied on certain information provided by MVH, specifically certain utilization data and existing community health care resources.

Based upon the assessment procedures performed, it appears MVH is in compliance with the provisions of §501(r)(3). Please note that, we were not engaged to, and did not, conduct an examination, the objective of which would be the expression of an opinion on compliance with the specified requirements. Accordingly, we do not express such an opinion.

We used and relied upon information furnished by the Organization, its employees and representatives and on information available from generally recognized public sources. We are not responsible for the accuracy and completeness of the information and are not responsible to investigate or verify it.

These findings and recommendations are based on the facts as stated and existing laws and regulations as of the date of this report. Our assessment could change as a result of changes in the applicable laws and regulations. We are under no obligation to update this report if such changes occur. Regulatory authorities may interpret circumstances differently than we do. Our services do not include interpretation of legal matters.

*BKD, LLP*

June 21, 2013

## Introduction

IRC Section 501(r) requires health care organizations to assess the health needs of their communities and adopt implementation strategies to address identified needs. Per IRC Section 501(r), a byproduct of the *Affordable Care Act*, to comply with federal tax-exemption requirements, a tax-exempt hospital facility must:

- Conduct a community health needs assessment every three years.
- Adopt an implementation strategy to meet the community health needs identified through the assessment.
- Report how it is addressing the needs identified in the community health needs assessment and a description of needs that are not being addressed with the reasons why such needs are not being addressed.

The community health needs assessment must take into account input from persons who represent the broad interest of the community served by the hospital facility, including those with special knowledge of or expertise in public health. The hospital facility must make the community health needs assessment widely available to the public.

This community health needs assessment, which also describes a process, is intended to document Muncy Valley Hospital's, compliance with IRC Section 501(r). Health needs of the community have been identified and prioritized so that Muncy Valley Hospital (Hospital) may adopt an implementation strategy to address specific needs of the community.

The process involved:

- Collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, health care resources and patient use rates.
- Interviews with key informants who represent a) broad interests of the community, b) populations of need or c) persons with specialized knowledge in public health.
- Circulation of a Community Health Input Questionnaire that gathered a wide range of information which was widely distributed to members of the community.
- Collaboration of the three hospital, Williamsport Regional Medical Center, Divine Providence Hospital and Muncy Valley Hospital to prioritize health need results.

This document is a summary of all the available evidence collected during the initial cycle of community health needs assessments required by the IRS. It will serve as a compliance document as well as a resource until the next assessment cycle.

Both the process and document serve as the basis for prioritizing the community's health needs and will aid in planning to meet those needs.

## **Summary of Community Health Needs Assessment**

The Hospital engaged **BKD, LLP** to conduct a formal community health needs assessment. **BKD, LLP** is one of the largest CPA and advisory firms in the United States, with approximately 2,000 partners and employees in 30 offices. BKD serves more than 900 hospitals and health care systems across the country. The community health needs assessment was conducted from December 2012 through April 2013.



Based on current literature and other guidance from the treasury and the IRS, the following steps were conducted as part of Hospital's community health needs assessment:

- The “community” served by the Hospital was defined by utilizing inpatient and outpatient data regarding patient origin. This process is further described in Community Served by the Hospital.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing information from various third parties (see references in Appendices). The health status of the community was then reviewed. Information on the leading causes of death and morbidity information was analyzed in conjunction with health outcomes and factors reported for the community by CountyHealthrankings.org. Health factors with significant opportunity for improvement were noted.
- An inventory of health care facilities and resources was prepared and a demand for physician and hospital services was estimated. Both were evaluated for unmet needs.
- Community input was provided through key informant interviews of 25 stakeholders and a community health input questionnaire was widely distributed. The Community Health Input Questionnaire was completed by 474 individuals. Results and findings are described in the Key Informant and Community Health Input Questionnaire sections of this report.
- Information gathered in the above steps was analyzed and reviewed to identify health issues of uninsured persons, low-income persons and minority groups and the community as a whole. Health needs were ranked utilizing a weighting method that considers 1) the ability of the Hospital to impact change, 2) the size of the problem, 3) the seriousness of the problem and 4) the prevalence of common themes.

Health needs were then prioritized taking into account the perceived degree of influence the Hospital has to impact the need and the health needs impact on the overall health of the community. Information gaps were identified during the prioritization process and are also reported.

- Recommendations based on this assessment have been communicated to Hospital management.

### ***General Description of Hospital***

In July 1994, an alliance was formed among three area hospitals, signaling the beginning of a new era in healthcare for the region. This alliance, Susquehanna Health, brought together Williamsport Regional Medical Center, Divine Providence Hospital, and Muncy Valley Hospital, along with all their subsidiaries, into one fully integrated healthcare system that provides healthcare to residents in the region and has received national recognition for its healthcare leadership.

Laurel Health System—including Soldiers + Sailors Memorial Hospital, The Green Home and other services—became part of Susquehanna Health in the fall of 2012. This partnership created an expanded healthcare delivery system that benefits the entire Tioga-Lycoming region.

Located in central Pennsylvania, Susquehanna Health is made up of these three hospitals, plus Soldiers + Sailors Memorial Hospital in Wellsboro, Pennsylvania, with a total of 332 licensed acute and 259 long-term care beds, along with two skilled nursing units, home care division, physician services and ambulance service. The system's emergency departments have a total of approximately 56,000 visits each year and its maternity units welcome 1,500 babies annually.



As the city of Williamsport was growing, a need for a medical facility to serve the population in the eastern end of Lycoming County developed due to bad roads and long distances that made traveling to Williamsport Regional Medical Center difficult. Recognizing the need for the community to have its own hospital facility, 12 physicians from the Muncy, Hughesville and Montgomery areas worked together to establish a hospital in Muncy. A small 18-bed facility opened in 1922 in a Victorian residence. The facility cost \$10,000. In 1945, the Hospital began the construction of what is today the Muncy Valley Hospital. In February of 1991, Muncy Valley Hospital was purchased by Divine Providence Hospital and from that time has shared a Catholic faith-based mission with Divine Providence.

Over the ensuing years, the Hospitals continued to thrive, adding new services and advanced technology to insure area residents had the best possible medical care. The Hospital increased to 14 physicians. In addition, there was a consulting staff of various specialties including surgery, internal medicine, genitourinary, eye, plastic surgery, X-ray, obstetrics, pediatrics, orthopedics, ear, nose, throat and dental services. In 1953, realizing the need for a nursing unit to care for geriatric patients, the Noble mansion that housed the original hospital was renovated and opened as a Geriatric Unit. An east wing was added to the hospital in 1957 and in 1968, the second floor of the east wing was completed. A new geriatric ward was established with money from a \$45,000 grant from the county commissioners, the beginning of what is the present comprehensive and modern Skilled Nursing Unit. Through Susquehanna Health, this facility has been renovated and expanded to 139 beds and today continues to provide area residents skilled nursing care in their own community.

As mentioned previously in the introduction, the three hospitals located in Lycoming County, Williamsport Regional Medical Center, Divine Providence Hospital and Muncy Valley Hospital collaborated together for the purpose of the Community Health Needs Assessment reports. Decisions for the three hospitals are made at a system level. The defined community, described later in the report, is the same for all three hospitals. Hence the responses from the community health input questionnaire as well as the key informant interviews were used for each Hospital's report. Soldiers & Sailors Memorial Hospital has a separate defined community from the other three hospitals in the health system. Hence, the report for Soldiers & Sailors Memorial Hospital is independent, with a separate community health input questionnaire and key informant interviews.

### **Community Served by the Hospital**

The Hospital is located in the city of Muncy, Pennsylvania. Muncy is an approximately one hundred seventy mile drive northeast from Philadelphia, Pennsylvania. Muncy and the surrounding geographic area are not close to any major metropolitan area. Muncy is accessible by a state highway and other secondary roads.



### **Defined Community**

A community is defined as the geographic area from which a significant number of the patients utilizing hospital services reside. While the community health needs assessment considers other types of health care providers, the utilization of Hospital services provides the clearest definition of the community. The criteria established to define the community is as follows:

- A zip code area must represent two percent or more of the Hospital's total discharges and/or outpatient visits.
- The Hospital's market share in the zip code area must be greater than or equal to 20 percent.
- The area is contiguous to the geographical area encompassing the Hospital.

Based on the patient origin of acute care discharges from July 1, 2011, through June 30, 2012, management has identified the community to be the entire county of Lycoming, which is comprised of the zip codes listed in *Exhibit 1*. Zip codes 17723, 17727 and 17742 are rural communities with low populations, hence were excluded from *Exhibits 1 -5* of this report. For purposes of geographical illustration, they are included. Due to the collaboration of the three Lycoming County hospitals and the defined community being the same for all three, all of the exhibits will be equivalent in the Community Health Needs Assessment reports for Divine Providence Hospital and Muncy Valley Hospital. *Exhibit 1* presents the Hospital's patient origin and charges for each of the zip code areas in its community. Following is a detailed map of the Hospital's geographical location and the footprint of the community identified in *Exhibit 1*. The map displays the Hospital's geographic relationship to surrounding counties, significant roads and highways, and identifies the zip codes that make up the Hospital's community.

When specific information is not available for zip codes, the community health needs assessment relies on information for the specific county. The geographic area of the defined community is Lycoming County. The community health needs assessment utilizes the county when corresponding information is more readily available.



**Exhibit 1**  
**Susquehanna Health - Muncy Valley Hospital**  
**Summary of Inpatient Discharges by Zip Code**  
**FY2012**

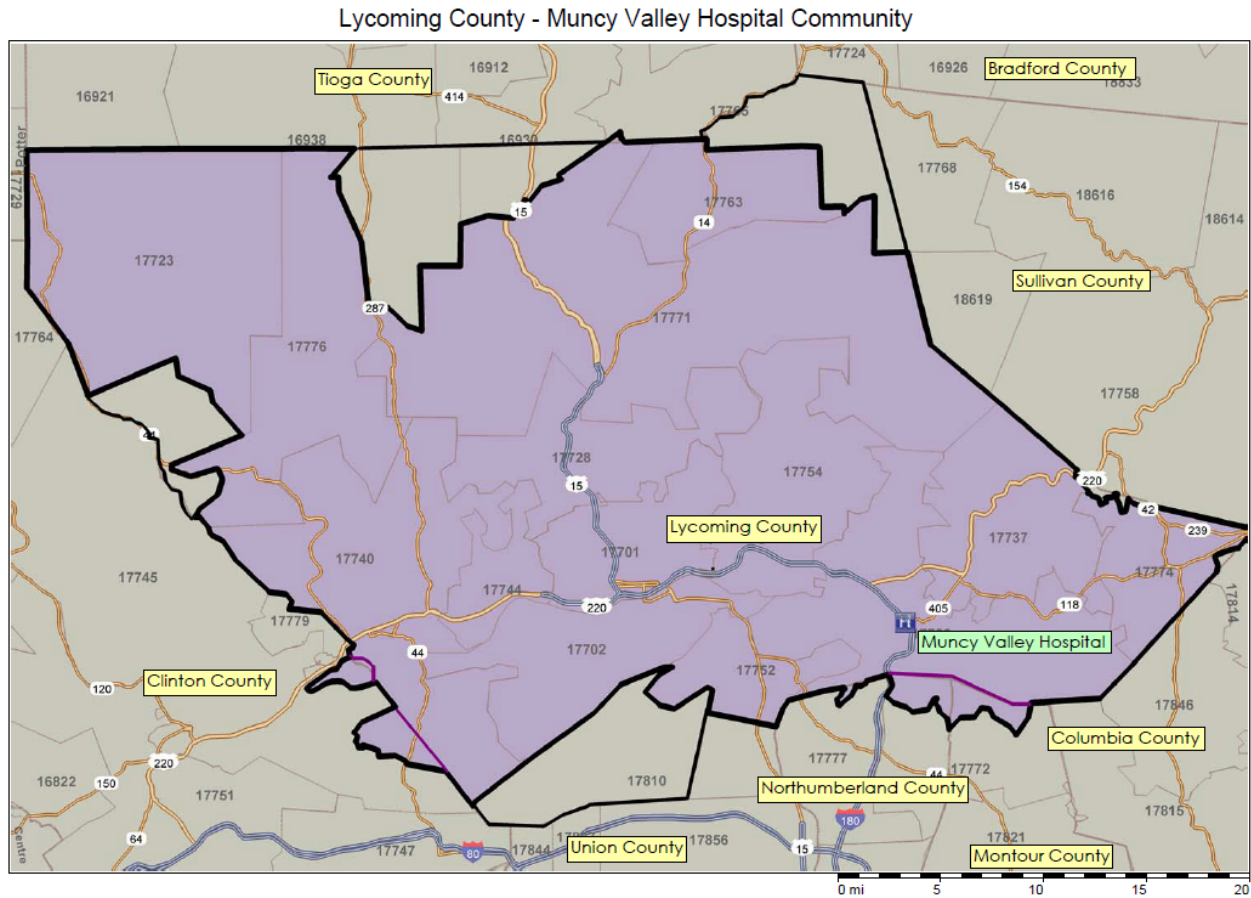
Zip Code	City	Discharges	Percent of Total Discharges	Cumulative Percent
17701	Williamsport	35	6.4%	6.4%
17702	Williamsport	9	1.6%	8.0%
17728	Cogan Station	8	1.5%	9.5%
17737	Hughesville	94	17.1%	26.5%
17740	Jersey Shore	-	0.0%	26.5%
17744	Linden	1	0.2%	26.7%
17752	Montgomery	42	7.6%	34.4%
17754	Montoursville	68	12.4%	46.7%
17756	Muncy	168	30.5%	77.3%
17763	Ralston	-	0.0%	77.3%
17771	Trout Run	5	0.9%	78.2%
17774	Unityville	14	2.5%	80.7%
17776	Waterville	-	0.0%	80.7%
	All Other	106	19.3%	100.0%
	<b>Total</b>	<b>550</b>	<b>100.0%</b>	

Source: *Susquehanna Health*

## Community Details

### Identification and Description of Geographical Community

The following map geographically illustrates the Hospital’s location and community by showing the community zip codes shaded. The community’s population is defined as the entire county of Lycoming County.



### Community Population and Demographics

The U.S. Bureau of Census has compiled population and demographic data based on the 2010 census. The Nielsen Company, a firm specializing in the analysis of demographic data, has extrapolated this data by zip code to estimate population trends from 2013 through 2018.

*Exhibit 2* illustrates that the overall population is projected to increase slightly over the five-year period from 117,179 to 119,114. In line with the overall numbers, the age category that utilizes health care services the most, 65 years and over, is projected to increase from 20,428 to 23,207. The projected changes to the composition of the total community, between male and female, are projected to remain approximately the same over the five-year period.

**Exhibit 2**  
**Susquehanna Health - Muncy Valley Hospital**  
**Estimated 2013 Population and Projected 2018 Population**

Zip Code	City	Under 18 years	18-44 years	45-64 years	65 years and over	Total	Male	Female
<b>Estimated 2013 Population</b>								
17701	Williamsport	8,950	17,241	11,047	7,270	44,508	22,230	22,278
17702	Williamsport	2,233	3,483	3,036	1,925	10,677	5,259	5,418
17728	Cogan Station	952	1,425	1,770	937	5,084	2,570	2,514
17737	Hughesville	1,483	2,074	2,066	1,178	6,801	3,328	3,473
17740	Jersey Shore	2,830	3,891	3,488	1,974	12,183	5,993	6,190
17744	Linden	575	870	1,019	520	2,984	1,500	1,484
17752	Montgomery	1,123	1,508	1,270	688	4,589	2,250	2,339
17754	Montoursville	2,508	3,515	3,854	2,806	12,683	6,176	6,507
17756	Muncy	2,262	4,177	3,452	2,036	11,927	5,095	6,832
17763	Ralston	78	107	116	64	365	181	184
17771	Trout Run	699	936	1,241	653	3,529	1,807	1,722
17774	Unityville	282	414	389	234	1,319	672	647
17776	Waterville	43	61	87	68	259	132	127
<b>PROVIDER SERVICE AREA</b>		<b>24,018</b>	<b>39,702</b>	<b>32,835</b>	<b>20,353</b>	<b>116,908</b>	<b>57,193</b>	<b>59,715</b>
<b>Projected 2018 Population</b>								
17701	Williamsport	9,317	17,347	10,494	8,202	45,360	22,663	22,697
17702	Williamsport	2,218	3,550	2,919	2,173	10,860	5,359	5,501
17728	Cogan Station	930	1,410	1,711	1,103	5,154	2,589	2,565
17737	Hughesville	1,478	2,074	2,017	1,359	6,928	3,381	3,547
17740	Jersey Shore	2,759	3,922	3,391	2,210	12,282	6,021	6,261
17744	Linden	550	867	976	607	3,000	1,501	1,499
17752	Montgomery	1,156	1,491	1,248	804	4,699	2,305	2,394
17754	Montoursville	2,481	3,609	3,695	3,159	12,944	6,292	6,652
17756	Muncy	2,287	4,181	3,350	2,324	12,142	5,175	6,967
17763	Ralston	66	105	115	74	360	181	179
17771	Trout Run	648	932	1,179	758	3,517	1,797	1,720
17774	Unityville	296	400	378	281	1,355	695	660
17776	Waterville	45	61	76	69	251	127	124
<b>PROVIDER SERVICE AREA</b>		<b>24,231</b>	<b>39,949</b>	<b>31,549</b>	<b>23,123</b>	<b>118,852</b>	<b>58,086</b>	<b>60,766</b>

Source: The Nielsen Company

*Exhibit 2.1* provides the percent difference for each zip code from estimated 2013 to projected 2018 as well as the ability to compare the percent difference to the state of Pennsylvania and the United States for comparison purposes. *Exhibit 2.1* illustrates that the overall population is projected to increase by 1.7 percent over the five-year period which is higher than the projected increase for Pennsylvania at 1.0 percent and lower than the United States increase of 3.3 percent. Montgomery and Montoursville zip codes are projecting large increases overall in comparison to the rest of the county, especially for age group 65 years and over. Note that the age category that utilizes health care services the most, 65 years and over, is projected to increase overall by 13.6 percent. This increase in the 65 year and over category will have a dramatic impact on both the amount and type of services required by the community.

**Exhibit 2.1**  
**Susquehanna Health - Muncy Valley Hospital**  
**Estimated 2013 Population vs. Projected 2018 Population Percent Difference**

Zip Code	City	Under 18 years	18-44 years	45-64 years	65 years and over	Total	Male	Female
<b>Percent Difference</b>								
17701	Williamsport	4.1%	0.6%	-5.0%	12.8%	1.9%	1.9%	1.9%
17702	Williamsport	-0.7%	1.9%	-3.9%	12.9%	1.7%	1.9%	1.5%
17728	Cogan Station	-2.3%	-1.1%	-3.3%	17.7%	1.4%	0.7%	2.0%
17737	Hughesville	-0.3%	0.0%	-2.4%	15.4%	1.9%	1.6%	2.1%
17740	Jersey Shore	-2.5%	0.8%	-2.8%	12.0%	0.8%	0.5%	1.1%
17744	Linden	-4.3%	-0.3%	-4.2%	16.7%	0.5%	0.1%	1.0%
17752	Montgomery	2.9%	-1.1%	-1.7%	16.9%	2.4%	2.4%	2.4%
17754	Montoursville	-1.1%	2.7%	-4.1%	12.6%	2.1%	1.9%	2.2%
17756	Muncy	1.1%	0.1%	-3.0%	14.1%	1.8%	1.6%	2.0%
17763	Ralston	-15.4%	-1.9%	-0.9%	15.6%	-1.4%	0.0%	-2.7%
17771	Trout Run	-7.3%	-0.4%	-5.0%	16.1%	-0.3%	-0.6%	-0.1%
17774	Unityville	5.0%	-3.4%	-2.8%	20.1%	2.7%	3.4%	2.0%
17776	Waterville	4.7%	0.0%	-12.6%	1.5%	-3.1%	-3.8%	-2.4%
<b>PROVIDER SERVICE AREA</b>		0.9%	0.6%	-3.9%	13.6%	1.7%	1.6%	1.8%
<b>Pennsylvania 2013 Estimated (1,000s)</b>		2,761	4,360	3,572	2,092	12,785	6,233	6,552
<b>Pennsylvania 2018 Projected (1,000s)</b>		2,736	4,330	3,486	2,359	12,911	6,296	6,614
<b>U.S. 2013 Estimated (1,000s)</b>		74,731	113,156	83,113	43,862	314,862	154,820	160,042
<b>U.S. 2018 Projected (1,000s)</b>		76,231	113,757	84,336	50,998	325,322	160,000	165,322

Source: The Nielsen Company

The following is an analysis of the age distribution of the population for the community. The analysis is provided by zip code and provides a comparison to Pennsylvania and the United States.

**Exhibit 2.2**  
**Susquehanna Health - Muncy Valley Hospital**  
**Estimated 2013 Population vs. Projected 2018 Population with Percent Totals**

Zip Code	City	Under 18 years	18-44 years	45-64 years	65 years and over	Total	Male	Female
<b>Estimated 2013 Population</b>								
17701	Williamsport	20.1%	38.7%	24.8%	16.3%	100.0%	49.9%	50.1%
17702	Williamsport	20.9%	32.6%	28.4%	18.0%	100.0%	49.3%	50.7%
17728	Cogan Station	18.7%	28.0%	34.8%	18.4%	100.0%	50.6%	49.4%
17737	Hughesville	21.8%	30.5%	30.4%	17.3%	100.0%	48.9%	51.1%
17740	Jersey Shore	23.2%	31.9%	28.6%	16.2%	100.0%	49.2%	50.8%
17744	Linden	19.3%	29.2%	34.1%	17.4%	100.0%	50.3%	49.7%
17752	Montgomery	24.5%	32.9%	27.7%	15.0%	100.0%	49.0%	51.0%
17754	Montoursville	19.8%	27.7%	30.4%	22.1%	100.0%	48.7%	51.3%
17756	Muncy	19.0%	35.0%	28.9%	17.1%	100.0%	42.7%	57.3%
17763	Ralston	21.4%	29.3%	31.8%	17.5%	100.0%	49.6%	50.4%
17771	Trout Run	19.8%	26.5%	35.2%	18.5%	100.0%	51.2%	48.8%
17774	Unityville	21.4%	31.4%	29.5%	17.7%	100.0%	50.9%	49.1%
17776	Waterville	16.6%	23.6%	33.6%	26.3%	100.0%	51.0%	49.0%
<b>TOTAL PROVIDER SERVICE AREA</b>		20.5%	34.0%	28.1%	17.4%	100.0%	48.9%	51.1%
<b>Projected 2018 Population</b>								
17701	Williamsport	20.5%	38.2%	23.1%	18.1%	100.0%	50.0%	50.0%
17702	Williamsport	20.4%	32.7%	26.9%	20.0%	100.0%	49.3%	50.7%
17728	Cogan Station	18.0%	27.4%	33.2%	21.4%	100.0%	50.2%	49.8%
17737	Hughesville	21.3%	29.9%	29.1%	19.6%	100.0%	48.8%	51.2%
17740	Jersey Shore	22.5%	31.9%	27.6%	18.0%	100.0%	49.0%	51.0%
17744	Linden	18.3%	28.9%	32.5%	20.2%	100.0%	50.0%	50.0%
17752	Montgomery	24.6%	31.7%	26.6%	17.1%	100.0%	49.1%	50.9%
17754	Montoursville	19.2%	27.9%	28.5%	24.4%	100.0%	48.6%	51.4%
17756	Muncy	18.8%	34.4%	27.6%	19.1%	100.0%	42.6%	57.4%
17763	Ralston	18.3%	29.2%	31.9%	20.6%	100.0%	50.3%	49.7%
17771	Trout Run	18.4%	26.5%	33.5%	21.6%	100.0%	51.1%	48.9%
17774	Unityville	21.8%	29.5%	27.9%	20.7%	100.0%	51.3%	48.7%
17776	Waterville	17.9%	24.3%	30.3%	27.5%	100.0%	50.6%	49.4%
<b>TOTAL PROVIDER SERVICE AREA</b>		20.4%	33.6%	26.5%	19.5%	100.0%	48.9%	51.1%
<b>ESTIMATED 2013</b>		20.5%	34.0%	28.1%	17.4%	100.0%	48.8%	51.3%
<b>PROJECTED 2018 POPULATION</b>		20.4%	33.6%	26.5%	19.5%	100.0%	48.8%	51.2%
<b>PENNSYLVANIA 2013</b>		23.7%	35.9%	26.4%	13.9%	100.0%	49.2%	50.8%
<b>UNITED STATES 2013</b>		23.4%	35.0%	25.9%	15.7%	100.0%	49.2%	50.8%

Source: The Nielsen Company

Very similar to the 13.6 percent growth seen in the overall number of people in the 65 year and over category in *Exhibit 2.1*, *Exhibit 2.2* indicates that as a percent of total population for the community, the 65 years and over category will be 19.5 percent of the total population in 2018 compared to 17.4 percent in 2013. Lairdsville and Cammal zip codes are showing the highest increases for ages 65 and over with increases of 6.5% and 5.6%, respectively. The majority age group, ages 18-44, even with the increase in the age group 65 and over increase, remains mostly unchanged over the five-year period lowering just slightly from 33.9 percent to 33.6.

While the relative age of the community population can impact community health needs, so can the ethnicity and race of a population. *Exhibit 3* shows the population of the community by ethnicity by illustrating the Hispanic versus non-Hispanic residents. In total, the projected 2018 population breakdown shows the community has a much lower Hispanic population than the state of Pennsylvania, as well as the United States. A review of the specific zip code areas shows a relatively higher percentage of Hispanic residents in the main Williamsport zip code than the rest of the community.

**Exhibit 3**  
**Susquehanna Health - Muncy Valley Hospital**  
**Estimated 2013 Population vs. Projected 2018 Population with Percent Difference**

Zip Code	City	Estimated 2013			Projected 2018			% Difference		% Total	
		Hispanic	Non-Hispanic	Total	Hispanic	Non-Hispanic	Total	Hispanic	Non-Hispanic	Hispanic	Non-Hispanic
17701	Williamsport	1,058	43,450	44,508	1,255	44,105	45,360	18.6%	1.5%	2.8%	97.2%
17702	Williamsport	86	10,591	10,677	94	10,766	10,860	9.3%	1.7%	0.9%	99.1%
17728	Cogan Station	43	5,041	5,084	50	5,104	5,154	16.3%	1.2%	1.0%	99.0%
17737	Hughesville	45	6,756	6,801	56	6,872	6,928	24.4%	1.7%	0.8%	99.2%
17740	Jersey Shore	72	12,111	12,183	85	12,197	12,282	18.1%	0.7%	0.7%	99.3%
17744	Linden	42	2,942	2,984	51	2,949	3,000	21.4%	0.2%	1.7%	98.3%
17752	Montgomery	57	4,532	4,589	63	4,636	4,699	10.5%	2.3%	1.3%	98.7%
17754	Montoursville	112	12,571	12,683	132	12,812	12,944	17.9%	1.9%	1.0%	99.0%
17756	Muncy	201	11,726	11,927	230	11,912	12,142	14.4%	1.6%	1.9%	98.1%
17763	Ralston	1	364	365	1	359	360	0.0%	-1.4%	0.3%	99.7%
17771	Trout Run	32	3,497	3,529	36	3,481	3,517	12.5%	-0.5%	1.0%	99.0%
17774	Unityville	3	1,316	1,319	6	1,349	1,355	100.0%	2.5%	0.4%	99.6%
17776	Waterville	2	257	259	2	249	251	0.0%	-3.1%	0.8%	99.2%
<b>PROVIDER SERVICE AREA</b>		1,754	115,154	116,908	2,061	116,791	118,852	17.5%	1.4%	1.7%	98.3%
<b>Pennsylvania (1,000s)</b>		801	11,984	12,785	922	11,989	12,911	15.1%	0.0%	7.1%	92.9%
<b>U.S. (1,000s)</b>		54,578	260,284	314,862	61,050	264,272	325,322	11.9%	1.5%	18.8%	81.2%

Source: The Nielsen Company

Exhibit 4 shows the population of the community by race by illustrating three different categories: Caucasian, African American and other residents. In total, the population breakdown for the community shows a much higher concentration of white residents than the state of Pennsylvania and the United States. A review of the specific zip code areas shows a larger percentage of African American residents in the main Williamsport zip code compared to other zip codes in the community. A large decrease in percentage of African American residents is projected for the Muncy zip code.

**Exhibit 4  
Susquehanna Health - Muncy Valley Hospital Community Zip Codes  
Estimated 2013 Population vs. Projected 2018 Population with Percent Difference**

Zip Code	City	Estimated 2013				Projected 2018				Percent Difference				Percent Total		
		Caucasian	African American	Other	Total	Caucasian	African American	Other	Total	Caucasian	African American	Other	Total	Caucasian	African American	Other
17701	Williamsport	37,775	4,388	2,345	44,508	38,186	4,463	2,711	45,360	1.1%	1.7%	15.6%	1.9%	84.2%	9.8%	6.0%
17702	Williamsport	10,424	73	180	10,677	10,569	86	205	10,860	1.4%	17.8%	13.9%	1.7%	97.3%	0.8%	1.9%
17728	Cogan Station	4,969	23	92	5,084	5,026	24	104	5,154	1.1%	4.3%	13.0%	1.4%	97.5%	0.5%	2.0%
17737	Hughesville	6,640	41	120	6,801	6,741	52	135	6,928	1.5%	26.8%	12.5%	1.9%	97.3%	0.8%	1.9%
17740	Jersey Shore	11,951	73	159	12,183	12,027	85	170	12,282	0.6%	16.4%	6.9%	0.8%	97.9%	0.7%	1.4%
17744	Linden	2,899	11	74	2,984	2,909	11	80	3,000	0.3%	0.0%	8.1%	0.5%	97.0%	0.4%	2.7%
17752	Montgomery	4,462	33	94	4,589	4,552	35	112	4,699	2.0%	6.1%	19.1%	2.4%	96.9%	0.7%	2.4%
17754	Montoursville	12,306	100	277	12,683	12,511	116	317	12,944	1.7%	16.0%	14.4%	2.1%	96.7%	0.9%	2.4%
17756	Muncy	11,138	506	283	11,927	11,411	420	311	12,142	2.5%	-17.0%	9.9%	1.8%	94.0%	3.5%	2.6%
17763	Ralston	358	0	7	365	353	0	7	360	-1.4%	0.0%	0.0%	-1.4%	98.1%	0.0%	1.9%
17771	Trout Run	3,478	10	41	3,529	3,457	10	50	3,517	-0.6%	0.0%	22.0%	-0.3%	98.3%	0.3%	1.4%
17774	Unityville	1,310	1	8	1,319	1,346	2	7	1,355	2.7%	100.0%	-12.5%	2.7%	99.3%	0.1%	0.5%
17776	Waterville	256	0	3	259	247	0	4	251	-3.5%	0.0%	33.3%	-3.1%	98.4%	0.0%	1.6%
<b>PROVIDER SERVICE AREA</b>		107,966	5,259	3,683	116,908	109,335	5,304	4,213	118,852	1.3%	0.9%	14.4%	1.7%	92.0%	4.5%	3.5%
<b>Pennsylvania (1,000s)</b>		10,357	1,419	1,009	12,785	10,285	1,481	1,145	12,911	-0.7%	4.4%	13.5%	1.0%	79.7%	11.5%	8.9%
<b>U.S. (1,000s)</b>		225,086	40,007	49,769	314,862	228,213	41,797	55,312	325,322	1.4%	4.5%	11.1%	3.3%	70.1%	12.8%	17.0%

Source: The Nielsen Company

## Socioeconomic Characteristics of the Community

The socioeconomic characteristics of a geographic area influence the way residents access health care services and perceive the need for health care services within society. The economic status of an area may be assessed by examining multiple variables within the community. The following exhibits are a compilation of data that includes household income, labor force, employees by types of industry, employment rates, educational attainment and poverty for the community. These measures will be used to compare the socioeconomic status of the community to the state of Pennsylvania and to the U.S.

### *Income and Employment*

*Exhibit 5* presents the median and per capita income for households in each zip code. Median and per capita incomes are highest for Cogan Station and Montoursville zip codes and lowest for Cammal and Ralston zip codes.

**Exhibit 5**  
**Susquehanna Health - Muncy Valley Hospital Community Zip Codes**  
**Median & Per Capita Income 2007-2011**

Zip Code	City		Median Household Income		Median Household Income
17701	Williamsport	\$	35,071	\$	20,152
17702	Williamsport	\$	48,997	\$	23,290
17728	Cogan Station	\$	58,039	\$	25,959
17737	Hughesville	\$	50,771	\$	25,200
17740	Jersey Shore	\$	48,415	\$	21,736
17744	Linden	\$	49,722	\$	20,789
17752	Montgomery	\$	47,701	\$	21,570
17754	Montoursville	\$	51,625	\$	29,874
17756	Muncy	\$	46,151	\$	21,661
17763	Ralston	\$	32,292	\$	16,735
17771	Trout Run	\$	44,701	\$	20,947
17774	Unityville	\$	42,857	\$	19,014
17776	Waterville	\$	38,750	\$	22,081
	Lycoming County	\$	43,788	\$	22,301

Source: Healthy Communities Institute Platform



*Exhibit 6* presents the monthly resident unemployment rates for Lycoming County. Annual averages are shown for Pennsylvania and the United States. *Exhibit 6* illustrates unemployment rates have risen in recent years with the exception of 2011 where all rates showed a small decline. 2012 shows a further decline for the United States, yet a slight increase for Lycoming County. Since 2011, Lycoming County's unemployment rate has been consistently below the state of Pennsylvania as well as the United States.

**Exhibit 6**  
**Susquehanna Health - Muncy Valley Hospital**  
**Annual Unemployment Rates (%)**  
**2012**

County	2007	2008	2009	2010	2011	2012
Lycoming County	4.9	5.9	8.7	8.8	7.7	7.8
Pennsylvania	4.4	5.4	7.9	8.4	7.9	7.9
United States	4.6	5.8	9.3	9.6	8.9	8.1

*Source: United States Dept. of Labor, Bureau of Labor Statistics*

*Exhibit 7* summarizes employment by major industry for the county. Lycoming County is supported by several major industries including trade, transportation and utilities, and education and health services. The trade, transportation and utilities industry accounts for more than 20% of all employment in Lycoming County and more than 19% of all employment in Pennsylvania.

**Exhibit 7**  
**Susquehanna Health - Muncy Valley Hospital**  
**Employment by Major Industry**  
**2010**

Major Industries	Lycoming		Pennsylvania		US
	County	%		%	%
Goods-producing	11,517	22.8%	825,303	15.1%	14.7%
Natural resources and mining	626	1.2%	48,777	0.9%	1.4%
Construction	1,976	3.9%	216,071	3.9%	4.3%
Manufacturing	8,915	17.6%	560,455	10.2%	9.0%
Service-providing	31,220	61.7%	3,917,016	71.6%	68.4%
Trade, transportation and utilities	10,329	20.4%	1,069,875	19.6%	19.1%
Information	626	1.2%	93,115	1.7%	2.1%
Financial activities	1,814	3.6%	311,400	5.7%	5.8%
Professional and business services	3,874	7.7%	688,069	12.6%	13.1%
Education and health services	8,590	17.0%	1,070,774	19.6%	14.6%
Leisure and hospitality	4,118	8.1%	500,369	9.1%	10.2%
Other services	1,870	3.7%	183,403	3.4%	3.4%
Federal Government	542	1.1%	109,554	2.0%	2.3%
State Government	3,046	6.0%	138,948	2.5%	3.6%
Local Government	4,294	8.5%	481,352	8.8%	11.0%
Total employment	50,620	100.0%	5,472,162	100.0%	100.0%

*Source: U.S. Department of Census*

Major employers for the county include the following:

**Exhibit 8**  
**Susquehanna Health - Muncy Valley Hospital**  
**Employment by Top Employers**

<b>Top Employers</b>	<b>Number of Employees</b>
Susquehanna Health System	2,544
Pennsylvania College of Technology	1,643
Williamsport Area School District	1,408
Brodart Co.	950
Lycoming County	580
Hope Enterprises Inc.	450
Shop Vac Corporation	310
West Pharmaceutical Services Inc.	300
State Government	*

*Source: Susquehanna Health System*

*\* Number of employees unavailable*

**Poverty**

*Exhibit 9* presents the percentage of total population in poverty (including under age 18) for the county versus the state of Pennsylvania and the United States. From 2010 to 2011, population in poverty in Lycoming County for all age groups decreased significantly. This is in line with the reduction of the unemployment rate from 2010 to 2011. The population percentage in poverty for Pennsylvania and the United States both increased from 2010 to 2011.

**Exhibit 9**  
**Susquehanna Health - Muncy Valley Hospital**  
**Poverty Estimate: Percentage of Total Population in Poverty**  
**2010 and 2011 1-year Estimates**

<b>County</b>	<b>2010</b>				<b>2011</b>			
	<b>All Persons</b>	<b>Under Age 18</b>	<b>Ages 18-64</b>	<b>Ages 65+</b>	<b>All Persons</b>	<b>Under Age 18</b>	<b>Ages 18-64</b>	<b>Ages 65+</b>
Lycoming County	18.0%	27.6%	16.8%	9.8%	14.0%	21.6%	13.7%	5.4%
Pennsylvania	13.4%	19.1%	12.7%	7.9%	13.8%	19.6%	13.1%	8.0%
United States	15.3%	21.6%	14.2%	9.0%	15.9%	22.5%	14.8%	9.3%

*Source: U.S. Census Bureau, 2010 & 2011 American Community Surveys 1-year Estimates*

Low-income residents often postpone seeking medical attention until health problems become aggravated, creating a greater demand on a given community’s medical resources. This includes reliance upon emergency room services for otherwise routine primary care. Often uninsured, the low-income demographics’ inability to pay for services further strains the medical network. Low-income residents are also less mobile, requiring medical services in localized population centers, placing additional pressure on those providers already in high demand. Understanding the extent of poverty within the population, therefore, helps determine an accurate picture of demand. The poverty rates for Lycoming County ranked unfavorably when compared to Pennsylvania’s and national averages in 2010 and favorably with the United States and unfavorably with Pennsylvania in 2011.



**Uninsured**

Exhibits 10, 10.1 and 10.2 present health insurance coverage status by age (under 65 years, 18-64 years and under 18 years) and poverty level for the county versus the state of Pennsylvania and the United States. It is clear that the proportion of uninsured population increases when focusing on income levels at or below 138% of federal poverty level versus all income levels. Lycoming County shows differences of 14.8%.

**Exhibit 10**  
**Susquehanna Health - Muncy Valley Hospital**  
**Health Insurance Coverage Status by Age (under 65 years) and Income (at or below 400%) of Poverty**  
**2011 1-year Estimates**

County	All Income Levels				Below 1.38 of FPL			
	Under 65 Uninsured	Percent Uninsured	Under 65 Insured	Percent Insured	Under 65 Uninsured	Percent Uninsured	Under 65 Insured	Percent Insured
Lycoming County	14,539	15.7%	78,141	84.3%	6,061	30.5%	13,824	69.5%
Pennsylvania	1,241,972	11.9%	9,179,256	88.1%	482,705	22.2%	1,691,885	77.8%
United States	45,724,599	17.4%	217,278,289	82.6%	19,307,397	30.0%	44,978,843	70.0%

County	1.38 to 1.99 of FPL				2.00 to 3.99 of FPL			
	Under 65 Uninsured	Percent Uninsured	Under 65 Insured	Percent Insured	Under 65 Uninsured	Percent Uninsured	Under 65 Insured	Percent Insured
Lycoming County	1,988	15.7%	10,643	84.3%	5,298	15.2%	29,612	84.8%
Pennsylvania	219,022	20.9%	829,480	79.1%	378,292	11.6%	2,873,764	88.4%
United States	8,265,592	27.9%	21,342,405	72.1%	12,941,176	16.7%	64,519,185	83.3%

County	4.00 and over FPL			
	Under 65 Uninsured	Percent Uninsured	Under 65 Insured	Percent Insured
Lycoming County	1,192	4.7%	24,062	95.3%
Pennsylvania	161,953	4.1%	3,784,127	95.9%
United States	5,210,434	5.7%	86,437,856	94.3%

Source: U.S. Census Bureau, 2011 American Community Survey 1-year estimates

Age group 18-64, shown below in *Exhibit 10.1*, has a slightly higher percentage uninsured for all income levels than the age 65 and under group at 18.1% versus 15.7%. Again, it is clear that the proportion of uninsured population increases when focusing on income levels at or below 138% of federal poverty level versus all income levels.

**Exhibit 10.1**  
**Susquehanna Health - Muncy Valley Hospital**  
**Health Insurance Coverage Status by Age (under 65 years) and Income (at or below 400%) of Poverty**  
**2011 1-year Estimates**

County	All Income Levels				Below 1.38 of FPL			
	Age 18-64	Percent	Age 18-64	Percent	Age 18-64	Percent	Age 18-64	Percent
	Uninsured	Uninsured	Insured	Insured	Uninsured	Uninsured	Insured	Insured
Lycoming County	12,586	18.1%	57,089	81.9%	4,976	37.0%	8,528	63.0%
Pennsylvania	1,096,320	14.2%	6,603,818	85.8%	418,919	29.3%	1,011,162	70.7%
United States	40,300,565	21.2%	149,899,605	78.8%	16,871,848	41.0%	24,288,947	59.0%

County	1.38 to 1.99 of FPL				2.00 to 3.99 of FPL			
	Age 18-64	Percent	Age 18-64	Percent	Age 18-64	Percent	Age 18-64	Percent
	Uninsured	Uninsured	Insured	Insured	Uninsured	Uninsured	Insured	Insured
Lycoming County	1,711	19.1%	7,268	80.9%	4,707	18.5%	20,681	81.5%
Pennsylvania	190,969	26.8%	521,946	73.2%	337,403	14.1%	2,058,976	85.9%
United States	7,191,545	36.0%	12,811,478	64.0%	11,457,186	20.4%	44,800,782	79.6%

County	4.00 and over FPL			
	Age 18-64	Percent	Age 18-64	Percent
	Uninsured	Uninsured	Insured	Insured
Lycoming County	1,192	5.5%	20,612	94.5%
Pennsylvania	149,029	4.7%	3,011,734	95.3%
United States	4,779,986	6.6%	67,998,398	93.4%

Source: U.S. Census Bureau, 2011 American Community Survey 1-year estimates

**Exhibit 10.2**  
**Susquehanna Health - Muncy Valley Hospital**  
**Health Insurance Coverage Status by Age (under 65 years) and Income (at or below 400%) of Poverty**  
**2011 1-year Estimates**

County	All Income Levels				Below 1.38 of FPL			
	Under 18	Percent	Under 18	Percent	Under 18	Percent	Under 18	Percent
	Uninsured	Uninsured	Insured	Insured	Uninsured	Uninsured	Insured	Insured
Lycoming County	1,953	8.5%	21,052	91.5%	1,085	17.0%	5,296	83.0%
Pennsylvania	145,652	5.0%	2,575,438	95.0%	63,786	8.6%	680,723	91.4%
United States	5,424,034	8.0%	67,378,684	92.0%	2,435,549	10.5%	20,689,896	89.5%

County	1.38 to 1.99 of FPL				2.00 to 3.99 of FPL			
	Under 18	Percent	Under 18	Percent	Under 18	Percent	Under 18	Percent
	Uninsured	Uninsured	Insured	Insured	Uninsured	Uninsured	Insured	Insured
Lycoming County	277	7.6%	3,375	92.4%	591	6.2%	8,931	93.8%
Pennsylvania	28,053	8.4%	307,534	91.6%	40,889	4.8%	814,788	95.2%
United States	1,074,047	11.2%	8,530,927	88.8%	1,483,990	7.0%	19,718,403	93.0%

County	4.00 and over FPL			
	Under 18	Percent	Under 18	Percent
	Uninsured	Uninsured	Insured	Insured
Lycoming County	-	0.0%	3,450	100.0%
Pennsylvania	12,924	2.0%	772,393	98.0%
United States	430,448	2.3%	18,439,458	97.7%

Source: U.S. Census Bureau, 2011 American Community Survey 1-year estimates



The age group under 18 years has a much lower percentage of uninsured for all income levels, which makes sense, as most of this population are probably insured through their parents' plans. Income level below 138% of the federal poverty level still has the highest percentage of uninsured of all the various income levels presented in the exhibit. Lycoming County compares favorably for all income levels to the uninsured percentages for the United States for all age groups except those under the age of 18. When compared to the state of Pennsylvania, Lycoming County is unfavorable for all age groups for all income levels.

**Education**

Exhibit 11 presents educational attainment by age cohort for individuals in Lycoming County versus the state of Pennsylvania and the United States.

**Exhibit 11**  
**Susquehanna Health - Muncy Valley Hospital**  
**Educational Attainment by Age - Total Population**  
**2007-2011 5-year Estimates**

State/ County	Age Cohort				
	18-24	25-34	35-44	45-64	65+
<b><u>Completing High School</u></b>					
Lycoming County	87.4%	86.2%	89.1%	89.5%	75.8%
Pennsylvania	86.6%	87.9%	91.9%	90.7%	76.7%
United States	83.4%	85.4%	87.5%	87.7%	76.8%
<b><u>Bachelor's Degree or More</u></b>					
Lycoming County	7.4%	23.6%	21.1%	19.3%	12.8%
Pennsylvania	11.2%	35.0%	31.2%	26.8%	16.3%
United States	9.3%	31.3%	31.3%	28.7%	20.7%
<b><u>Graduate or Professional Degree (Population 25 and over)</u></b>					
Lycoming County	6.4%				
Pennsylvania	10.2%				
United States	10.5%				

Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-year estimates

Education levels obtained by community residents may impact the local economy. Higher levels of education generally lead to higher wages, less unemployment and job stability. These factors may indirectly influence community health. Lycoming County compares unfavorably to Pennsylvania and the United States for persons aged 25 and older in obtaining a bachelor's degree or higher. Persons obtaining a graduate or professional degree are also lower than the state and national average.

## Health Status of the Community

This section of the assessment reviews the health status of Lycoming County residents, with comparisons to the state of Pennsylvania. This in-depth assessment of the mortality and morbidity data, health outcomes, health factors and mental health indicators of county residents that make up the community will enable the Hospital to identify priority health issues related to the health status of its residents.

Good health can be defined as a state of physical, mental and social well-being, rather than the absence of disease or infirmity. According to *Healthy People 2012*, the national health objectives released by the U.S. Department of Health and Human Services, individual health is closely linked to community health. Community health, which includes both the physical and social environment in which individuals live, work and play, is profoundly affected by the collective behaviors, attitudes and beliefs of everyone who lives in the community. Healthy people are among a community’s most essential resources.

Numerous factors have a significant impact on an individual’s health status: lifestyle and behavior, human biology, environmental and socioeconomic conditions, as well as access to adequate and appropriate health care and medical services. Studies by the American Society of Internal Medicine conclude that up to 70 percent of an individual’s health status is directly attributable to personal lifestyle decisions and attitudes. Persons who do not smoke, who drink in moderation (if at all), use automobile seat belts (car seats for infants and small children), maintain a nutritious low-fat, high-fiber diet, reduce excess stress in daily living and exercise regularly have a significantly greater potential of avoiding debilitating diseases, infirmities and premature death.

The interrelationship among lifestyle/behavior, personal health attitude and poor health status is gaining recognition and acceptance by both the general public and health care providers. Some examples of lifestyle/behavior and related health care problems include the following:

<b><i>Lifestyle</i></b>	<b><i>Primary Disease Factor</i></b>
Smoking	Lung cancer Cardiovascular disease Emphysema Chronic bronchitis
Alcohol/drug abuse	Cirrhosis of liver Motor vehicle crashes Unintentional injuries Malnutrition Suicide Homicide Mental illness
Poor nutrition	Obesity Digestive disease Depression
Driving at excessive speeds	Trauma Motor vehicle crashes
Lack of exercise	Cardiovascular disease Depression

<b>Lifestyle</b>	<b>Primary Disease Factor</b>
Overstressed	Mental illness Alcohol/drug abuse Cardiovascular disease

Health problems should be examined in terms of morbidity as well as mortality. Morbidity is defined as the incidence of illness or injury and mortality is defined as the incidence of death. However, law does not require reporting the incidence of a particular disease, except when the public health is potentially endangered. Various infectious diseases in Missouri must be reported to county health departments. Except for Acquired Immune Deficiency Syndrome (AIDS), most of these reportable diseases currently result in comparatively few deaths.

Due to limited morbidity data, this health status report relies heavily on death and death rate statistics for leading causes of death in Lycoming County and the state of Pennsylvania. Such information provides useful indicators of health status trends and permits an assessment of the impact of changes in health services on a resident population during an established period of time. Community attention and health care resources may then be directed to those areas of greatest impact and concern.

**Leading Causes of Death**

Exhibit 12 reflects the leading causes of death for Lycoming County residents and compares the rates, per hundred thousand, to the state of Pennsylvania average rates, per hundred thousand.

**Exhibit 12**  
**Susquehanna Health - Muncy Valley Hospital**  
**Selected Causes of Resident Deaths: Number and Rate per 100,000**  
**(Rates per 100,000)**

	Lycoming		Pennsylvania	
	Number	Rate	Number	Rate
Total Deaths, All Causes	1,217	771.7	123,473	758.8
All Cancers	209	179.9	23,817	187.5
Breast Cancer	23	20.0	3,061	24.1
Colorectal Cancer	20	17.3	2,299	18.1
Lung Cancer	60	52.1	6,567	51.7
Prostate Cancer	32	27.8	3,010	23.7
Other Cancers	74	63.7	8,880	69.9
Diabetes	34	29.1	3,184	25.1
Cerebrovascular Disease	41	34.9	6,629	52.2
Heart Disease	124	107.2	31,274	246.2
HIV	3	3.0	264	2.1
Influenza & Pneumonia	10	8.8	2,289	18.0
Suicide	15	13.3	1,547	12.2
Falls	4	3.4	1,401	8.3
Firearms	8	7.3	1,294	10.0
Unintentional Injuries	45	38.9	5,607	40.1
Unintentional Poisonings	7	6.3	1,654	13.3
Drug Use	10	8.7	1,946	15.5
Motor Vehicle Accidents	14	12.4	1,381	10.9

Source: Healthy Communities Institute Portal (Lycoming), Pennsylvania Dept. of Health Portal (Pennsylvania)

*Exhibit 13* compares the number of deaths for Lycoming County residents, with U.S. Crude Rates and identifies causes of death that statistically differ from U.S. rates.

**Exhibit 13**  
**Susquehanna Health - Muncy Valley Hospital**  
**Comparison of Rates for Selected Causes of Death: Rate per 100,000 Residents: Lycoming County**

<b>Selected Cause of Death</b>	<b>Number of Deaths</b>	<b>County Rate</b>	<b>PA Rate</b>	<b>2009 US Rate</b>	<b>Percent County Difference from US</b>
Total Deaths, All Causes	1,217	771.7	758.8	794.5	-2.9%
All Cancers	-	-	-	-	-
Breast Cancer	209	179.9	187.5	185.0	-2.8%
Colorectal Cancer	23	20.0	24.1	13.4	49.3%
Lung Cancer	20	17.3	18.1	17.1	1.2%
Prostate Cancer	60	52.1	51.7	51.6	1.0%
Other Cancers	32	27.8	23.7	9.2	202.2%
Diabetes	74	63.7	69.9	93.8	-32.1%
Cerebrovascular Disease	34	29.1	25.1	22.4	29.9%
Heart Disease	41	34.9	52.2	42.0	-16.9%
HIV	124	107.2	246.2	195.4	-45.1%
Influenza & Pneumonia	3	3.0	2.1	3.1	-3.2%
Suicide	10	8.8	18.0	17.5	-49.7%
Falls	15	13.3	12.2	12.0	10.8%
Firearms	4	3.4	8.3	8.1	-58.0%
Unintentional Injuries	8	7.3	10.0	10.2	-28.4%
Unintentional Poisonings	45	38.9	40.1	38.5	1.0%
Drug Use	7	6.3	13.3	10.4	-39.4%
Motor Vehicle Accidents	10	8.7	15.5	12.8	-32.0%
	14	12.4	10.9	11.8	5.1%

*Source: Healthy Communities Institute Portal (Lycoming), Pennsylvania Dept. of Health Portal (Pennsylvania), CDC.gov (US)*





## Health Outcomes and Factors

An analysis of various health outcomes and factors for a particular community can, if improved, help make that community a healthier place to live, learn, work and play. A better understanding of the factors that affect the health of the community will assist with how to improve the community's habits, culture and environment. This portion of the community health needs assessment utilizes information from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

The County Health Rankings model is grounded in the belief that programs and policies implemented at the local, state and federal levels have an impact on the variety of factors that, in turn, determine the health outcomes for communities across the nation. The model provides a ranking method that ranks all 50 states and the counties within each state, based on the measurement of two types of health outcomes for each county: how long people live (mortality) and how healthy people feel (morbidity). These outcomes are the result of a collection of health factors and are influenced by programs and policies at the local, state and federal levels.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, *e.g.* 1 or 2, are considered to be the "healthiest." Counties are ranked relative to the health of other counties in the same state on the following summary measures:

- Health Outcomes - rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.
- Health Factors - rankings are based on weighted scores of four types of factors:
  - Health behaviors (six measures)
  - Clinical care (five measures)
  - Social and economic (seven measures)
  - Physical environment (four measures)

A more detailed discussion about the ranking system, data sources and measures, data quality and calculating scores and ranks can be found at the website for County Health Rankings ([www.countyhealthrankings.org](http://www.countyhealthrankings.org)).

As part of the analysis of the needs assessment for the community, the two counties that comprise the majority of the community will be used to compare the relative health status of each county to the state of Pennsylvania as well as to a national benchmark. A better understanding of the factors that affect the health of the community will assist with how to improve the community's habits, culture and environment.

The following tables, from County Health Rankings, summarize the 2013 health outcomes for the county that encompasses the community for Muncy Valley Hospital. Each measure is described and includes a confidence interval or error margin surrounding it – if a measure is above the state average and the state average is beyond the error margin for the county, then further investigation is recommended.

Health Outcomes - rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures. *Exhibit 14* shows Lycoming County health outcomes were higher than national benchmarks. Mortality outcomes were favorable to the state, ranking 20<sup>th</sup>, and also for morbidity, ranking 16th.

**Lycoming County**

**Exhibit 14**  
**Susquehanna Health - Muncy Valley Hospital**  
**Lycoming County Health Rankings - Health Outcomes (2013)**

	Lycoming County	Error Margin	National Benchmark	PA	Rank (of 67)
<i>Mortality</i>					20
<b>Premature death</b> - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	6,563	6,020-7,107	5,317	6,973	
<i>Morbidity</i>					16
<b>Poor or fair health</b> - Percent of adults reporting fair or poor health (age-adjusted)	14.0%	11.0-18.0%	10.0%	14.0%	
<b>Poor physical health days</b> - Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.1	2.4-3.9	2.6	3.5	
<b>Poor mental health days</b> - Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3.2	2.5-3.9	2.3	3.6	
<b>Low birth weight</b> - Percent of live births with low birth weight (<2500 grams)	7.0%	6.5-7.6%	6.0%	8.4%	

Source: *Countyhealthrankings.org*

A number of different health factors shape a community’s health outcomes. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment.

*Exhibit 14.1* summarizes the health factors for Lycoming County. Areas for improvement include:

- Health Behaviors
- Adult smoking
  - Adult obesity
  - Physical inactivity
  - Excessive drinking
  - Motor vehicle crash death rate
  - Sexually transmitted infections
  - Teen birth rate



Clinical Care

- Primary care physicians
- Uninsured adults
- Dentists
- Diabetic screenings

Social & Economic Factors

- Some college
- Children in poverty
- Inadequate social support
- Children in single-parent households
- Violent crime

Physical Environment

- Access to recreational facilities
- Limited access to healthy foods

**Exhibit 14.1**  
**Susquehanna Health - Muncy Valley Hospital**  
**Lycoming County Health Rankings - Health Factors (2013)**

	Lycoming County	Error Margin	National Benchmark	PA	Rank (of 67)
<i>Health Behaviors</i>					49
<b>Adult smoking</b> - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	24.0%	20.0-29.0%	13.0%	21.0%	
<b>Adult obesity</b> - Percent of adults that report a BMI >= 30	31.0%	27.0-35.0%	25.0%	29.0%	
<b>Physical inactivity</b> - Percent of adults aged 20 and over reporting no leisure time physical activity	29.0%	25-33%	21.0%	26.0%	
<b>Excessive drinking</b> - Percent of adults that report excessive drinking in the past 30 days	17.0%	13.0-22.0%	7.0%	17.0%	
<b>Motor vehicle crash death rate</b> - Motor vehicle deaths per 100K population	16.0	13.0-18.0	10.0	12.0	
<b>Sexually transmitted infections</b> - Chlamydia rate per 100K population	318.0		92.0	374.0	
<b>Teen birth rate</b> - Per 1,000 female population, ages 15-19	33.0	31.0-35.0	21.0	29.0	
<i>Clinical Care</i>					20
<b>Uninsured adults</b> - Percent of population under age 65 without health insurance	13.0%	11.0-14.0%	11.0%	12.0%	
<b>Primary care physicians</b> - Ratio of population to primary care physicians	1,367:1		1,067:1	1,273:1	
<b>Dentists</b> - Ratio of population to dentists	2,896:1		1,516:1	1,801:1	
<b>Preventable hospital stays</b> - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	51.0	48.0-55.0	47.0	70.0	
<b>Diabetic screening</b> - Percent of diabetic Medicare enrollees that receive HbA1c screening	76.0%	71.0-80.0%	90.0%	84.0%	
<b>Mammography screening</b> - Percent of female Medicare enrollees that receive mammography screening	81.0%	75.0-86.0%	73.0%	67.0%	
<i>Social &amp; Economic Factors</i>					31
<b>High school graduation</b> - Percent of ninth grade cohort that	86.0%			83.0%	
<b>Some college</b> - Percent of adults aged 25-44 years with some post-	53.0%	51.0-56.0%	70.0%	60.0%	
<b>Unemployment</b> -percent of population age 16+ unemployed but seeking work	7.7%		7.9%	5.0%	
<b>Children in poverty</b> - Percent of children under age 18 in poverty	21.0%	16.0-26.0%	14.0%	19.0%	
<b>Inadequate social support</b> - Percent of adults without social/emotional support	22.0%	17.0-27.0%	14.0%	21.0%	
<b>Children in single-parent households</b> - Percent of children that live in household headed by single parent	36.0%	32.0-39.0%	20.0%	32.0%	
<b>Violent Crime rate</b> - Violent crimes per 100,000 population (age-adjusted)	169.0		66.0	386.0	
<i>Physical Environment</i>					32
<b>Daily fine particulate matter</b> - the average daily measure of fine particulate matter in micrograms per cubic meter in a county	12.6	12.5-12.7	8.8	13.2	
<b>Drinking water safety</b> - percentage of population exposed to water exceeding a violation limit during the past year	0.0%		0.0%	13.0%	
<b>Access to recreational facilities</b> - rate of recreational facilities per 100,000 population	7.0		16.0	11.0	
<b>Limited access to healthy foods</b> - percent of population who are low-income and do not live close to a grocery store	7.0%		1.0%	4.0%	
<b>Fast food restaurants</b> - Percent of all restaurants that are fast-food establishments	40.0%		27.0%	49.0%	

Source: Countyhealthrankings.org

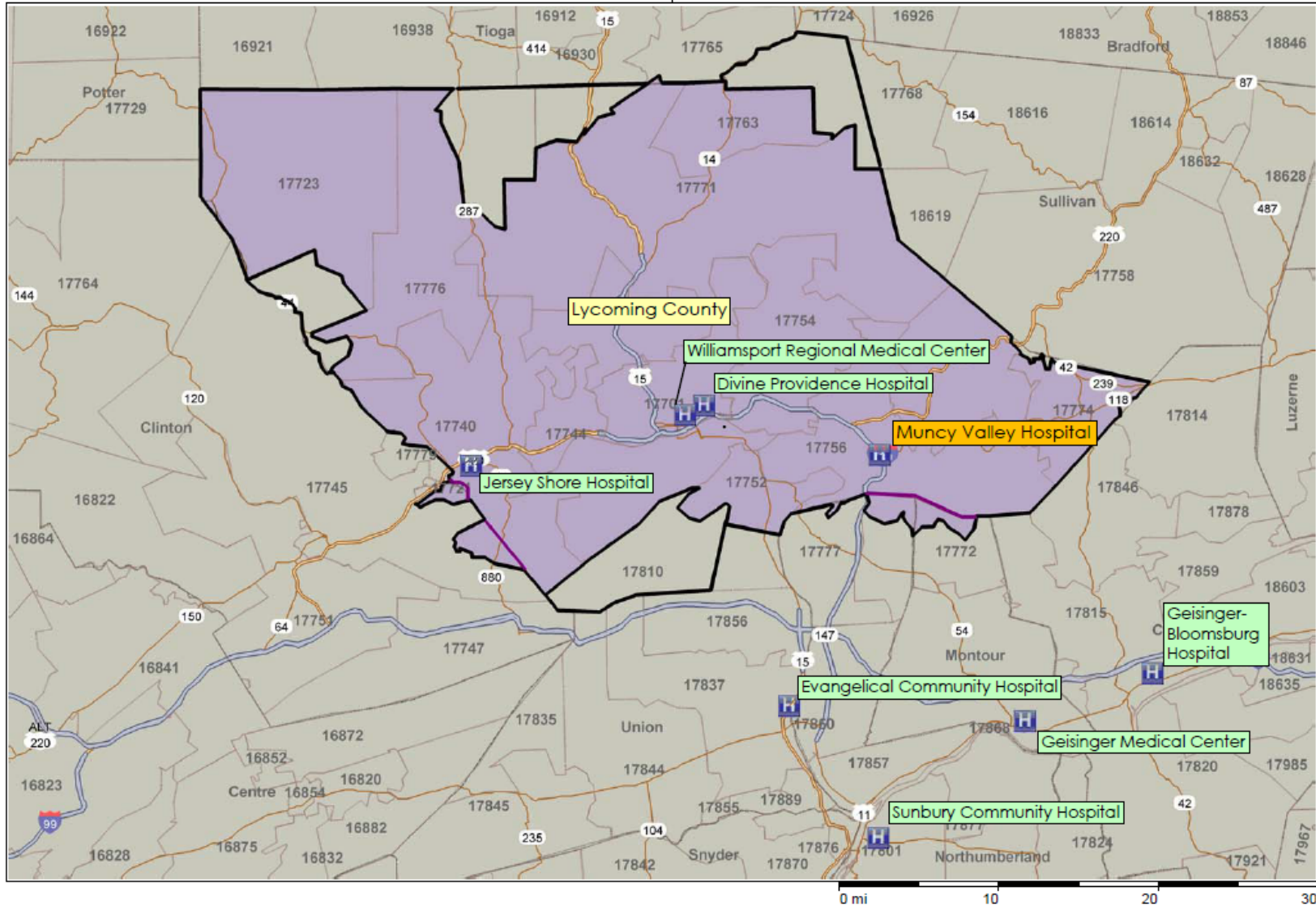


***Lycoming County Health Synopsis:*** Lycoming County has low rates of sexually transmitted infections, preventable hospital stays, violent crime in comparison, daily fine particulate matter, drinking water violations and fast food restaurants to the state. The county has high rates of mammography screenings and high school graduates in comparison to the state. The county is challenged by lower-than desirable rates of diabetic screenings, individuals with post-secondary education, and access to recreational facilities and healthy foods in comparison to the state. Rates of death for heart disease are significantly lower for Lycoming County when compared to the State. However, prostate cancer, breast cancer, diabetes, motor vehicle accidents and mental health issues leading to suicide appear to be mortality challenges for the county. Overall mortality and morbidity factors are higher when compared to national benchmarks. All health behaviors, while lower or comparable to the State, are still significantly higher than the national rates. The ratio of population to primary care as well as dentists is higher than both the state and national benchmarks. Overall clinical care and morbidity for the county ranked highest for the categories of factors (20 and 16 out of 67 counties) with health behaviors ranking the lowest (49 out of 67 counties).

## **Health Care Resources**

The availability of health resources is a critical component to the health of a community and a measure of the soundness of the area's health care delivery system. An adequate number of health care facilities and health care providers are vital for sustaining a community's health status. Fewer health care facilities and health care providers can impact the timely delivery of services. A limited supply of health resources, especially providers, results in the limited capacity of the health care delivery system to absorb charity and indigent care as there are fewer providers upon which to distribute the burden of indigent care. This section will address the availability of health care resources to the residents of Lycoming County. The following is a map showing a geographical representation of the area facilities in relation to the community.

Lycoming County - Muncy Valley Hospital Area Facilities





**Hospitals and Health Centers**

Residents of the community take advantage of services provided by the Hospital but also use other hospitals in the area. *Exhibit 15* summarizes hospital services located in a 30 mile radius (driving distance may be greater) available to the residents of the community:

**Exhibit 15**  
**Susquehanna Health - Muncy Valley Hospital**  
**Summary of Acute Care Hospitals**

			Miles from MVH	Bed Size	Annual Discharges	Annual Patient Revenue
Muncy Valley Hospital	215 E. Water St., Muncy, PA 17756	Critical Access	0.0	20	664	\$ 88,251,232
Divine Providence Hospital	1100 Grampian Blvd., Williamsport, PA 17701	Psychiatric	15.0	31	808	\$ 195,462,096
Williamsport Regional Medical Ctr.	700 High St., Williamsport, PA 17701	Acute Care	15.3	193	10,800	\$ 500,924,704
Jersey Shore Hospital	1020 Thompson St., Jersey Shore, PA 17745	Critical Access	16.3	25	1,021	\$ 65,184,640
Evangelical Community Hospital	1 Hospital Dr., Lewisburg, PA 17837	Acute Care	20.1	115	5,708	\$ 224,109,712
Geisinger-Bloomsburg Hospital	549 E. Fair St., Bloomsburg, PA 17815	Acute Care	27	52	2,523	\$ 164,640,640
Geisinger Medical Center	100 N. Academy Ave., Danville, PA 17822	Acute Care	28.3	440	26,232	\$ 3,565,242,112
Sunbury Community Hospital	350 N. 11th St., Sunbury, PA 17801	Acute Care	28.9	90	1,710	\$ 114,025,264
Lockhaven Hospital	24 Cree Dr., Lockhaven, PA 17745	Acute Care	42.9	47	1,679	\$ 151,784,384

Source: Costreportdata.com

The following is a brief description of the health care services available at each of these facilities:

**Divine Providence Hospital** – is one of the four hospitals along with Muncy Valley Hospital, Divine Providence Hospital and Soldiers & Sailors Memorial Hospital that make up Susquehanna Health. Muncy Valley Hospital is a Critical Access Hospital.

**Williamsport Regional Medical Center** – is one of the four hospitals along with Muncy Valley Hospital, Divine Providence Hospital and Soldiers & Sailors Memorial Hospital that make up Susquehanna Health.

**Jersey Shore Hospital** – is a rural health care facility located in the heart of north central Pennsylvania. Jersey Shore Hospital is a Critical Access Hospital with 25 inpatient beds.

**Evangelical Community Hospital** – beginning in 1926, Evangelical has 115 patient beds and 18 bassinets, nearly 200 physicians on medical staff, nearly 900 clinical employees including lab technicians, nurses, therapists, radiology technicians, etc. More than 30,000 emergency room visits and more than half a million laboratory procedures are completed each year.

**Geisinger-Bloomsburg Hospital** – provides x-ray, laboratory, emergency, general surgery, hospitalist, mental health, maternity services and physical therapy.

**Lockhaven Hospital** – offers services such as cardiopulmonary, emergency, rehabilitation services, primary care, women’s services, imaging, laboratory services, surgical services and others.

**Geisinger Medical Center** – along with a wide range of medical services, they also offer a Level 1 Trauma center, a six-helicopter LifeFlight program and clinical research facilities.

**Sunbury Community Hospital** – offers a range of services including inpatient, outpatient and emergency care, as well as medical and surgical services.

### Hospital Market Share

The market share of a hospital relative to that of its competitors may be based largely on the services required by patients and the availability of those services at each facility. For this study, the market share of the Hospital was considered based on the type of services required by those patients in the community. The ability to attain a certain relative market share (percentage) of the community varies based on a number of factors, including the services provided, geographical location and accessibility of each competing facility. *Exhibit 16* presents the relative market share of each hospital that had discharges of residents from the community (Lycoming County). This information provides an excellent summary of market share information as well as the outmigration of patients from the community.

**Exhibit 16**  
**Susquehanna Health - Muncy Valley Hospital**  
**Patient Origin Analysis: Lycoming County Acute Care Discharges by Hospital**

	2009		2010		Change	
	Total Discharges	%	Total Discharges	%	Total Discharges	%
Muncy Valley Hospital	456	3.1%	558	3.9%	102	0.8%
Williamsport Regional Medical Center	9,835	67.8%	9,680	66.9%	(155)	-0.9%
Divine Providence Hospital	598	4.1%	619	4.3%	21	0.2%
Jersey Shore Hospital	503	3.5%	466	3.2%	(37)	-0.3%
Geisinger Health System	1,643	11.3%	1,689	11.7%	46	0.4%
All Other Hospitals	1,481	10.2%	1,463	10.0%	(18)	-0.2%
Total	14,516	100.0%	14,475	100.0%	(41)	

Source: Susquehanna Health

### Other Health Care Facilities and Providers

**Susquehanna Community Medical and Dental Center** – is a Federally Qualified Community Health Center located in Williamsport, Pennsylvania. Dental services include cleanings, restorations, extractions and emergency dental care. Health Center services include expanded primary care services, social work services, integrating behavioral health and expanding health education.

**Lycoming County Health Department** – is the local health department for the community located in Williamsport, Pennsylvania. The health department offers various prevention program services, education and additional consulting about various health issues.

### Estimated Demand for Physician Office Visits and Hospital Services

In order to define existing services and develop future plans that may affect the operations of the Hospital, this study includes an analysis of estimated demand for physician office visits, hospital emergency room visits and hospital discharges using national averages and population estimates. Current and future unmet need can be evaluated based on the changes in the size of the market for certain services as determined by applying these national average use rates to the population of the community. *Exhibit 17* summarizes estimated 2013 and projected 2018 physician office visits, emergency department visits and hospital discharges using 2009 national average use rates from the National Center for Health Statistics.





**Exhibit 17**  
**Susquehanna Health - Muncy Valley Hospital**  
**Physician Office Visits, Emergency Department Visits, and Discharges**  
**Estimated 2013**

Age	2013 Community Population	Physician Office Visits per Person	Estimated Physician Office Visits	Emergency Department Visits per Person	Estimated Emergency Department Visits	Hospital Discharges per Person	Estimated Hospital Discharges
0-17	24,018	2.47	59,324	0.45	10,808	0.0342	821
18-44	39,702	2.34	92,903	0.49	19,454	0.0886	3,516
45-64	32,835	4.01	131,668	0.37	12,149	0.1210	3,972
65+	20,353	7.37	150,002	0.52	10,584	0.3549	7,223
Total	116,908		433,897		52,995		15,532
Primary Care Visits		55.9%	242,548				
Specialty Care Visits		44.1%	191,349				
Total			433,897				

**Projected 2018**

Age	2018 Community Population	Physician Office Visits per Person	Projected Physician Office Visits	Emergency Department Visits per Person	Projected Emergency Department Visits	Hospital Discharges per Person	Projected Hospital Discharges
0-17	24,231	2.47	59,851	0.45	10,904	0.0342	828
18-44	39,949	2.34	93,481	0.49	19,575	0.0886	3,538
45-64	31,549	4.01	126,511	0.37	11,673	0.1210	3,816
65+	23,123	7.37	170,417	0.52	12,024	0.3549	8,206
Total	118,852		450,259		54,176		16,389
Primary Care Visits		55.9%	251,695				
Specialty Care Visits		44.1%	198,564				
Total			450,259				

Source: [www.cdc.gov](http://www.cdc.gov), community populations from The Nielsen Company



Examination of the population demographics suggests that the aging of the “baby boom” population will actually slightly increase the overall utilization of hospital and primary care services within the community. For example, the projected change in the age category 65+ shows a significant increase. While the age category 65+ is projected to increase 13.6 percent from 2013 to 2018, the overall population of the community is projected to increase by only 1.7 percent.

*Exhibit 18* illustrates the percentage change in the calculated utilization from *Exhibit 17* as an estimated percentage increase in utilization from 2013 to 2018.

**Exhibit 18**  
**Susquehanna Health - Muncy Valley Hospital**  
**Estimated Difference in Utilization: Physician Office Visits,**  
**Emergency Room Visits and Hospital Discharges**  
**Estimated 2013 and Projected 2018**

	Estimated 2013	Projected 2018	Percent Difference
Primary Care Physician Office Visits	242,548	251,695	3.8%
Specialty Care Physician Office Visits	191,349	198,564	3.8%
Total Estimated Physician Office Visits	433,897	450,259	3.8%
Emergency Department Visits	52,995	54,176	2.2%
Hospital Discharges	15,532	16,389	5.5%

*Exhibits 19* and *20* provide detailed analysis of estimated acute care discharges, ambulatory procedures, hospital outpatient department visits and physician office visits. These exhibits categorize the utilization for estimated 2013 and projected 2018 by different age categories to assess possible growth areas. A review of each of the charts indicates that there is potential market growth in all of the acute care areas. The categories with highest percentage increase are operations on the miscellaneous diagnostic and Therapeutic procedures, respiratory system and cardiovascular system.

**Exhibit 19**  
**Susquehanna Health - Muncy Valley Hospital**  
**Number of Ambulatory Surgery Procedures by Procedure Category and Age: Provider Service Area**  
**Estimated 2013 and Projected 2018**

Procedure Category	Total	Estimated 2013				Total	Projected 2018				Market Difference Percent
		Under 15 years	15-44 years	45-64 years	65 years and over		Under 15 years	15-44 years	45-64 years	65 years and over	
<b>Total Provider Service Area Population</b>	<b>116,908</b>	<b>19,803</b>	<b>43,917</b>	<b>32,835</b>	<b>20,353</b>	<b>118,852</b>	<b>20,175</b>	<b>44,005</b>	<b>31,549</b>	<b>23,123</b>	
All procedures	19,695	612	5,152	5,320	8,610	20,680	624	5,163	5,111	9,782	5.0%
Operations on the nervous system	505	62	117	138	188	527	63	117	133	214	4.4%
Operations on the endocrine system	50	0	12	22	16	51	0	12	21	18	2.0%
Operations on the eye	36	3	7	9	17	37	3	7	8	19	2.9%
Operations on the ear	14	7	4	0	3	15	7	4	0	4	7.6%
Operations on the nose, mouth and pharynx	104	18	32	26	28	107	18	32	25	32	3.0%
Operations on the respiratory system	498	0	54	156	288	532	0	55	150	327	6.8%
Operations on the cardiovascular system	3,229	0	255	1,080	1,894	3,445	0	255	1,038	2,152	6.7%
Operations on the hemic and lymphatic system	169	5	18	67	79	176	5	18	64	89	4.4%
Operations on the digestive system	2,474	72	436	748	1,218	2,612	73	437	719	1,383	5.6%
Operations on the urinary system	453	9	75	149	220	477	9	75	143	250	5.2%
Operations on the male genital organs	106	7	6	38	55	112	7	6	37	62	5.5%
Operations on the female genital organs	706	4	359	237	106	712	4	360	228	120	0.8%
Obstetrical procedures	2,458	4	2,448	6	0	2,463	4	2,453	6	0	0.2%
Operations on the musculoskeletal system	1,940	47	324	665	904	2,038	48	324	639	1,027	5.0%
Operations on the integumentary system	617	0	164	219	234	640	0	165	210	265	3.7%
Miscellaneous diagnostic and therapeutic procedures	6,206	253	842	1,756	3,355	6,601	258	844	1,688	3,811	6.4%

Source: CDC - National Health Statistic Report #29, October 26, 2010

**Exhibit 20**  
**Susquehanna Health - Muncy Valley Hospital**  
**Number of Acute Care Discharges by Medical Diagnostic Category and Age: Provider Service Area**  
**Estimated 2013 and Projected 2018**

Procedure Category	Estimated 2013					Projected 2018					Market Difference Percent
	Total	Under 15 years	15-44 years	45-64 years	65 years and over	Total	Under 15 years	15-44 years	45-64 years	65 years and over	
<b>Total Provider Service Area Population</b>	<b>116,908</b>	<b>19,803</b>	<b>43,917</b>	<b>32,835</b>	<b>20,353</b>	<b>118,852</b>	<b>20,175</b>	<b>44,005</b>	<b>31,549</b>	<b>23,123</b>	
All Conditions	15,085	709	3,709	3,756	6,910	15,899	723	3,717	3,609	7,850	5.4%
Infectious and patristic diseases	550	42	79	126	303	588	43	79	121	345	6.9%
Neoplasms	735	12	85	278	360	775	13	85	268	409	5.4%
Endocrine, nutritional and metabolic diseases and immunity disorders	817	50	128	234	405	864	51	128	225	460	5.8%
Diseases of the blood and blood-forming organs	217	0	45	50	122	231	0	45	48	138	6.5%
Mental Disorders	937	48	439	319	131	944	49	440	306	149	0.7%
Diseases of the nervous system and sense organs	349	33	61	96	159	367	34	61	92	180	5.2%
Diseases of the circulatory system	2,880	10	152	776	1,942	3,116	11	153	746	2,206	8.2%
Diseases of the respiratory system	1,511	178	116	335	882	1,622	181	117	322	1,002	7.3%
Diseases of the digestive system	1,459	66	287	446	660	1,534	67	288	429	750	5.1%
Diseases of the genitourinary system	952	23	184	236	509	1,013	24	184	227	578	6.4%
Complications of pregnancy, childbirth and puerperium	172	0	172	0	0	172	0	172	0	0	0.0%
Diseases of the skin and subcutaneous tissue	324	27	67	103	127	338	28	67	99	144	4.3%
Diseases of the musculoskeletal system and connective tissue	878	9	95	301	473	930	9	95	289	537	5.9%
Congenital anomalies	30	0	10	12	8	31	0	10	12	9	3.3%
Certain conditions originating in the perinatal period	55	55	0	0	0	56	56	0	0	0	1.8%
Symptoms, signs and ill defined conditions	77	14	18	20	25	80	15	18	19	28	3.9%
Injury and poisoning	1,263	62	279	330	592	1,332	63	280	317	672	5.5%
Supplementary classifications	1,820	21	1,491	93	215	1,849	21	1,494	90	244	1.6%

Source: CDC - National Health Statistic Report #29, October 26, 2010



## Estimated Demand for Physician Services

AmeriMed Consulting was engaged by Susquehanna Health to assist in the development of a Medical Staff Development Plan based on the healthcare needs of its medical service area. The plan was developed to serve as a guide for strategic staff planning for the Hospital, contribute to its effort to document community need for physicians, and fulfill the requirement put forth by federal physician recruiting regulations. Community need is based on the total number of physicians providing medical services to an area, not only those physicians on staff at a hospital where the hospital may be considering physician recruitment.

The approach used by AmeriMed Consulting to evaluate physician need was based on the following factors:

- Defining the demographic profile and payor mix of the client's service area.
- Researching unique service area factors that might influence the demand for healthcare services within the area.
- Identifying the total number of physicians by specialty in the defined service area.
- Developing a profile of the current Medical Staff using quantitative data and findings from the Physician Focus Interviews and Medical Staff Survey.
- Developing a profile of the patient market including demographic data and qualitative data from the Community Survey.
- Utilizing six established physician needs assessment models to identify potential physician surpluses or deficits in each medical specialty.
- Evaluating results of the above efforts in the context of their medical staffing and consulting experience.

AmeriMed concluded that despite the higher overall income medians, the service area for the Hospital has some household income-related factors that would drive an additional need for physician services within portions of the community. A lack of available resources to the indigent may increase volumes in the emergency room as patients lacking primary care access often seek routine care through emergency services. *Exhibit 21* shows the physician needs identified by AmeriMed Consulting divided into community need and need created by retiring physicians.



**Exhibit 21**  
**Susquehanna Health - Muncy Valley Hospital**  
**Summary of Physician Need by Specialty**

Physician Group	Current Communitywide Need for Physician FTE's	Succession Planning FTE's	Total FTE's to Evaluate for Potential Recruitment
<b>Primary Care Specialties</b>			
Family Medicine	6.0	11.4	17.4
Internal medicine	6.0	2.5	8.5
Pediatrics	2.0	1.8	3.8
Total	14.0	15.7	29.7
<b>Hospital-Based Specialties</b>			
Anesthesiology	3.0	6.0	9.0
Emergency Medicine	5.0	8.0	13.0
Hospitalist	0.0	1.0	1.0
Pathology	0.0	4.0	4.0
Radiology	0.0	6.0	6.0
Total	8.0	25.0	33.0
<b>Medical Specialties</b>			
Acupuncture	0.0	0.4	0.4
Allergy/Immunology	1.0	0.0	1.0
Cardiology	0.0	4.0	4.0
Dentistry	1.0	2.4	3.4
Dermatology	1.0	2.0	3.0
Endocrinology	1.0	0.5	1.5
Gastroenterology	0.0	2.5	2.5
Hematology/Oncology	0.0	2.0	2.0
Hyperbaric Medicine/Wound Care	0.0	0.8	0.8
Infectious Disease	0.0	1.0	1.0
Nephrology	0.0	0.8	0.8
Neurology	1.0	1.0	2.0
Obstetrics/Gynecology	1.0	3.9	4.9
Occupational Medicine	0.0	1.0	1.0
Pain Management	1.0	1.0	2.0
Physical Medicine & Rehabilitation	0.0	1.0	1.0
Psychiatry	2.0	1.9	3.9
Pulmonology/Critical Care Medicine	2.0	1.2	3.2
Radiation Oncology	0.0	2.0	2.0
Rheumatology	0.0	1.0	1.0
Total	11.0	30.4	41.4
<b>Surgical Specialties</b>			
Cardiac/Thoracic Surgery	0.0	1.0	1.0
General Surgery	1.0	1.7	2.7
Neurosurgery	1.0	2.0	3.0
Ophthalmology	0.0	2.0	2.0
Oral/Maxillofacial Surgery	1.0	1.4	2.4
Orthopedic Surgery	1.0	4.0	5.0
Otolaryngology	1.0	1.0	2.0
Plastic Surgery	1.0	0.8	1.8
Podiatry	0.0	2.8	2.8
Urology	1.0	1.0	2.0
Vascular Surgery	0.0	1.0	1.0
Total	7.0	18.7	25.7
<b>Total physicians</b>	<b>40.0</b>	<b>89.8</b>	<b>129.8</b>



## **Recommendations**

Recommendations were made based on information about physician population as supplied by Susquehanna Health that was current as of fall 2012. 43 percent of primary care respondents to the Medical Staff Survey indicated that they were not currently accepting new Medicaid patients at the time of the survey. 24 percent were closed to new Medicare patients. AmeriMed's recommendations were made based on the current demographic profile of patients in the community at the time of the report as well as anticipated changes over the next five years. Primary care is estimated to have a high need for physicians with Family Medicine being the highest physician group overall with an estimated need of approximately 17 physicians.

For hospital based services, service line volumes and program parameters were the primary drivers to estimate needs. Anesthesiology and Emergency Medicine are identified with the highest physician needs within the category at 9 and 13 physicians needed, respectively, with Emergency Medicine being the second highest physician group need overall.

Eight percent of medical specialists that responded to the Medical Staff Survey indicated that they were no longer accepting new Medicaid or new Medicare patients at the time of the survey. The highest needs in this category were Obstetrics/Gynecology and Cardiology, with an estimated need of 5 and 4 physicians. Other specialties with an estimated need of 2 or greater physicians in this category include: Dentistry, Gastroenterology, Hematology/Oncology, Neurology, Pain Management, Psychiatry, Pulmonology/Critical Care Medicine and Radiation Oncology.

19 percent of surgeons that responded to the Medical Staff Survey indicated they were not accepting new Medicaid patients at the time of the survey. Needs for surgical specialties were evaluated based on a community needs basis as well as in the context of hospital surgical capacity. An adequate supply of anesthesiologists, surgical professionals, space and equipment must all exist to provide necessary access to services. Their highest physician group need in this category is an estimated need of approximately 5 physicians for Orthopedic Surgery. Other groups with an estimated physician need of 2 or higher include: General Surgery, Neurosurgery, Ophthalmology, Oral/Maxillofacial Surgery, Otolaryngology, Podiatry and Urology.

## **Key Informant Interviews**

Interviewing key informants (community stakeholders) is a technique employed to assess public perceptions of the county's health status and unmet needs that represent the broad interests of the community with knowledge of or expertise in public health. These interviews are intended to ascertain opinions among individuals likely to be knowledgeable about the community and influential over the opinions of others about health concerns in the community. Since the defined community is equivalent for all three hospitals in Lycoming County, the results of these interviews were utilized for all three Community Health Needs Assessment reports as well as for the system level collaboration for the prioritization of health needs.

## **Methodology**

Interviews with 25 key informants were conducted over dates in March 2013. Informants were determined based on their a) specialized knowledge or expertise in public health, b) their affiliation with local government, schools and industry or c) their involvement with underserved and minority populations.

A representative from Susquehanna Health contacted all individuals nominated for interviews as well as conducted the interviews. If the respective key informant agreed to an interview, an interview time and place was scheduled.



All interviews were conducted by using the Susquehanna representative using a standard questionnaire. A copy of the interview instrument is included in the Appendices. A summary of their opinions is reported without judging the truthfulness or accuracy of their remarks. Community leaders provided comments on the following issues:

- Health and quality of life for residents of the community
- Barriers to improving health and quality of life for residents of the community
- Opinions regarding the important health issues that affect Lycoming County residents and the types of services that are important for addressing these issues
- Delineation of the most important health care issues or services discussed and actions necessary for addressing those issues

Interview data was initially recorded in narrative form. Themes in the data were identified and representative quotes have been drawn from the data to illustrate the themes. Informants were assured that personal identifiers such as name or organizational affiliations would not be connected in any way to the information presented in this report. Therefore, quotes included in the report may have been altered slightly to preserve confidentiality.

This technique does not provide a quantitative analysis of the leaders' opinions, but reveals community input for some of the factors affecting the views and sentiments about overall health and quality of life within the community.

### ***Key Informant Profiles***

Key informants from the community (see the Appendices for a list of key informants) worked for the following types of organizations and agencies:

- Social service agencies
- Local school system and community college
- Local city and county government
- Public health agencies
- Industry
- Faith community
- Medical providers

### ***Key Informant Interview Results***

The interview questions for each key informant were identical. The questions on the interview instrument are grouped into four major categories for discussion:

1. General opinions regarding health and quality of life in the community
2. Underserved populations and communities of need
3. Barriers
4. Most important health and quality of life issues





A summary of the leaders' responses by each of these categories follows. Paraphrased quotes are included to reflect some commonly held opinions and direct quotes are employed to emphasize strong feelings associated with the statements. This section of the report summarizes what the key informants said without assessing the credibility of their comments.

### 1. General Opinions Regarding Health and Quality of Life in the Community

The key informants were asked to rate the health and quality of life in Lycoming County. They were also asked to provide their opinion whether the health and quality of life had improved, declined or stayed the same over the past few years. Lastly, key informants were asked to provide support for their answers.

Most of the key informants rated the health and quality of life in Lycoming County in the good/excellent/above average category. There were a few responses on either end of this average rating. A few of the informants ranked quality of life higher than health. Interviewees repeatedly noted that there were extreme diversities in health and quality of life for certain residents within the community. Economic circumstances are seen to contribute largely to the dichotomy between the two groups.

When asked whether the health and quality of life had improved, declined or stayed the same, the responses were mixed with fourteen saying it had improved, seven staying the same or mixed and four saying it had declined. One informant stated health and quality of life have improved, but behavioral health has declined. Another informant reported the environment had declined, but everything else had improved.

*"For some it has gotten worse, but overall stable. The elderly struggle with the cost of prescriptions."*

*"It depends on what social and income class we talk about. There are many healthcare and social service organizations making headway, but many external forces that take away those gains."*

*"Education has improved. Health still has a ways to go. We are still above the state average in poverty and education."*

Key informants noted that services at Muncy Valley Hospital and other medical providers contributed to the overall improvement of health and quality of life in the community. Natural gas industry was reported as a positive for economic development. The Lycoming County Health Improvement Coalition and their initiatives were noted as a positive. Increased health and substance abuse education, commitment by business leaders in the community, wellness and social opportunities, local recreation and sports were reported as factors for a positive change in health and quality of life for the community. Budget cuts, lack of resources, substance abuse, broken families, teen pregnancies, lack of primary care/insurance coverage, poor prescription insurance coverage, decline in parenting skills, lack of funding for behavioral health, housing need for homeless, unemployment and low incomes were the highlighted reasons for a decline in health and quality of life. Overall, key informants value the Hospital's impact on community health and recognize the Hospital as an asset to the community. Affordability of care, local services budgets and substance abuse were generally seen as the reasons behind poor health and poor quality of life.

*"Susquehanna Health has kept up with technology."*

*"...phenomenal heart and stroke care. Good patient education for diabetes, cancer, and wound healing."*

*"The community is becoming aware of resources to improve their health."*

*"The health system has focused on the voice of the customer."*



*“Many people have no primary care physicians. Many have no health insurance or financial resources.”*

*“Healthcare today is a challenge. Add in any other financial or social struggles and healthcare can be impossible.”*

## **2. Underserved Populations and Communities of Need**

Key informants were asked to provide their opinions regarding specific populations or groups of people whose health or quality of life may not be as good as others. They were also asked to provide their opinions as to why they thought these populations were underserved or in need. Each key informant was asked to consider the specific populations they serve or those with which they usually work. They identified primarily the lower income populations and those suffering from substance abuse as having the largest needs. The homeless, the elderly, minority populations and those that suffer from domestic violence were also mentioned.

Respondents identified two main areas of need: health and healthy living education and access to/affordability of care. A high concentration of elderly population contributes to the rise in health care costs. This in turn causes economic strain for the community, and especially the elderly that need the increased care. When the elderly and the poor have to choose between eating and paying for their care, this puts more demand on local charities and community centers. The elderly and poor in rural areas have another layer of complexity with a transportation need to get the medical care they need. With limited resources, and the high demand of needs from the elderly, it increases the difficulty of providing quality care to the population as a whole. Those that avoid their health problems because of these issues and only seek care in emergent situations increase the strain on medical facilities.

*“The poor fall through the cracks because of missing eligibility for social assistance.”*

*“There are many multi-family living arrangements in single-family homes. There are many transient families. There are different value systems and expectations, and drugs and alcohol are prevalent.”*

*“Cultural stigmas must be overcome such as mental health, STD’s, etc. Certain cultural and societal behaviors often contradict healthy lifestyles such as smoking, drugs, alcohol and teen sexual activities.”*

*“People don’t understand the consequences of their actions: tobacco, seat belts, alcohol, etc. Diabetes is a big problem and it is important to get the message out so they will seek treatment.”*

*“Domestic violence is a common denominator in problems in our area. There is a lack of understanding of this issue. When people are victimized over time they have less motivation to change.”*

The key informants were asked what could improve the health and quality of life in the area. The main responses were based on ideas for education and providing the community with ways to improve their health habits. The following were included:

- Greater economic development and job opportunities.
- Improvement of the family environment and education.
- Improved access to free and affordable clinics and day care.
- Educate about youth and exercise.
- Educate about navigating the Medical Assistance program.



- Promote positive change through the schools.
- Improved screening for domestic violence at hospitals and elsewhere.

*“The community must try to treat the whole person and community, not just in medical terms. We must somehow get kids and teens to understand that they are not invincible. There are many gaps in mental health care.”*

*“When one struggles with meeting the most basic needs, there is little thought about prevention and wellness. People need to feel safe in the home and community before they think about health.”*

*“Make healthcare affordable but also inform, educate, and motivate people to take advantage of healthcare.”*

### 3. Barriers

The key informants were asked what barriers or problems keep community residents from obtaining necessary health services in their community. Responses from key informants included providers for children, access to/affordable healthcare, lack of pediatric dentists, motivation to change habits, lack of providers that take Medical Assistance patients, lack of health insurance coverage, cost of prescriptions, transportation, addictions to various substances and lack of funding for certain programs.

Lack of education and communication surrounding health issues and the availability of health resources is seen as a primary barrier to health services. People do not understand how to qualify for services and there are a limited number of physicians that accept Medical Assistance patients.

*“There is a lack of education and awareness. There is not enough access to primary care and dental. The community needs more education concerning good oral health. There is often a disconnect between needs and resources. Violence in and outside of the home is also increasing.”*

*“Lack of financial resources is a barrier. Even insurance deductibles and copayments can be burdensome.”*

Choosing unhealthy lifestyle habits is also viewed as a barrier to improving health and quality of life in the community. Those interviewed believe it is difficult to reach out to those with addictions and a lack of trust in healthcare providers in general.

*“Education and literacy are barriers. There are a number of kids that still smoke or engage in non-healthy habits. We don’t address the fact that some of these conditions are addictions.”*

*“It is challenging to help someone who doesn’t want help. Attempts to engage patients in their own care are often futile.”*

*“Lifestyle and different classes influence health and quality of life. Cannot give up, must continue to pursue.”*

### 4. Most Important Health and Quality of Life Issues

Key informants were asked to provide their opinion as to the most critical health and quality of life issues facing the community.



The issues identified most frequently were:

1. Lifestyle choices including exercise, obesity, smoking and no interest in preventative care
2. Substance abuse
3. Cancer
4. The health impact of the gas industry
5. Access/affordability of medical as well as dental care

Other issues that were reported are behavioral health/mental health, diabetes, stress, education, cohesive family life, housing, jobs, teenage pregnancy and domestic violence.

*“For upper and middle class there are none. For lower income there are access issues to medical and dental care.”*

*“Providing a medical home for medical refuge for the neediest of the community. No one organization can do it all. There is an underground network between certain local organizations to help the neediest navigate the system and its resources.”*

*“The community would like to see healthcare get into the schools such as exercise and screening for risk factors. School involvement should be started at a younger age.”*

*“Healthcare should be a right and not a privilege. Healthcare should be accessible to all.”*

*“Wait time in the ER is horrendous.”*

*“Susquehanna Health is setting an example for health and fitness to encourage other employers.”*

*“We must begin to move the populations from health crisis mod to one of preventive care and wellness. Education is the key.”*

## **Key Findings**

A summary of themes and key findings provided by the key informants follows:

- Information and education on health issues was identified as a need by several informants. There is a significant need to inform, educate and counsel specific categories of the community.
- Drug and alcohol abuse are seen as a health and quality of life issue.
- Transportation is an issue for rural residents, low income households and the elderly.
- Education on making better health choices is a need for the community for both adults and youth.



## Community Health Input Questionnaire

The Hospital circulated community health input questionnaires, in order to gather broad community input regarding health issues. The input process was launched on February 6, 2013, and was closed on April 19, 2013.

The Community Health Questionnaire survey was intended to gather information regarding the overall health of the community. The results are intended to provide information on different health and community factors. Requested community input included demographics and socioeconomic characteristics, behavioral risk factors, health conditions and access to health resources. Since the defined community is the same for Williamsport Regional Medical Center, Divine Providence Hospital and Muncy Valley Hospital, the results from the community health input questionnaire were used for all 3 Community Health Needs Assessment reports, as well as for the collaboration at the system level for prioritization of health needs.

### **Methodology**

A web-based tool, Question Pro, was utilized to conduct the community input process. Paper questionnaires, which were identical to the electronic questionnaire, were also distributed to populations who may not have access to the internet or generationally are more likely to complete a paper questionnaire. Electronic and paper questionnaires were circulated to the residents of the community. Scheduled below is the survey distribution report.

There were 474 questionnaires completed and returned which comprised of 374 electronic questionnaires and 100 paper questionnaires. Sociodemographic characteristics such as age, education, income and employment status were somewhat comparable to the most recent census data. Over 79 percent of the questionnaire respondents were female which is more than the 51 percent of the population of the community. Additionally, representation of those individuals 65 and older is less than that reported in the latest census data.

### **Community Health Input Questionnaire**

The instrument used for this input process was based largely on the Centers for Disease Control and Prevention (CDC) Behavioral Risk Factor Surveillance System (BRFSS), as well as various other public health surveys and customized questions. The final instrument was developed by the Hospital representatives in conjunction with BKD.

### **Community Health Input Results**

The questionnaire was quite detailed in nature, including many specific questions regarding general health, satisfaction with specific and general providers and demographic information. A compilation of the actual results are included in the Appendices to allow for a detailed analysis. Health needs indicated include:

- **Assessment of Personal Health**

When asked to assess their personal health status, 27 percent of the respondents described their health as being “excellent,” while 63 percent stated that their overall health was “good.”

When asked to rate their community as a “healthy community,” approximately 9 percent of the respondents indicated their community was healthy or very healthy. More than 31 percent of the respondents indicated their community was unhealthy or very unhealthy.



- **Health Care Access Issues**

Over 39 percent of the respondents reported having health insurance with over 67 percent of health insurance being provided by private insurance companies. Health care access issues are primarily related to costs. Respondents noted the following reasons for not receiving medical care:

1. Cannot afford it
2. Not qualified for the plan where I work
3. Not qualified for Medical Assistance

The other respondents did not have employers that offered it or have never applied for Medical Assistance, or felt they did not need insurance.

Respondents noted the following reasons that stopped them from getting the health care they needed:

1. The healthcare provider's hours
2. The deductible or copayment was too high
3. The health insurance did not cover/approve or pay for what was needed

The other respondents noted they could not get time off from work to go, could not get an appointment, had no insurance and other various reasons.

When asked what the biggest barrier to receiving health care in the community, respondents listed the following:

1. Cost or expense
2. Doctors' office hours
3. Insurance issues

- **Lifestyle Behavioral Risk Factors**

Proper diet and nutrition seem to be a challenge as only 18 percent of the respondents report eating the daily recommended servings of fruits and vegetables and 23 percent of the respondents report that they never exercise. Of the respondents, 34 percent report exercising at least three times per week. When asked about exercising at least five times per week, nearly 42 percent of the respondents answered "never." Over 58 percent eat fast food more than once a week. 8 percent of the respondents always smoke cigarettes. Use of seat belts is high (over 83 percent) and when applicable, respondents' children use seat belts and/or child safety seats with only approximately 2 percent using them only sometimes. Over 18 percent text while driving a motor vehicle.

- **Social and Mental Health**

Over 10 percent of the respondents reported always being stressed out with over 76 percent responding that they were sometimes stressed out. Over 19 percent of the respondents rated their stress level as high or very high. Over 21 percent of the respondents reported that they did less than they would like because of mental health or emotional issues.





Approximately 27 percent of respondents reported that their current employment is stressful, while over 26 percent reported that finances are stressful. Nearly 55 percent of the respondents worry about losing their job. Nearly 47% feel lonely, yet over 45% are always happy about their lives, and over 52 percent are sometimes happy about their lives. Over 30 percent of respondents always feel safe in their community. Over 2 percent noted domestic violence impacts their life.

### **What do Citizens say about the Health of their Community?**

The five most important “health problems:”

1. Obesity (adult)
2. Cancer
3. Heart disease and stroke
4. Aging problems
5. Diabetes

The three most “risky behaviors:”

1. Drug abuse
2. Alcohol abuse
3. Tobacco use/second hand smoke

The five most important factors for a “healthy community:”

1. Affordable and available health care
2. Healthy behaviors and lifestyles
3. Healthy food sources
4. Clean and safe environment
5. Job security

### **Prioritization of Identified Health Needs**

The Hospital has accomplished much over the past several years and continues to work on the development and implementation of programs and initiatives that work toward the improvement of community health and wellness. Primary and secondary data from this assessment process will be a valuable resource for future planning. The community input findings obtained through interviews and the community input questionnaire should be especially useful in understanding residents’ health needs. The findings provide the Hospital a lot of information to act on. In order to facilitate prioritization of identified health needs, a ranking and prioritization process was used and is described in the section below.

Analysis of community health information, key informant interviews and the community health input questionnaire were all used to assess the first four factors for each of the health needs of the community in *Exhibit 22*. The leadership teams from the Lycoming County operations voted to gauge the factor, Ability of the Hospital to Impact Change. For each identified health need, the statement, “Susquehanna Health can address and positively impact the following community health issue,” was shown along with the health need to consider, then leadership members voted by selecting “1” = Strongly disagree, “2” = Disagree, “3” = Agree and “4” = Strongly Agree. To provide a triple weight to this factor of



prioritization, needs with a scoring of “1” were assigned 1 point. Needs with a scoring of “2” were assigned 4 points. Needs with a scoring of “3” were assigned 8 points. There were no needs scored with a “4”, yet it should be noted if there had been, the need would have been assigned 12 points. These scorings were made at a system level, hence each of the following exhibits will also be seen in the Community Health Needs Assessment reports for Divine Providence Hospital and Muncy Valley Hospital.

Exhibit 22  
Susquehanna Health - Muncy Valley Hospital  
Ranking of Community Health Needs

Health Problem	Ability to evaluate and measure outcomes based on data	How many people are affected by the issue?	What are the consequences of not addressing this problem?	Prevalence of common themes	SubTotal	Ability of the Hospital to Impact Change	Total Score
<b>Adult Obesity</b>	3	4	4	4	15	8	23
<b>Affordable Healthcare</b>	3	4	4	4	15	8	23
<b>Diseases of the Heart</b>	4	3	4	4	15	8	23
<b>Diabetes</b>	4	4	3	4	15	8	23
<b>Lung Cancer</b>	4	4	4	2	14	8	22
<b>Other Cancers</b>	4	4	4	2	14	8	22
<b>Prostate Cancer</b>	4	3	4	2	13	8	21
<b>Breast Cancer</b>	4	2	4	2	12	8	20
<b>Colorectal Cancer</b>	4	2	4	2	12	8	20
<b>Shortage of Physicians/Access to Specialists</b>	3	3	3	3	12	8	20
<b>Mental Health</b>	3	3	4	2	12	8	20
Uninsured Residents	4	3	3	3	13	4	17
Low Birth Weight	3	2	3	1	9	8	17
Respiratory	3	2	3	1	9	8	17
Dental Health	3	3	3	3	12	4	16
Infant Mortality	3	2	2	1	8	8	16
STDs	3	2	1	1	7	8	15
Adult Smoking	2	3	3	3	11	4	15
Teen birth rate	3	2	3	3	11	4	15
Drug Abuse	2	2	3	3	10	4	14
Physical Activity	1	2	2	1	6	8	14
Access to Recreational Facilities/Limited	2	4	2	1	9	4	13
Transportation	2	2	3	2	9	4	13
Access to Healthy Foods	2	2	2	3	9	4	13
Alcohol abuse	2	2	2	2	8	4	12
Motor Vehicle Crashes	2	3	2	2	9	1	10
Children in Poverty	3	3	2	1	9	1	10

Health needs were ranked based on five factors:

1. The ability of the Hospital to evaluate and measure outcomes.
2. How many people are affected by the issue or size of the issue?
3. What are the consequences of not addressing this problem?
4. Prevalence of common themes.
5. The ability of the Hospital to impact change.

Health needs were then prioritized and charted on *Exhibit 23* taking into account their overall ranking, the degree to which the Hospital can impact long-term change and the identified health needs impact on overall health.



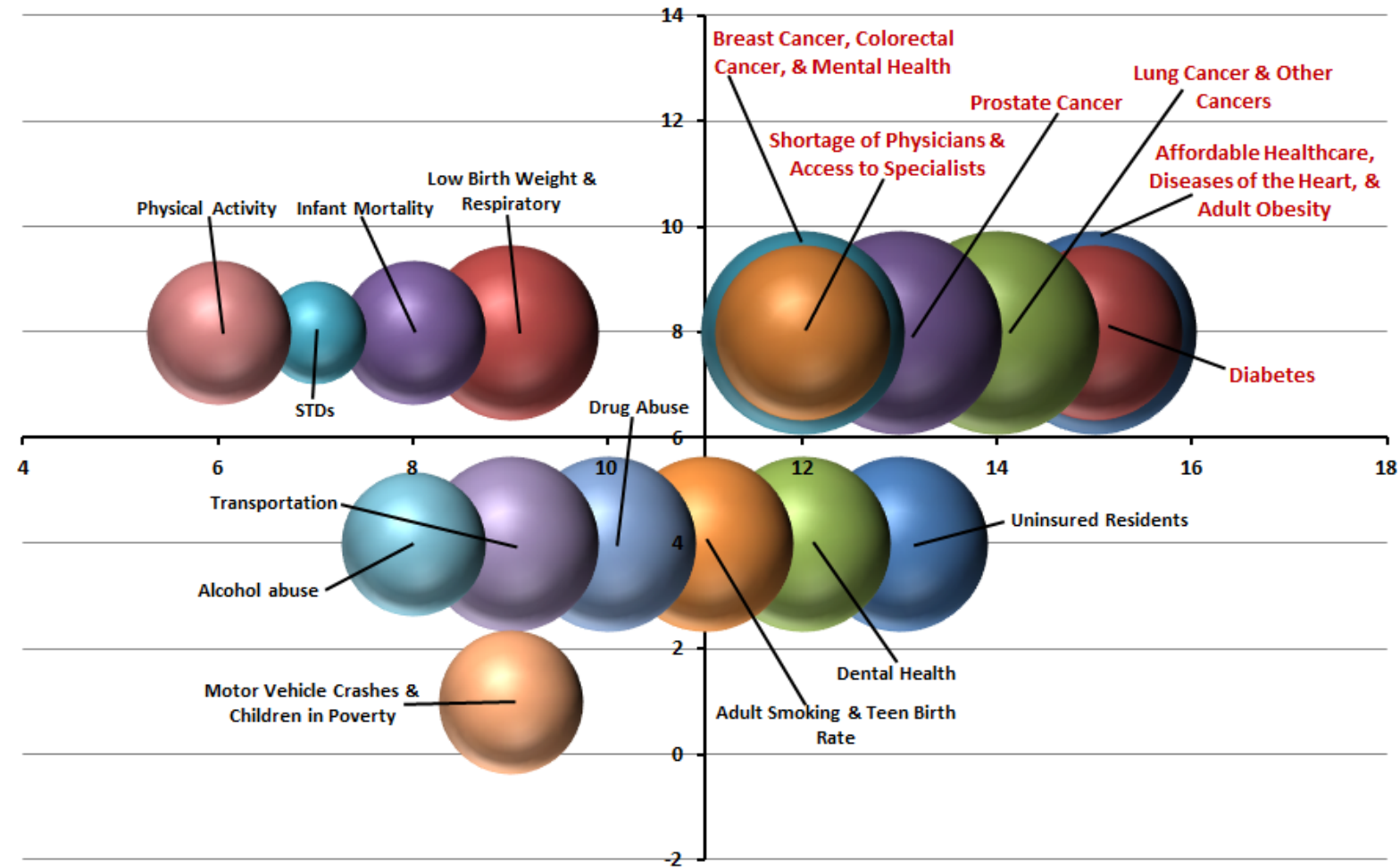


Utilizing the statistical median (6) as the horizontal axis, the overall ranking based on subtotal score was plotted on *Exhibit 23*. Next, each identified health need was assigned a value by Hospital management between 1 and 12 representing the perceived degree of impact the Hospital has on changing health outcomes related to the identified health need. Utilizing the statistical median (11) as the vertical axis, this value was charted.

Lastly, each health need was evaluated and assigned a rating between 1 and 4 regarding the health needs consequences of not being addressed. Those health needs receiving the highest rating are represented by the largest spheres.

The graphical representation included as *Exhibit 23* is intended to aid in identifying health priorities for the organization. By addressing those needs in the upper right quadrant, overall community health will likely improve as these needs have the greatest impact on overall health and the Hospital is more likely to influence a positive impact on these needs.

**Exhibit 23**  
**Susquehanna Health - Muncy Valley Hospital**  
**Prioritization of Identified Health Needs**



## Considerations for Meeting Identified Health Needs

After compiling and analyzing all of the data in this assessment, we recommend that management consider the following benchmarking, targets, ideas and strategies in its implementation strategy plans. Some of the strategies will address multiple needs. These lists are not intended to be exhaustive and do not imply there is only one way to address the identified health needs.

### **Obesity**

Adult obesity was prioritized among the top ranking health needs for the community. Changes in this area can have a high impact to the overall health of the community. Diet and body weight are related to health status. Good nutrition is important to the growth and development of children. A healthful diet also helps Americans reduce their risks for many health conditions. Lack of physical activity, poor dietary choices and obesity are linked with the increased risk of several medical conditions.

**Exhibit 24**  
**Susquehanna Health - Muncy Valley Hospital**  
**Adult Obesity**  
**Leading Health Indicators**

County	County Health Rankings		Healthy People 2020 Targets
	MVH Community	US Benchmark	
	<b>Reduce the proportion of adults who are obese</b>		
Lycoming	31.0%	25.0%	30.5%
	<b>Reduce the proportion of children and adolescents aged 2 to 19 years who are considered obese</b>		
County	N/A	N/A	14.5%
	<b>Increase the contribution of total vegetables to the diets of the population aged 2 years and older</b>		
County	N/A	N/A	1.1 cup equivalent per 1,000 calories

*Community and US Benchmark Source: County Health Rankings*

Recommendations to improve the obesity rate are as follows:

- A community-wide fitness initiative led by the Hospital focusing on fitness, nutrition and physical activity.
- Engaging local park boards for more community activities.

### **Affordable Healthcare**

Affordable healthcare was prioritized among the highest health needs for the community. Access to care (including transportation), uninsured residents, affordable healthcare, access to physicians and access to specialists are all health needs identified in relation to the area of access to healthcare. Increasing access to both routine medical care and medical insurance are vital steps in improving the health of the community.



**Exhibit 25**  
**Susquehanna Health - Muncy Valley Hospital**  
**Access to Healthcare**  
**Leading Health Indicators**

		<b>County Health Rankings</b>		<b>Healthy People</b>
		<b>MVH</b>	<b>US</b>	<b>2020 Targets</b>
		<b>Community</b>	<b>Benchmark</b>	
<b>County</b>	<b>Insured adults</b>			<b>Increase the proportion of persons with medical insurance</b>
Lycoming	87.0%	89.0%		100.0%
<b>County</b>	<b>Ratio of population to primary care physicians</b>			<b>Increase the proportion of persons with a usual primary care provider</b>
Lycoming	1,367:1	1,067:1		83.9%
<b>County</b>	<b>Preventable Hospital Stays</b>			<b>Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines</b>
Lycoming	51.0	47.0		9.0%
<b>County</b>				<b>Reduce the proportion of hospital emergency department visits in which the wait time to see an emergency department clinician exceeds the recommended timeframe</b>
	N/A	N/A		9.0%

*Community and US Benchmark Sources: County Health Rankings*

Recommendations to improve community health related to access to care include the following:

- Extended services and increased hours of operation at community health clinics for the working poor.
- Recruitment of additional specialists to the community as well as increased collaboration among specialists and other agencies such as school programs, clinics, etc.
- The implementation of a community health resource center to be located within the Hospital which would provide assistance to those needed to access health resources. Additionally, routine screening and education sessions could be provided at the resource center.
- The compilation of a health resource directory providing the listing of available health resources in the community with primary contact information for each resource.
- Education sessions for the newly unemployed and underemployed regarding how to access health services including clear information as to what agencies provide which services.
- Strive to be the “Thought Leader” and convener of agencies serving the health needs of the community.

**Diseases of the Heart**

Diseases of the heart, access to recreational facilities, adult obesity and access to healthy foods are some of the health needs in the community. Changes in these areas can have a high impact to the overall health of the community.

Hypertension prevention includes following a healthy eating pattern, reducing salt and sodium in the diet, maintaining a healthy weight, being physically active, limiting alcohol intake and quitting smoking if a smoker. Research has shown that following a healthy eating plan can both reduce the risk of developing high blood pressure and lower an already elevated blood pressure. To reduce salt and sodium in the diet, it is best to reduce intake to the recommendation of less than 2.4 grams (2,400 milligrams) of sodium a day. Being overweight increases the risk of developing high blood pressure. Blood pressure rises as body weight increases. Nearly one in three adults in Lycoming County is obese. Lack of physical activity, poor dietary choices and obesity are linked with the increased risk of several medical conditions in addition to diseases of the heart. Physical activity can help reduce blood pressure as well as reduce the risk of other types of heart disease.

**Exhibit 26**  
**Susquehanna Health - Muncy Valley Hospital**  
**Diseases of the Heart**  
**Leading Health Indicators**

County Health Rankings		Healthy People
MVH Community	US Benchmark	2020 Targets
<b>Reduce coronary heart disease deaths per 100,000 persons</b>		
<b>County</b>	<b>Cause of Death Rates</b>	
Lycoming	107.2      195.4	100.8
<b>Reduce the proportion of adults who are obese</b>		
<b>County</b>	<b>Adult Obesity</b>	
Lycoming	31.0%      25.0%	30.5%
<b>Reduce the proportion of adults engaging in binge drinking during the past 30 days</b>		
<b>County</b>	<b>Excessive Drinking</b>	
Lycoming	17.0%      7.0%	24.4%
<b>County</b>	<b>facilities per 100,000</b>	
Lycoming	7.0      16.0	N/A
<b>Increase the proportion of adults with hypertension whose blood pressure is under control</b>		
<b>County</b>		
	N/A      N/A	61.2%
<b>Increase proportion of adults who have had their blood cholesterol checked within the preceding 5 years</b>		
<b>County</b>		
	N/A      N/A	82.1%

Community and US Benchmark Source: County Health Rankings

Recommendations to improve diseases of the heart rate include:

- A community-wide fitness initiative led by the Hospital focusing on fitness, nutrition and physical activity.
- Community education about the available options for outdoor physical fitness.
- Education on nutrition and cooking for healthy hearts.

**Diabetes**

According to The Healthy People 2020, diabetes affects an estimated 23.6 million people in the U.S. and is the 7<sup>th</sup> leading cause of death. Other health factors for diabetes include a lowered life expectancy by up to 15 years, increased risk of heart disease by 2 to 4 times, and increased causes for kidney failure, lower limb amputations and adult-onset blindness.

**Exhibit 27**  
**Susquehanna Health - Muncy Valley Hospital**  
**Diabetes**  
**Leading Health Indicators**

	County Health Rankings		Healthy People 2020 Targets
	MVH Community	US Benchmark	
<b>County</b>	<b>Cause of Death Rates</b>		<b>Reduce the diabetes death rate</b>
Lycoming	29.1	22.4	65.8 deaths per 100,000 population
<b>County</b>	N/A	N/A	<b>Reduce the annual number of new cases of diagnosed diabetes in the population</b>
			7.2
<b>County</b>	N/A	N/A	<b>Reduce the proportion of persons with diabetes with an A1c value greater than 9%</b>
			16.1%
<b>County</b>	<b>Diabetic Screening</b>		<b>Increase the proportion of persons with diabetes whose condition has been diagnosed</b>
Lycoming	76.0%	90.0%	80.1%

*Community and US Benchmark Source: County Health Rankings*



Recommendations to prevent or delay the onset of diabetes include:

- Education and further advertisement of Diabetes screenings made available for the community.
- Education on lifestyle changes such as specific dietary choices.

### ***Cancer***

Cancer as a leading cause of death is the top cause of death for the community. The most common risk factors for cancer are growing older, tobacco use, sunlight, ionizing radiation, certain chemicals and other substances, some viruses and bacteria, certain hormones, family history of cancer, alcohol use, poor diet, lack of physical activity and being overweight. Although cancer may strike at any age, it is more commonly a disease of middle and older age.

Many cancers are preventable by reducing risk factors. Other cancers can be prevented by getting vaccinated against human papillomavirus and hepatitis B virus. Screening is effective in identifying some types of cancers including breast cancer, cervical cancer and colorectal cancer. It is critical to assess whether people understand and remember the information they receive about cancer screening. Research shows that a recommendation from a health care provider is the most important reason patients cite for having cancer screening tests.



**Exhibit 28**  
**Susquehanna Health - Muncy Valley Hospital**  
**Cancer**  
**Leading Health Indicators**

	County Health Rankings		Healthy People 2020 Targets
	MVH Community	US Benchmark	
<b>County</b>	<b>Cancer of Death Rates</b>		<b>Reduce the overall cancer death rate</b>
Lycoming	179.9	185.0	160.6 deaths per 100,000 population
<b>County</b>	<b>Breast Cancer Death Rate</b>		<b>Reduce the female breast cancer death rate</b>
Lycoming	20.0	13.4	20.6 deaths per 100,000 population
<b>County</b>	<b>Colorectal Cancer Death Rate</b>		<b>Reduce the colorectal cancer death rate</b>
Lycoming	17.3	17.1	14.5 deaths per 100,000 population
<b>County</b>	<b>Lung Cancer Death Rate</b>		<b>Reduce the lung cancer death rate</b>
Lycoming	52.1	51.6	45.5 deaths per 100,000 population
<b>County</b>	<b>Prostate Cancer Death Rate</b>		<b>Reduce the prostate cancer death rate</b>
Lycoming	27.8	9.2	21.2 deaths per 100,000 population
<b>County</b>			<b>Increase the proportion of adults who receive a colorectal cancer screening based on the most recent guidelines</b>
	N/A	N/A	70.5%
<b>County</b>	<b>Mammography Screening</b>		<b>Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines</b>
	81.0%	73.0%	81.1%

Community and US Benchmark Source: County Health Rankings

Strategies that address this priority area should consider the following:

- Provision of increased clinical preventive services
- Logistical factors such as transportation
- The challenges faced by the elderly population should be considered



**Mental and Emotional Well-Being**

Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases. Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25 percent of all years of life lost to disability and premature mortality. Suicide is the 11<sup>th</sup> leading cause of death in the United States, accounting for the deaths of approximately 30,000 people per year. Mental health plays a major role in people’s ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people’s ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person’s ability to participate in treatment and recovery.

**Exhibit 29**  
**Susquehanna Health - Muncy Valley Hospital**  
**Mental and Emotional Well-Being**  
**Leading Health Indicators**

	County Health Rankings		Healthy People
	MVH	US	2020 Targets
	Community	Benchmark	
<b>County</b>	<b>Poor Mental Health Days</b>		
Lycoming	3.2	2.3	N/A
<b>County</b>	<b>Suicide Death Rate</b>		<b>Reduce the suicide rate</b>
Lycoming	13.3	12.0	10.2 suicides per 100,000 population
<b>County</b>			<b>Reduce the proportion of adolescents aged 12 to 17 years who experience major depressive episodes</b>
	N/A	N/A	7.4%

*Community and US Benchmark Source: County Health Rankings*

Strategies that address this priority area should consider the following:

- Increase the number of mental health providers
- Increase depression screenings by primary care physicians



## **Health Issues of Uninsured Persons, Low-Income Persons and Minority Groups**

Certain key informants were selected due to their positions working with low-income and uninsured populations. Several key informants were selected due to their work with minority populations. Based on information obtained through key informant interviews and the community health survey, the following chronic diseases and health issues were identified:

- Uninsured/low income population
  - ✓ Access to healthy foods
  - ✓ Dental care
  - ✓ Mental and emotional health
  - ✓ Education on access to health services
  - ✓ Obesity
- Hispanic population
  - ✓ Dental care
  - ✓ Prenatal care
  - ✓ Access to care due to not having legal status
  - ✓ Preventative care
  - ✓ Obesity

## APPENDICES

## **Acknowledgements**

The project Steering Committee was the convening body for this project. Many other individuals including community residents, key informants and community-based organizations contributed to this community health needs assessment.

### ***Project Steering Committee***

Special thanks to all of the following committee members for their time and commitment to this project:

*Steve Martin, CPA, Vice President/Controller*  
*Rev. John Charnock, Director of Pastoral Care and Volunteer Services*  
*Susan Browning, Director of Community Benefit and Outreach*

### ***Key Informants***

Thank you to the following individuals who participated in our key informant interview process:

*Keith Kuzio, CEO, Larson Design*  
*Anne Holliday, Nursing Home Administration, Susquehanna Health*  
*Morris Smith, Shepherd of the Streets, United Churches of Lycoming County*  
*Douglas Koszalka, District Executive Director, PA Dept. of Health*  
*Dave Fagerstorm, President & CEO, River Valley Regional YMCA*  
*Davie Jane Gilmore, President, Penn College*  
*Sally Wentzler, Director of Family Center for Reproductive Health, Susquehanna Health*  
*Dr. Alexander Nesbitt, Medical Director for Palliative Care, Susquehanna Health*  
*Fr. Glenn McCreary, Pastor & Prison Chaplain, Diocese of Scranton*  
*Dr. Kathleen Kelley, Superintendent of WASD*  
*Gwen Bernstine, Executive Director United Churches of Lycoming County*  
*Ellen Krajewski, Executive Director of Community Health and Dental Clinic*  
*Mark Shuman, Sales, Clear Channel Communications*  
*Gabe Campana, Mayor of Williamsport, Pennsylvania*  
*Pat McGhee, Administrative Director of Homecare and Behavioral Health, Susquehanna Health*  
*John Yingling, Director, County Dept. of Safety*  
*Anne Marie Phillips, Owner, Phillips Supply*  
*Adrienne Wertz, Director of Funds Distribution and Community Building, Lycoming County United Way*  
*Terry Roller, President & CEO, STEP Inc.*  
*Delia Probst, Supervisor, Susquehanna Health Emergency Department*  
*Sr. Ann Marie Paul, Director of Mission Integration, Susquehanna Health*  
*Kevin Carroll, Director of Men's Center, American Rescue Workers*  
*John Ressler, Executive Director, Albright Life*  
*Sr. Sharon Hartman, Chaplain, Susquehanna Health*  
*Diane Glenwright, Executive Director, YWCA*

**Community Health Input Questionnaire**

Thank you to the following businesses and entities that assisted with distributing the community health input questionnaire:

*The Lifecenter of Susquehanna Health*

*The Susquehanna Community Health and Dental Clinic, Inc.*



## **KEY INFORMANT INTERVIEW PROTOCOL**



**Susquehanna Health**

**Key Informant Interview**

**Community Health Needs Assessment**

Interviewer: \_\_\_\_\_

Date: \_\_\_\_\_

Start Time: \_\_\_\_\_

End Time: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Agency/Organization: \_\_\_\_\_

# Years Living in Lycoming County: \_\_\_\_\_

# Years in Current Position: \_\_\_\_\_

Email Address: \_\_\_\_\_

**Introduction:** Good morning/afternoon. My name is John Charnock. Thank you for taking time out of your busy day to speak with me. I'll try to keep our time to approximately 40 minutes, but we may find that we run over- up to 50 minutes total- once we get into the interview. (Check to see if this is okay).

Susquehanna Health is gathering local data as part of developing a plan to improve health and quality of life in Lycoming County. Community input is essential to this process. A combination of surveys and key informant interviews are being used to engage community members. You have been selected for a key informant interview because of your knowledge, insight, and familiarity with the community. The themes that emerge from these interviews will be summarized and made available to the public, however, individual interviews will be kept strictly confidential.

**To get us started, can you tell me briefly about the work that you and your organization do in the community?**

Thank you. Next I'll be asking you a series of questions about health and quality of life in Lycoming County. As you consider these questions, keep in mind the broad definition of health adopted by the World Health Organization: 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.' While sharing the local perspectives you have from your current position and from experiences in this community.







**5. Are there people or groups of people in Lycoming County whose health or quality of life may not be as good as others?**

**a. Who are these persons or groups (whose health or quality of life is not as good as others)?**

**b. Why do you think their health/quality of life is not as good as others?**

**6. What barriers, if any, exist to improving health and quality of life in Lycoming County?**

**7. In your opinion, what are the most critical health and quality of life issues in Lycoming County?**



8. *What needs to be done to address these issues?*

9. **In your opinion, what else will improve health and quality of life in Lycoming County?**

10. **Is there someone (who) you would recommend as a "key informant" for this assessment?**



**Close:** Thanks so much for sharing your concerns and perspectives on these issues. The information you have provided will contribute to develop a better understanding about factors impacting health and quality of life in Lycoming County. Before we conclude the interview,

**Is there anything you would like to add?**

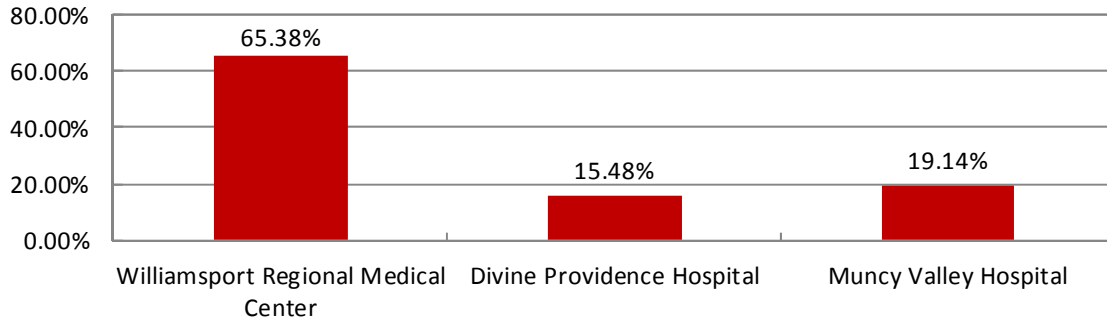
As a reminder, summary results will be made available by Susquehanna Health and used to develop a community-wide health improvement plan. Should you have any questions, please feel free to contact The Rev. Dr. John Charnock at Susquehanna Health. Here is his contact information **(provide business card)**. Thanks once more for your time. It's been a pleasure to meet you.



**COMMUNITY HEALTH INPUT QUESTIONNAIRE  
DETAIL RESULTS**

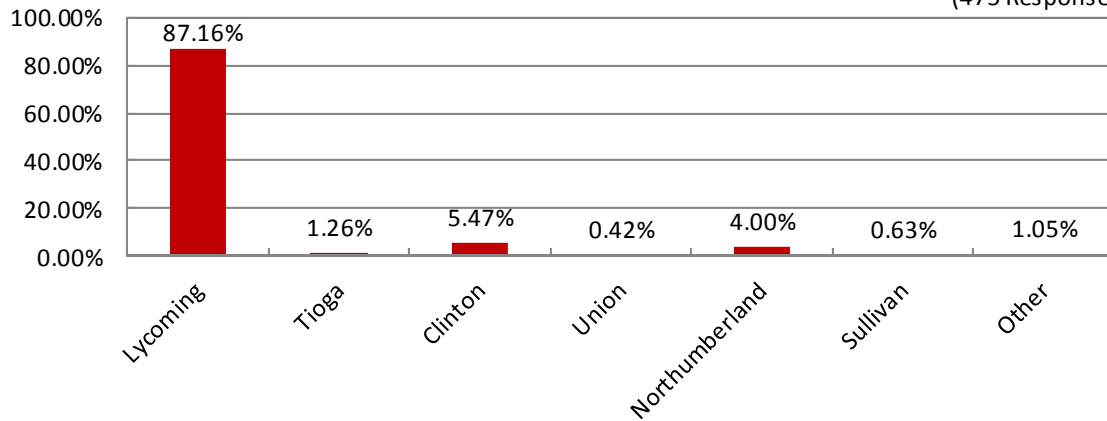


**1. Which facility in the Susquehanna Health have you or would you utilize (check one):**



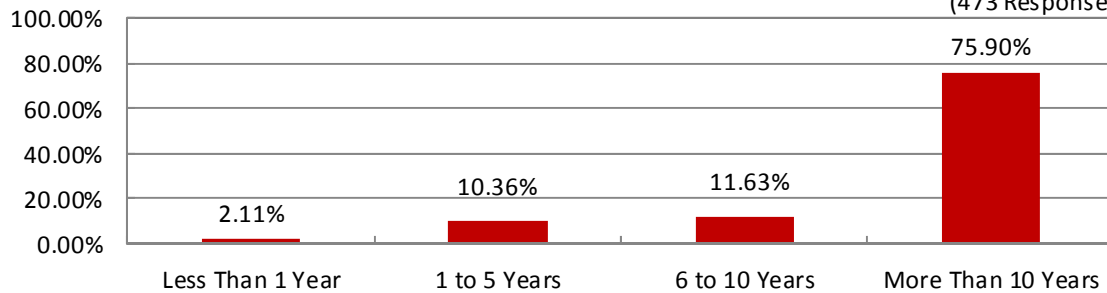
**2. Select the county municipality in which you live:**

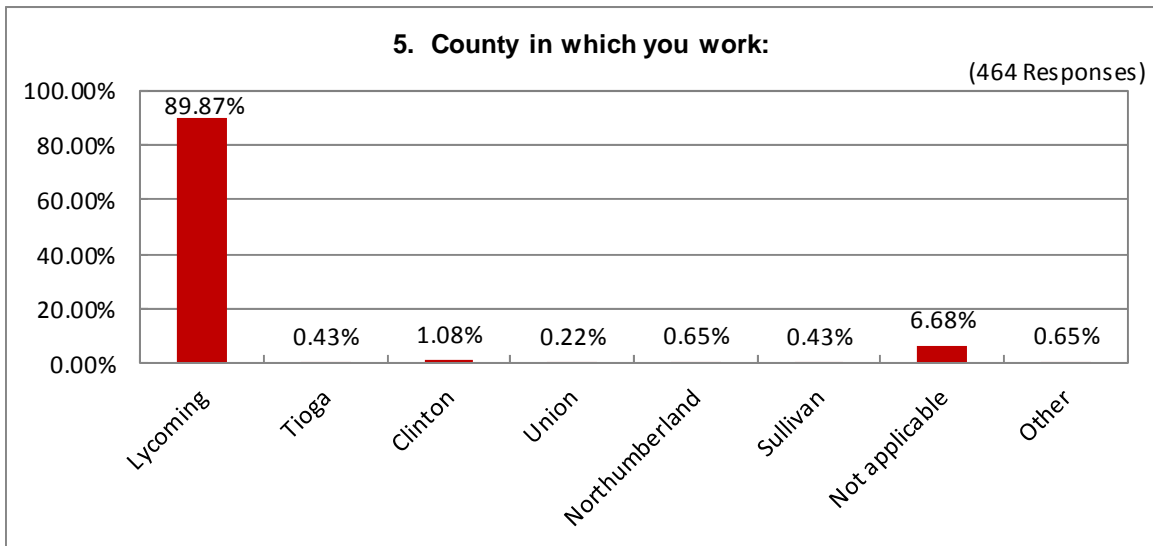
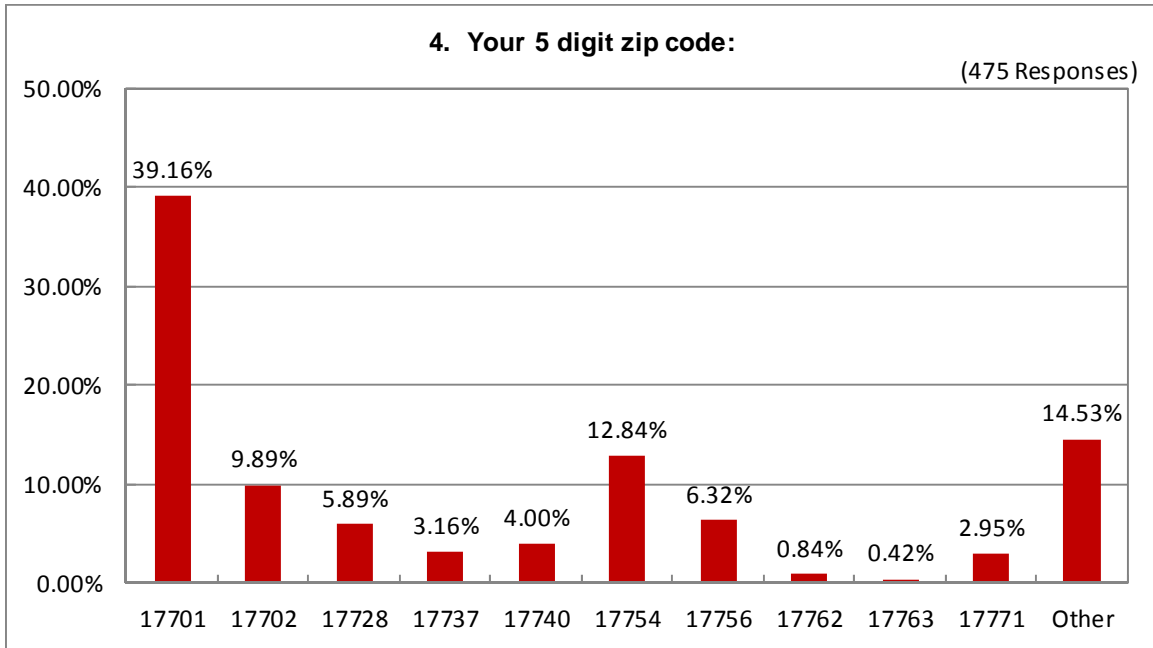
(475 Responses)

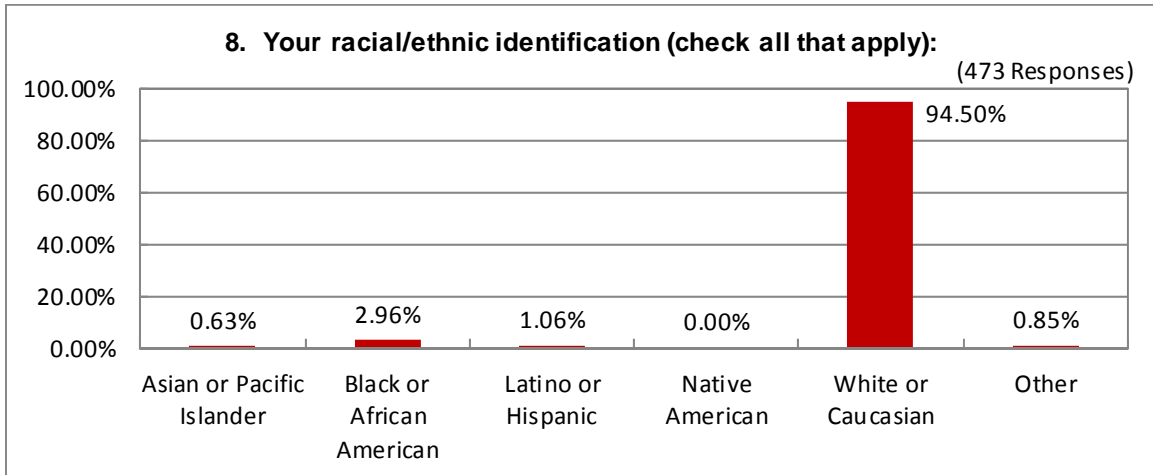
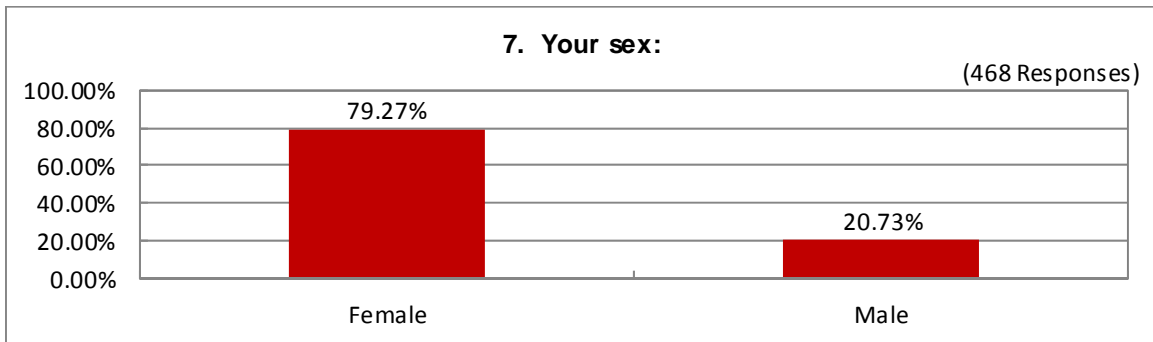
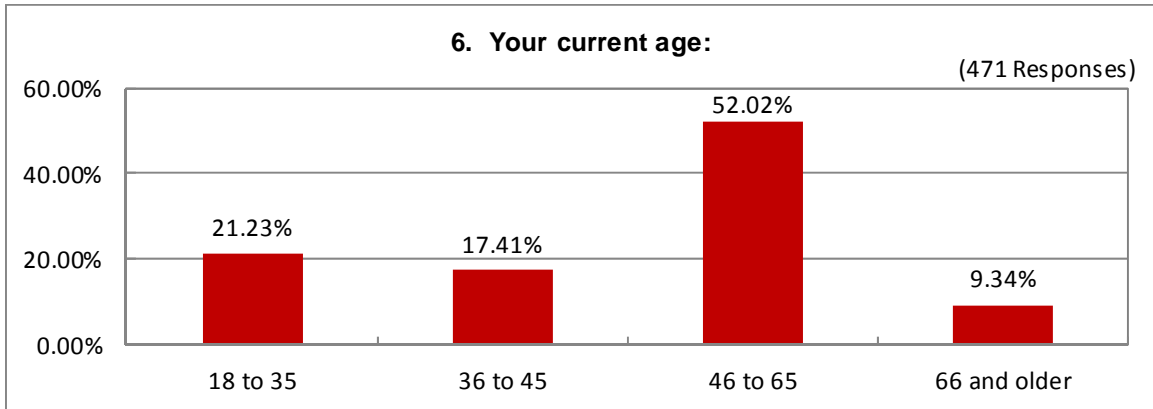


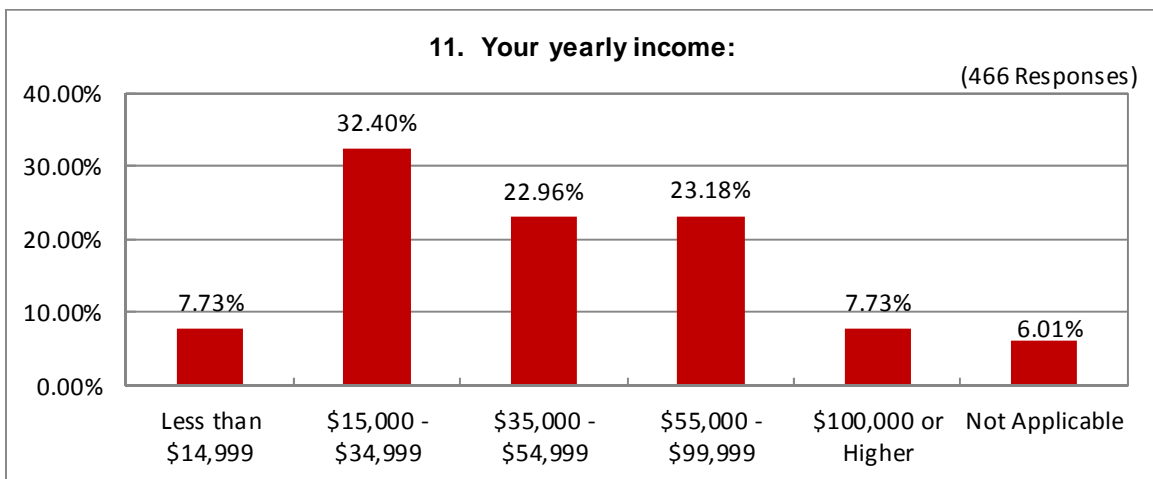
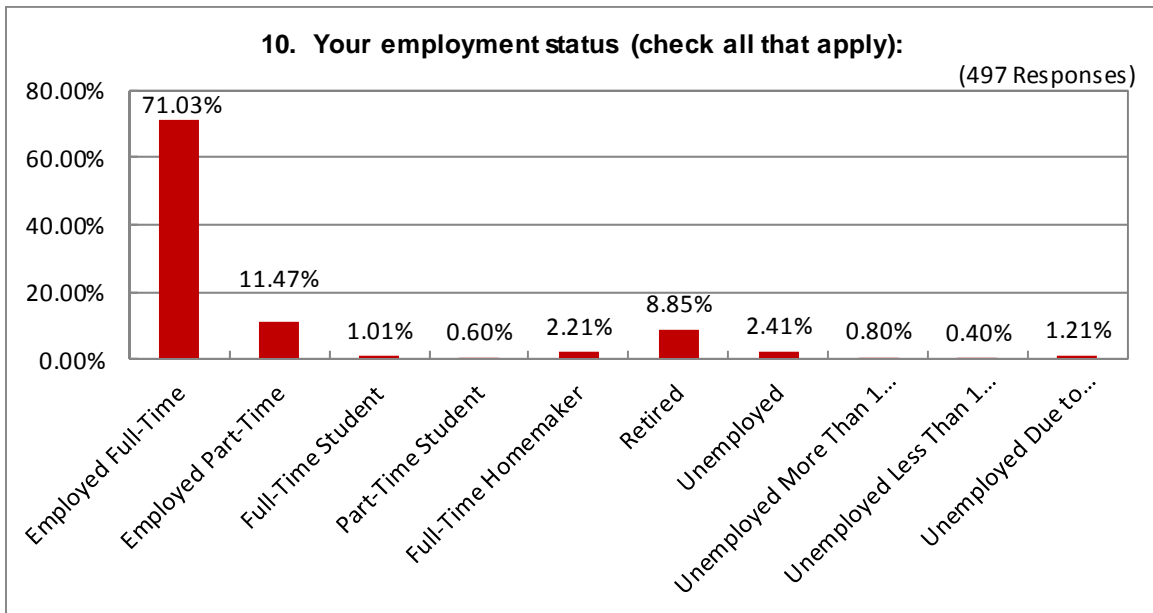
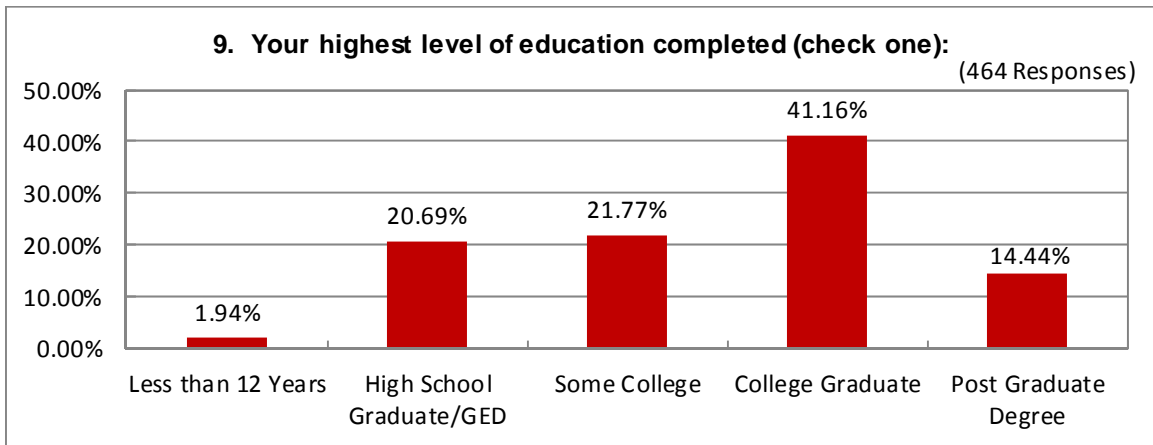
**3. Length of time you have been a resident in your current municipality:**

(473 Responses)

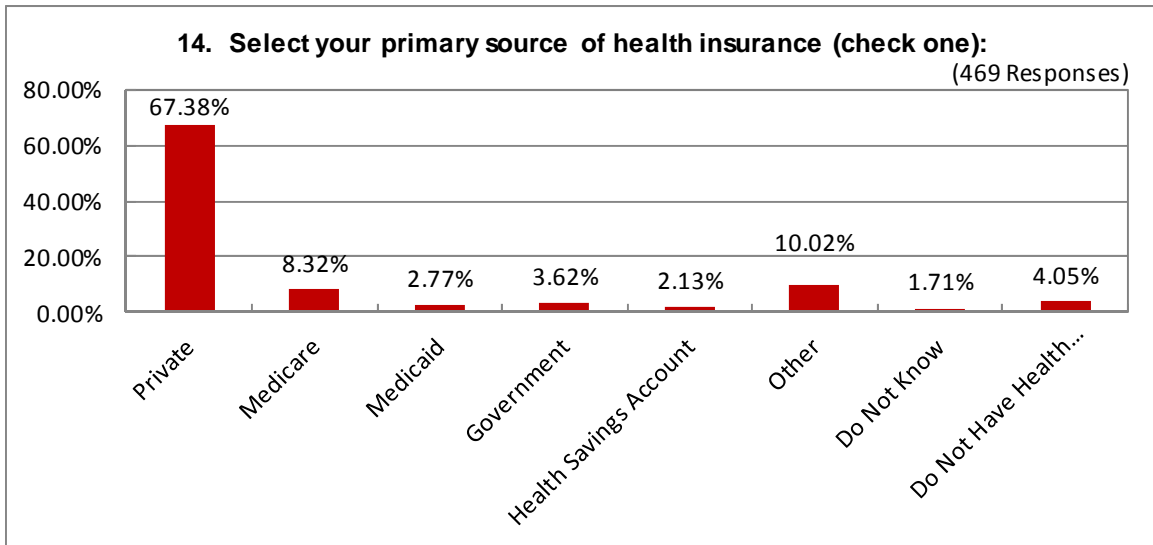
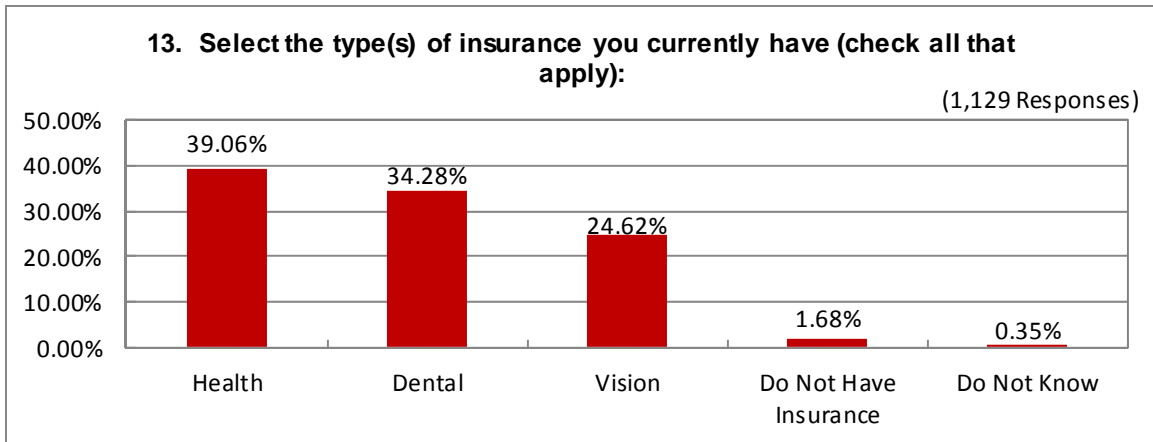
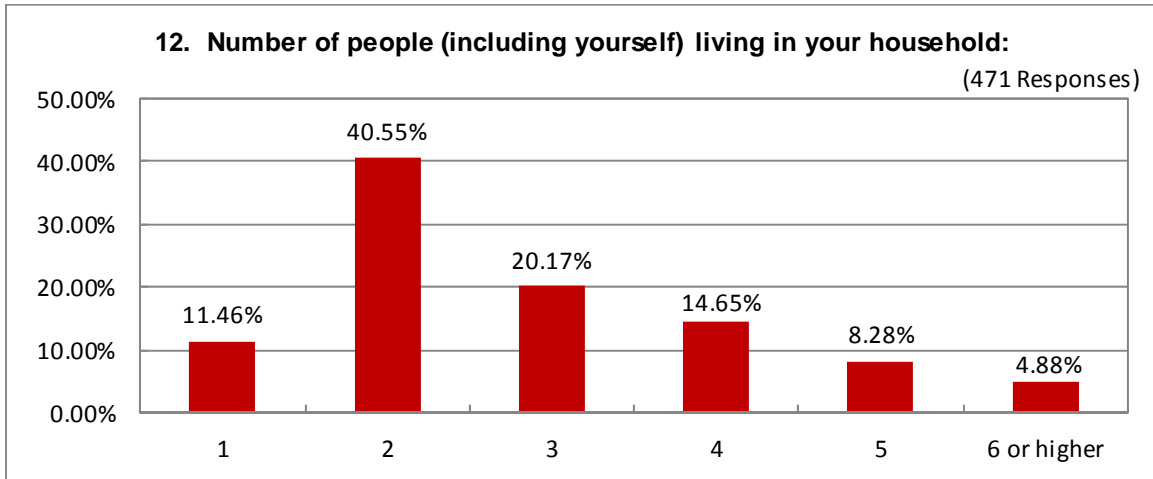


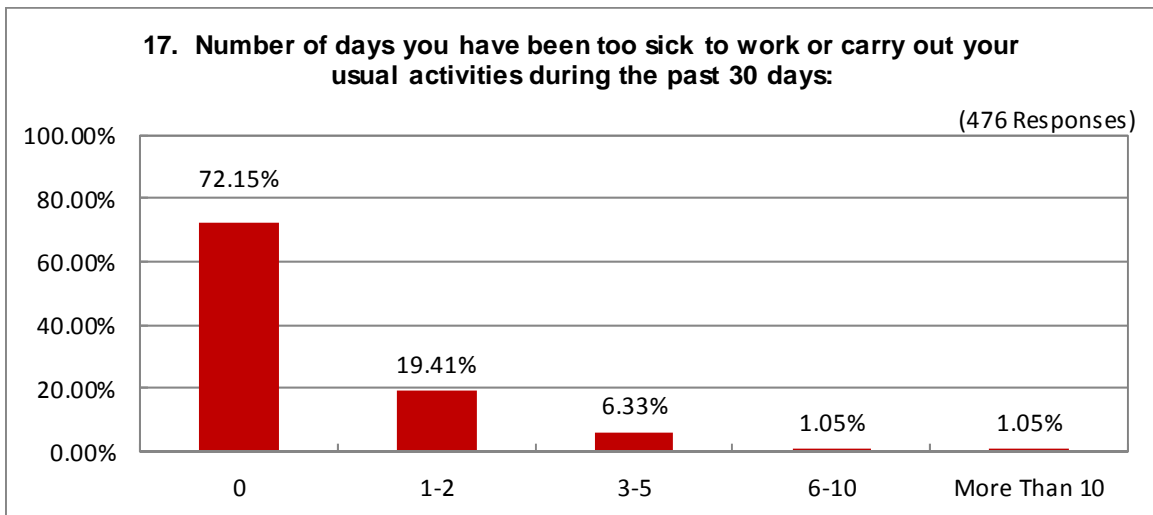
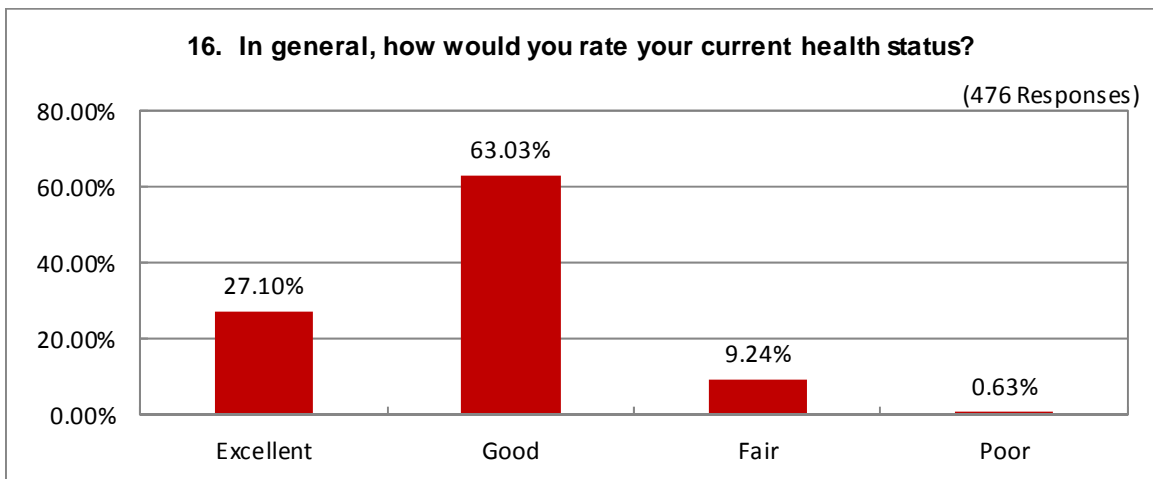
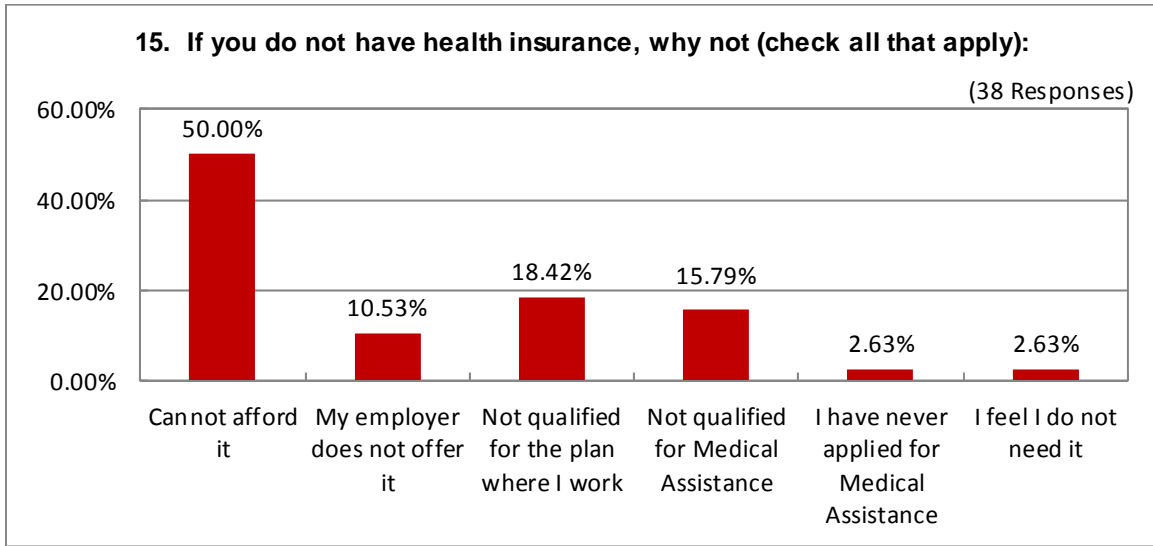


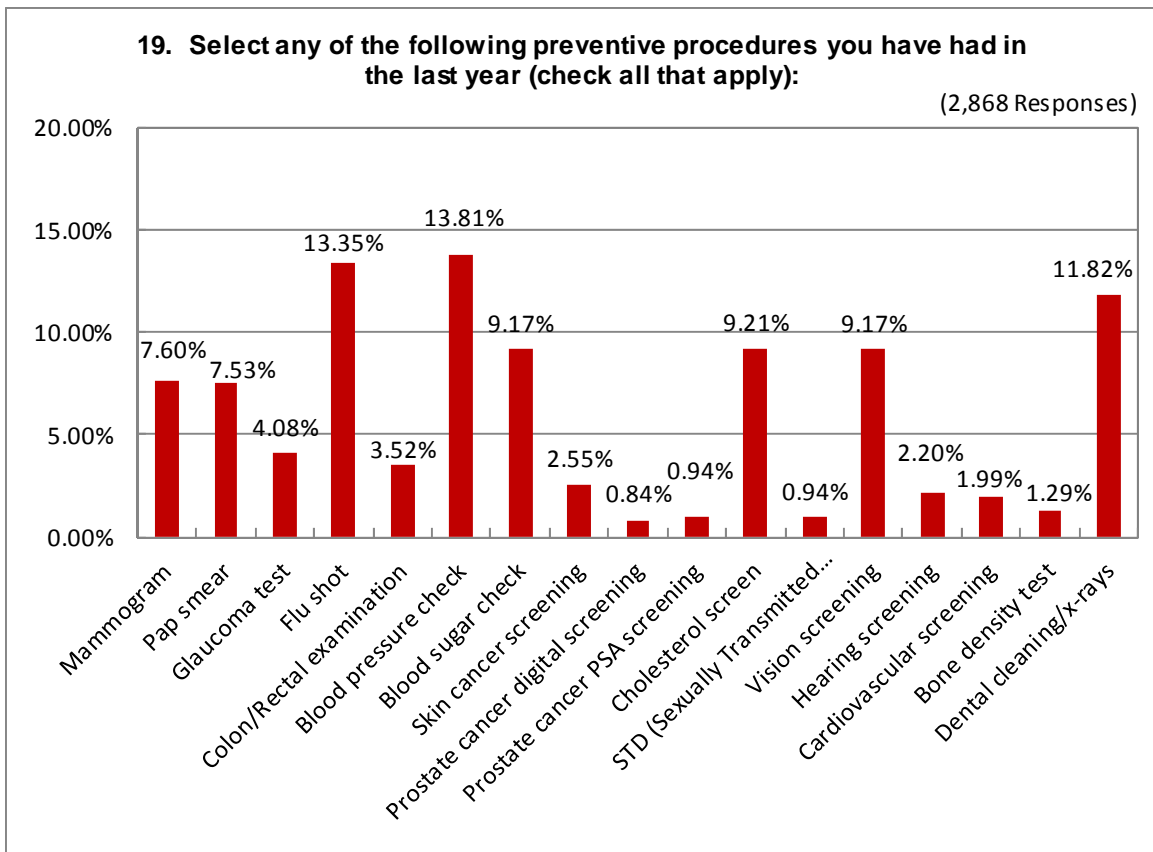
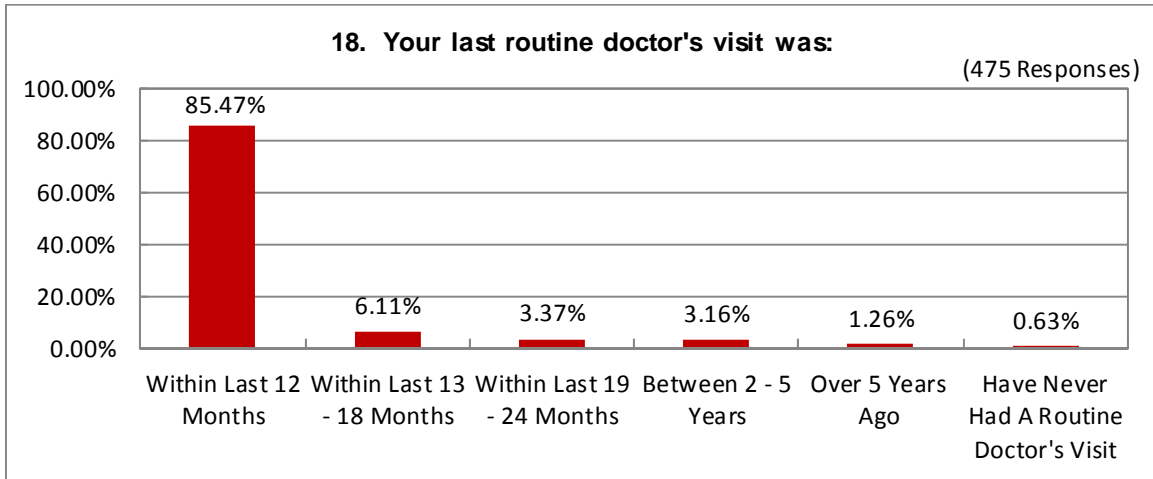


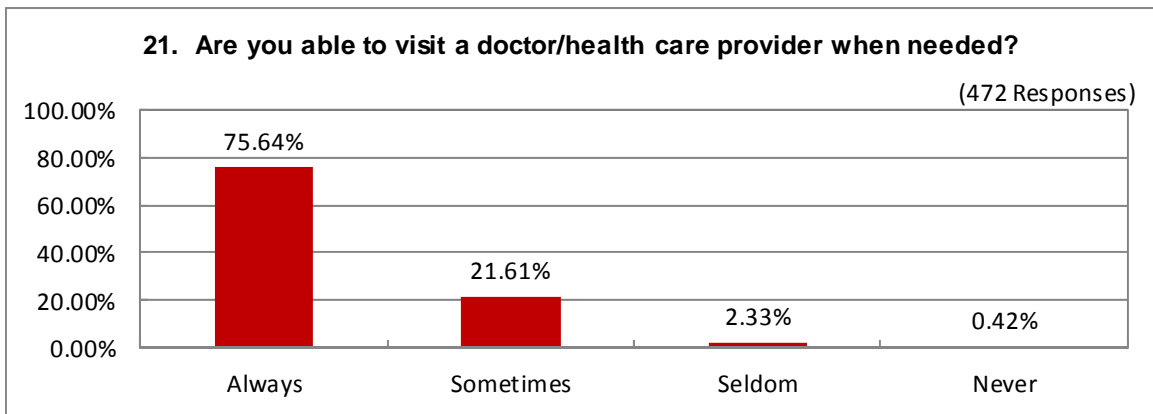
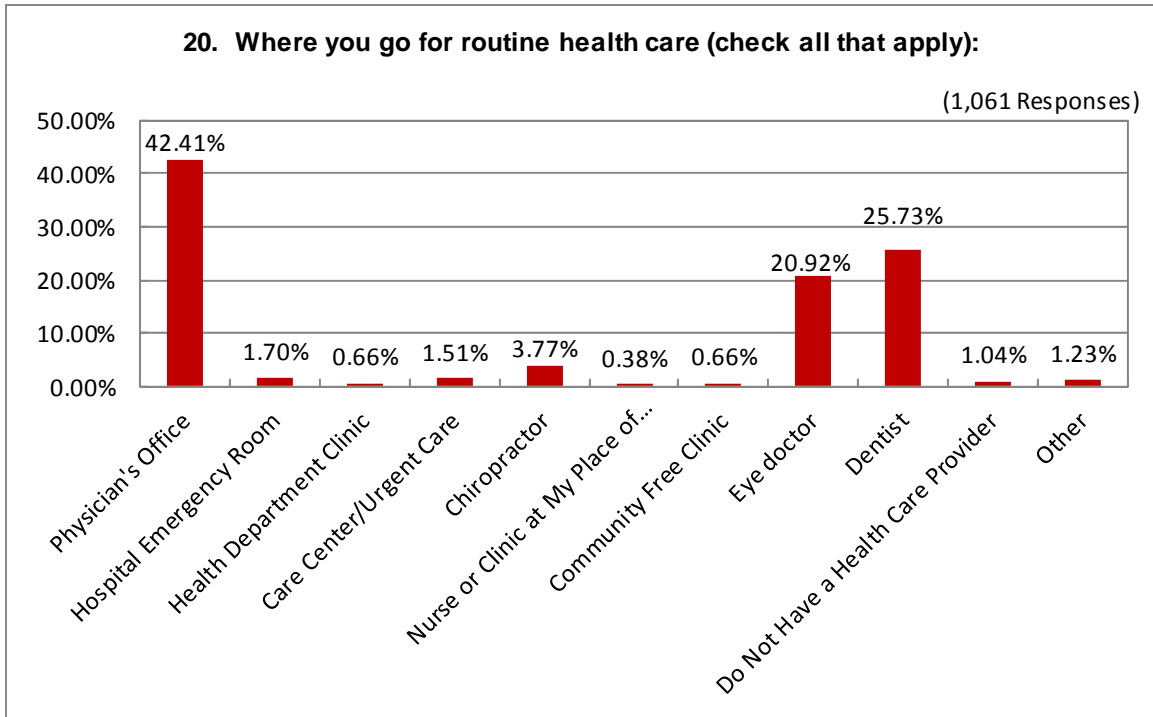


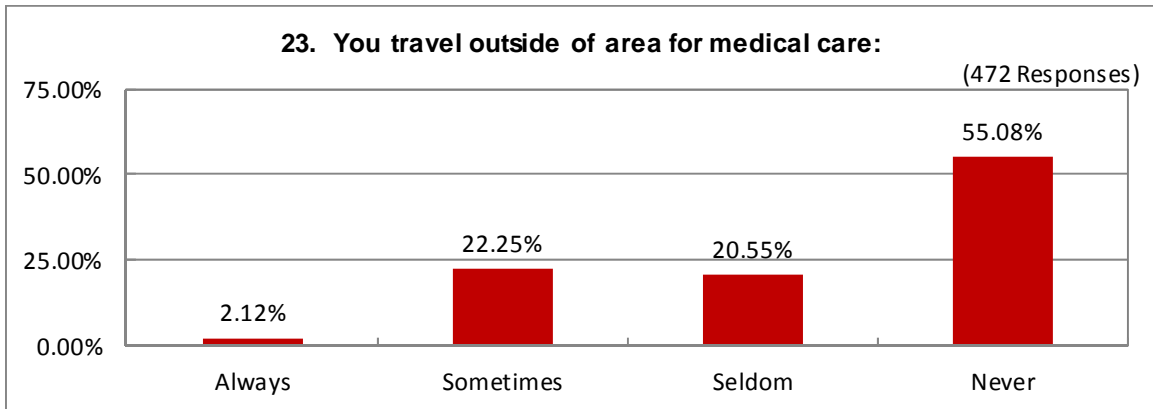
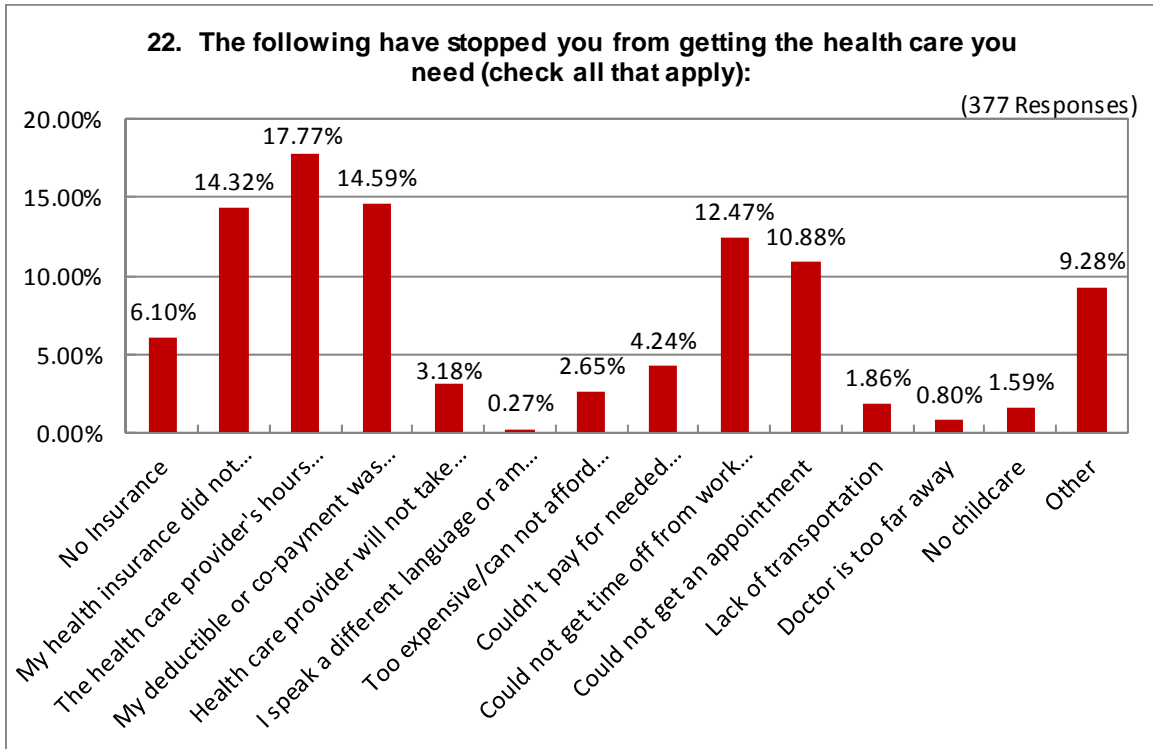


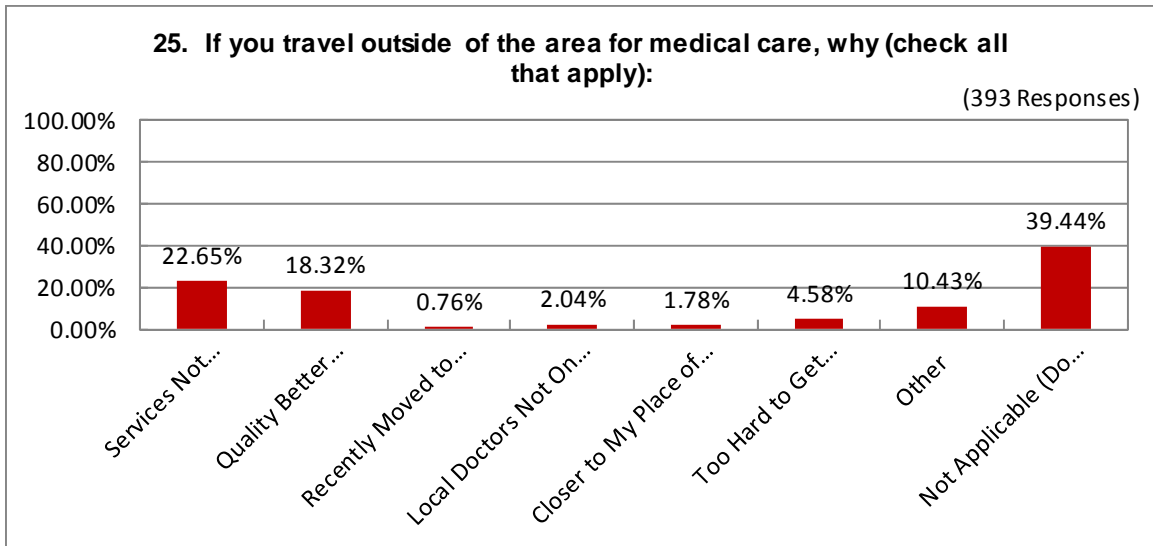
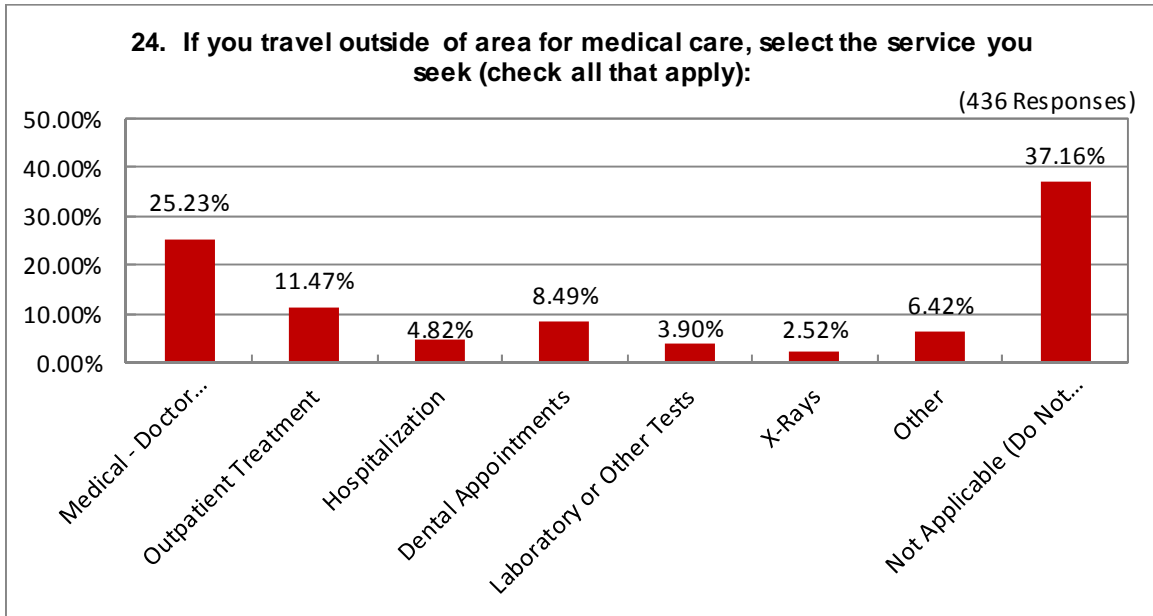


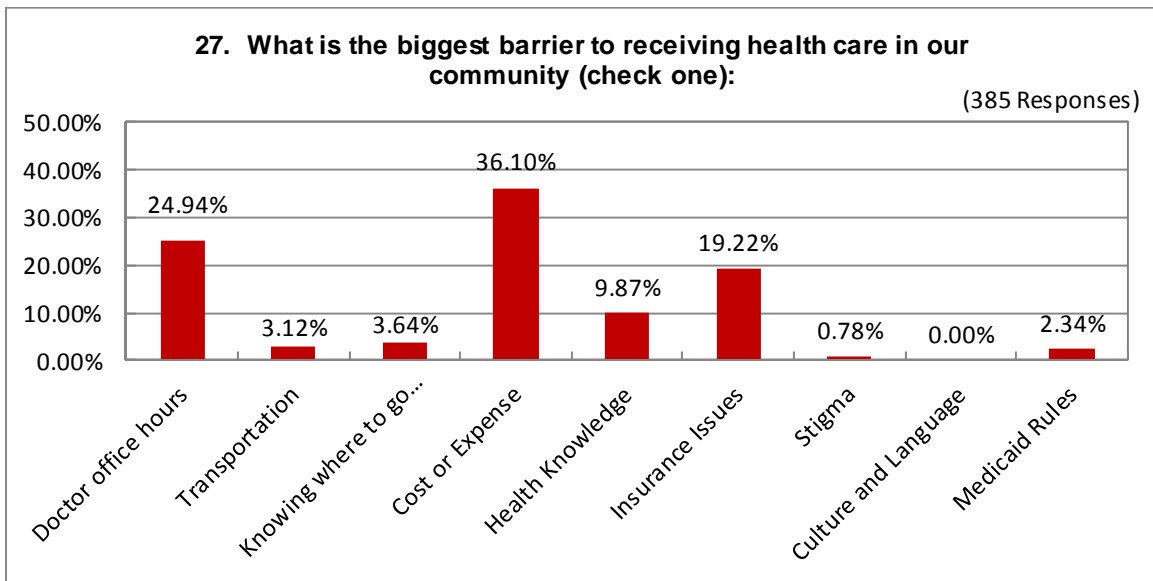
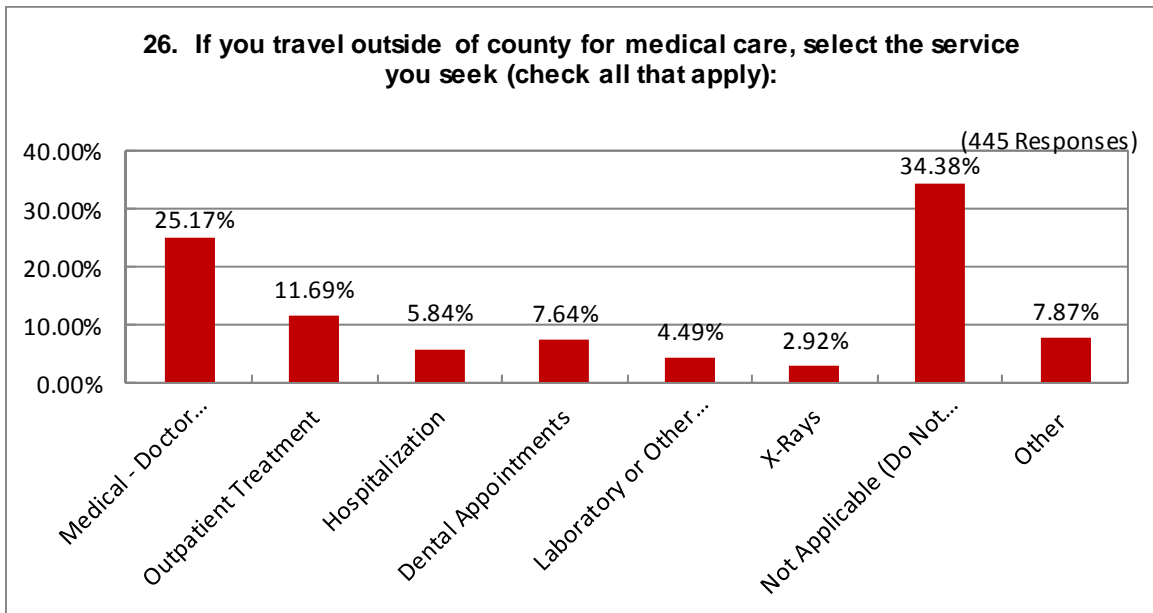


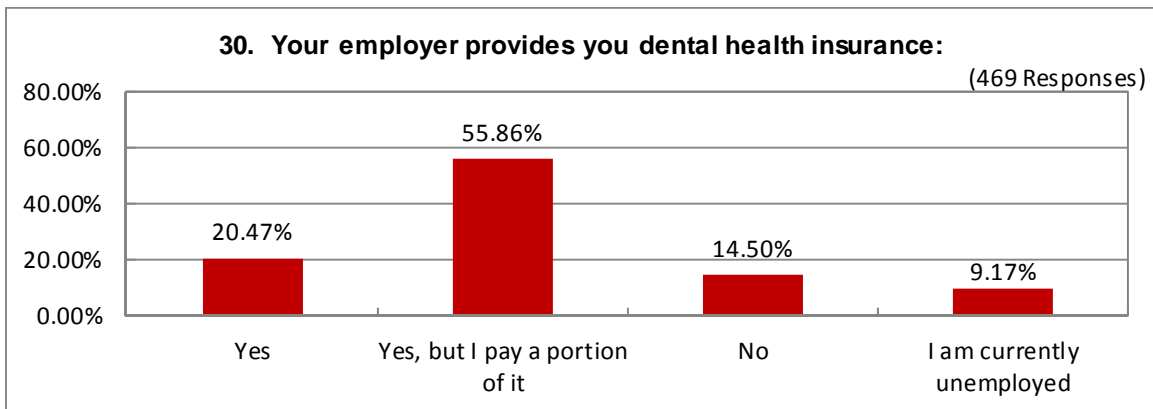
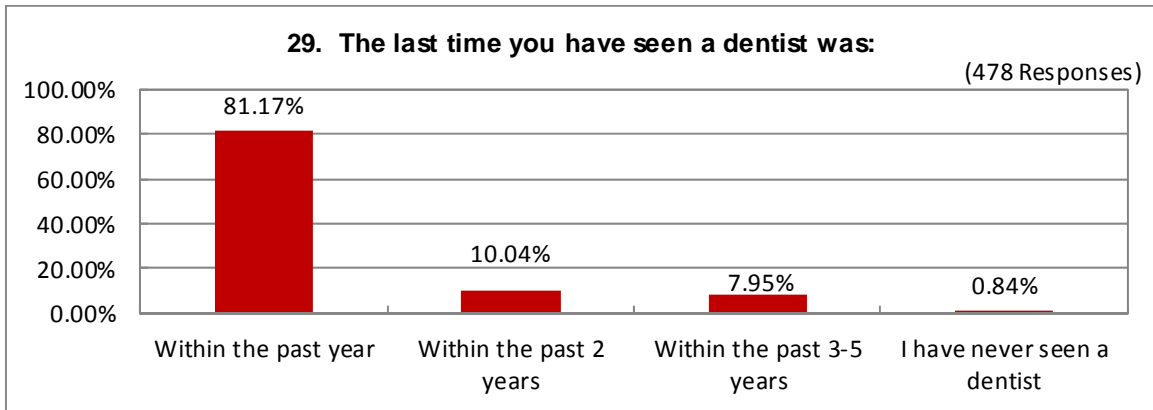
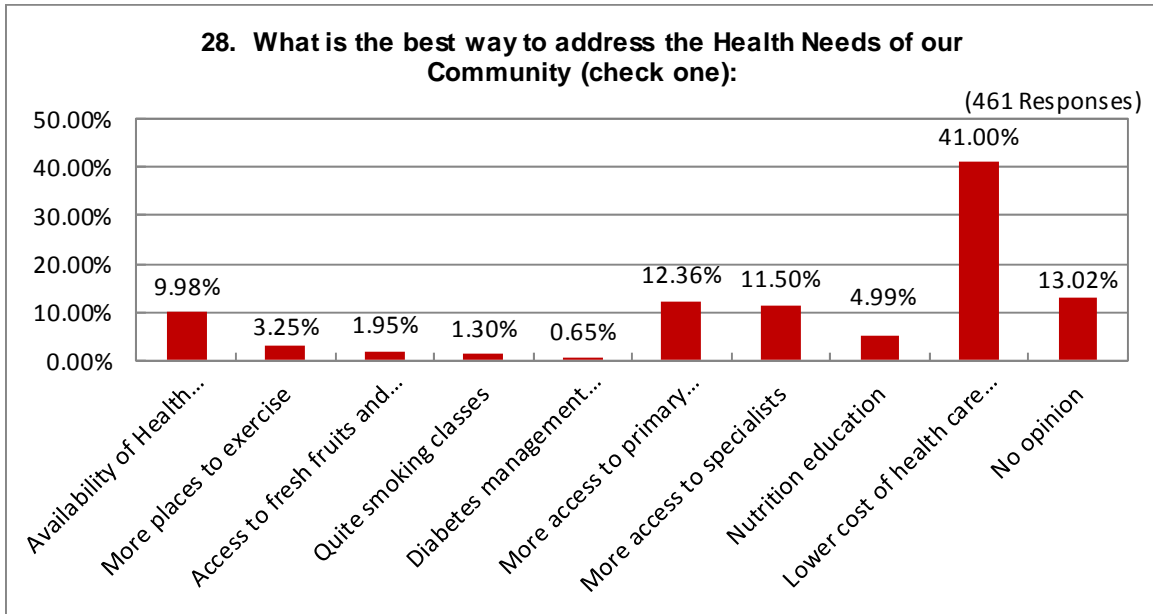




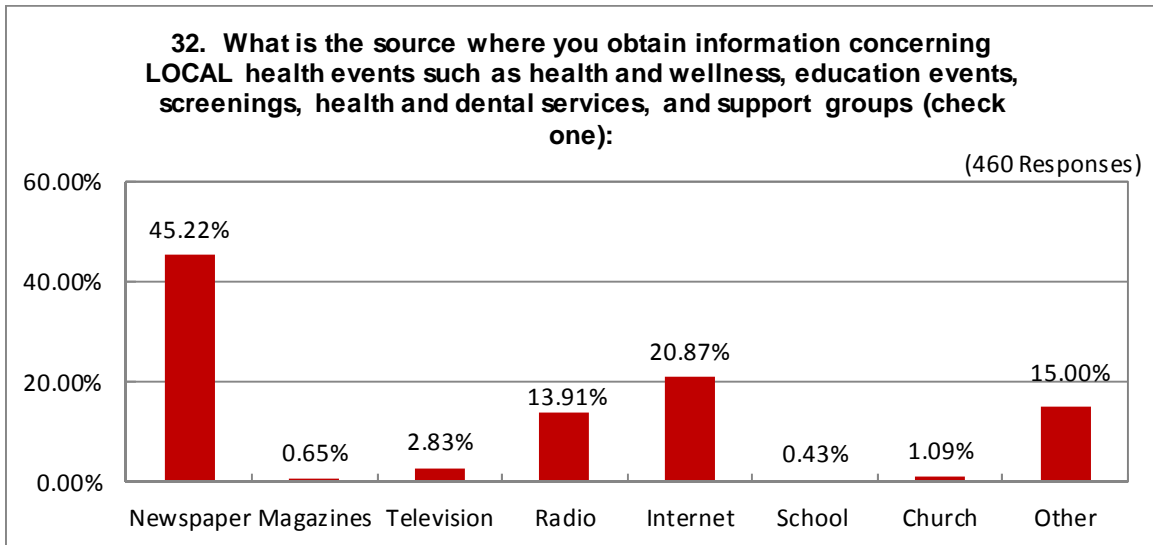
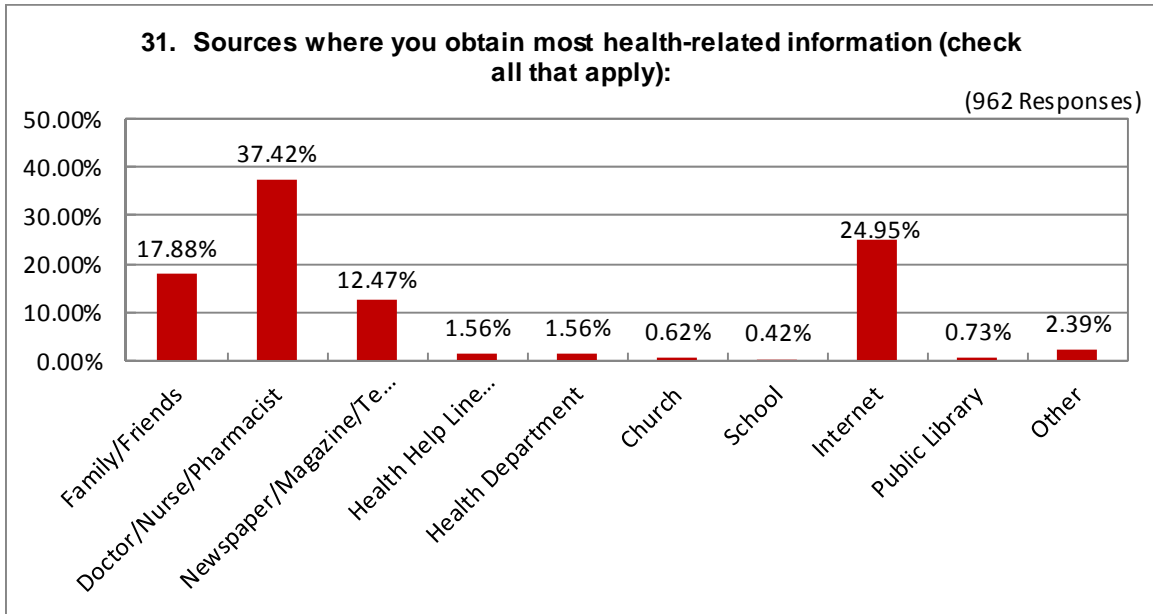


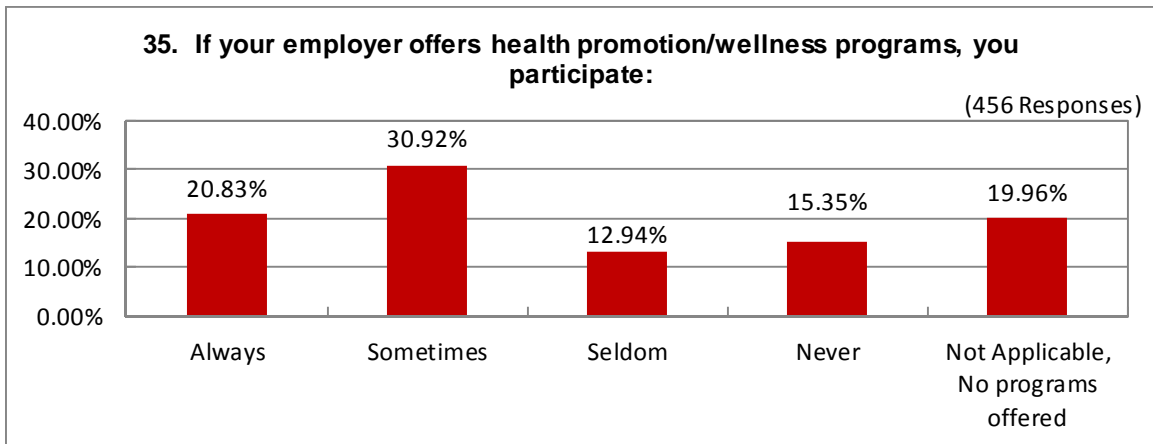
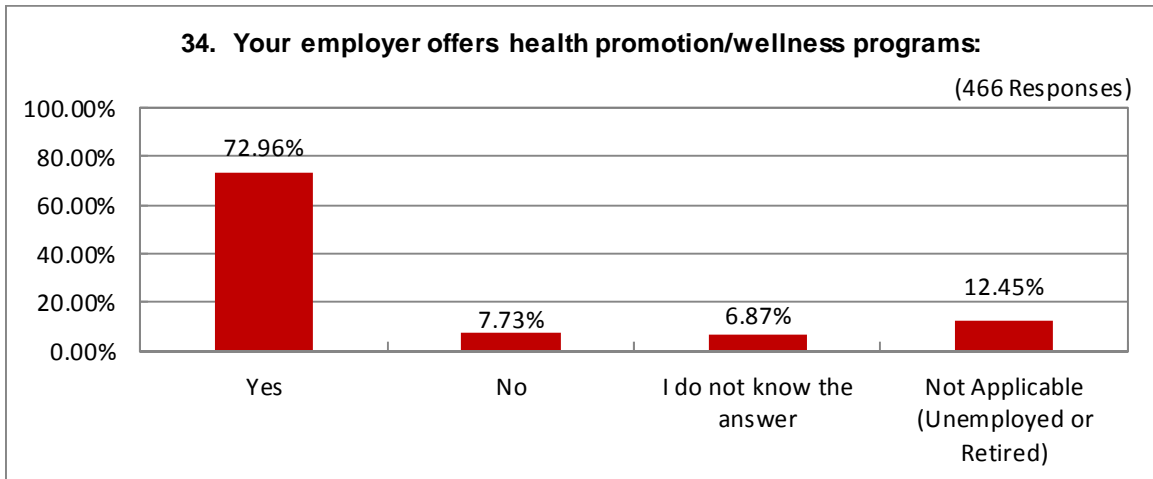
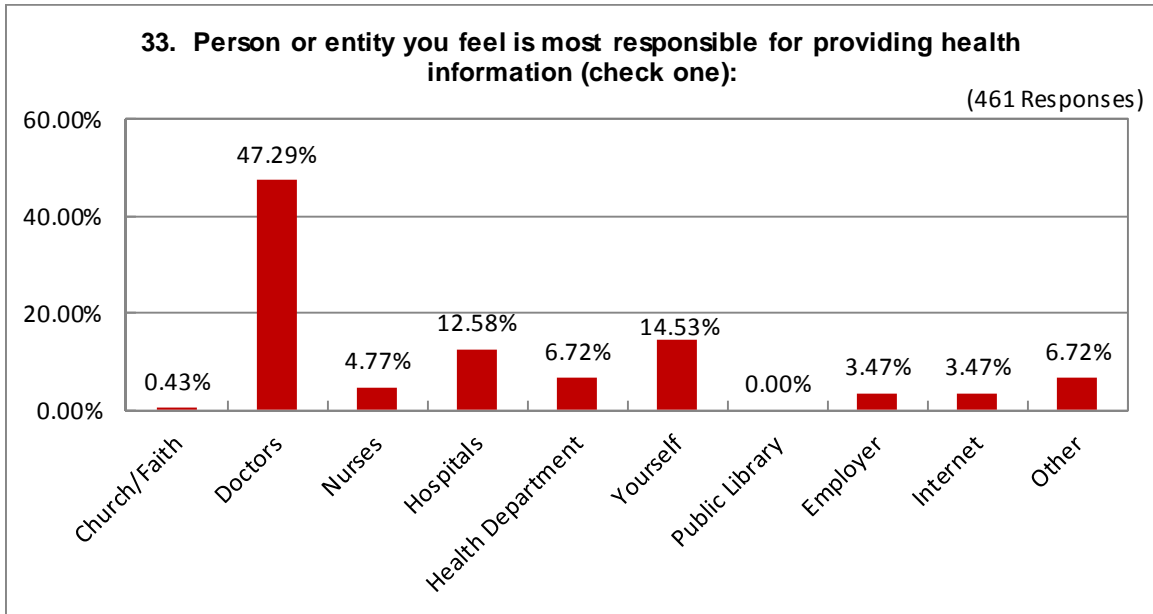


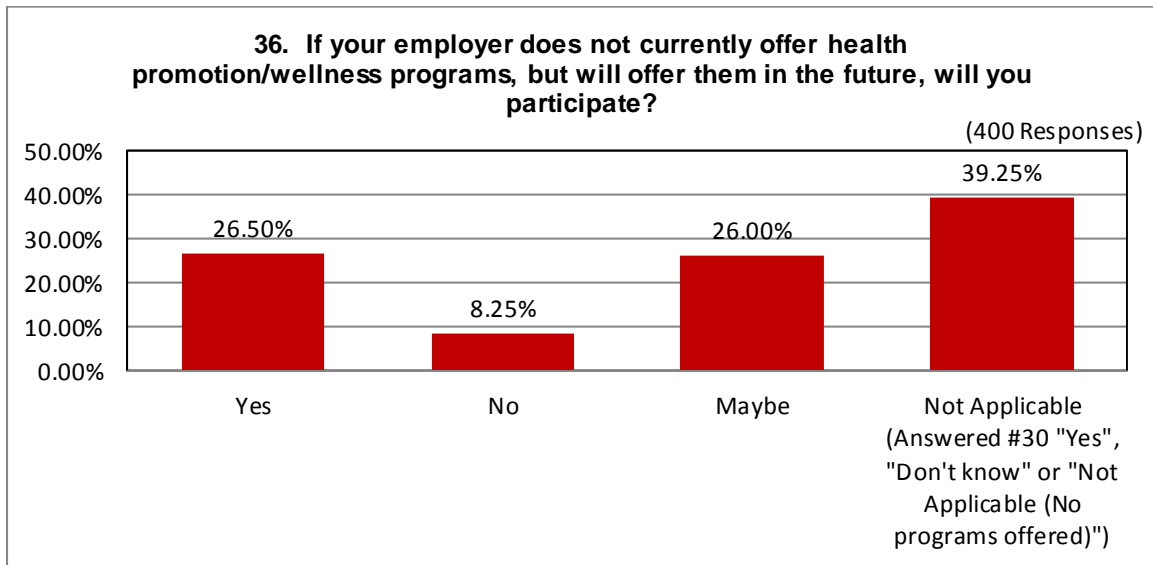


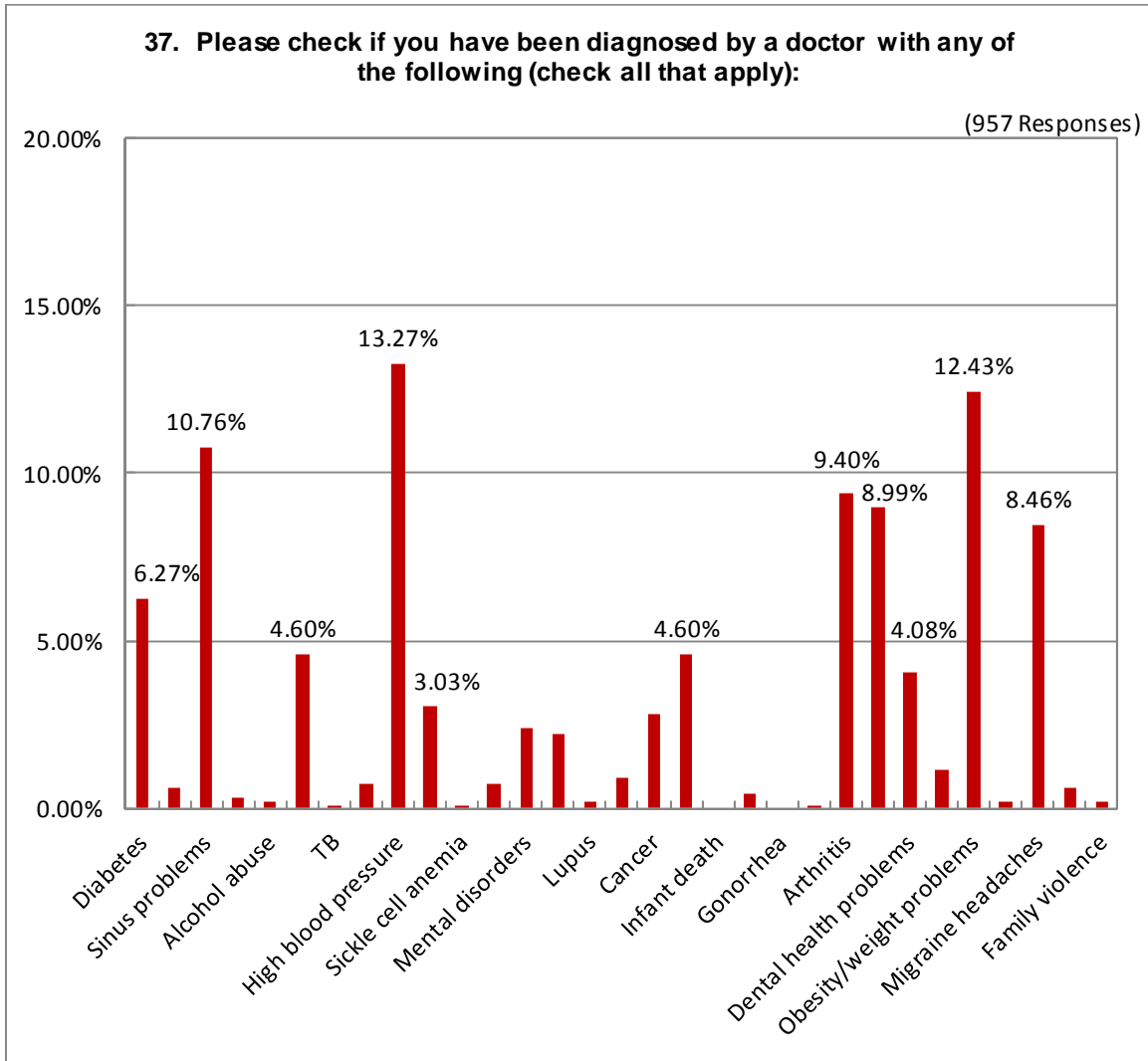




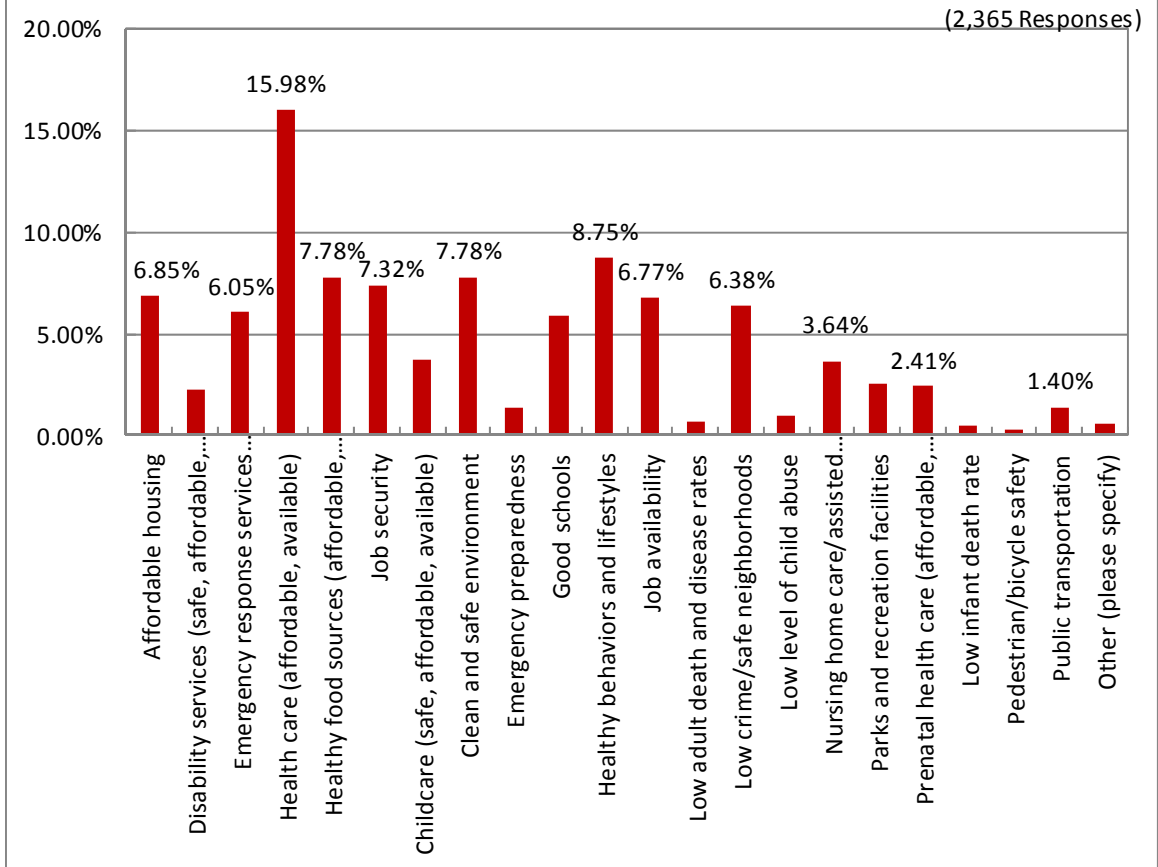






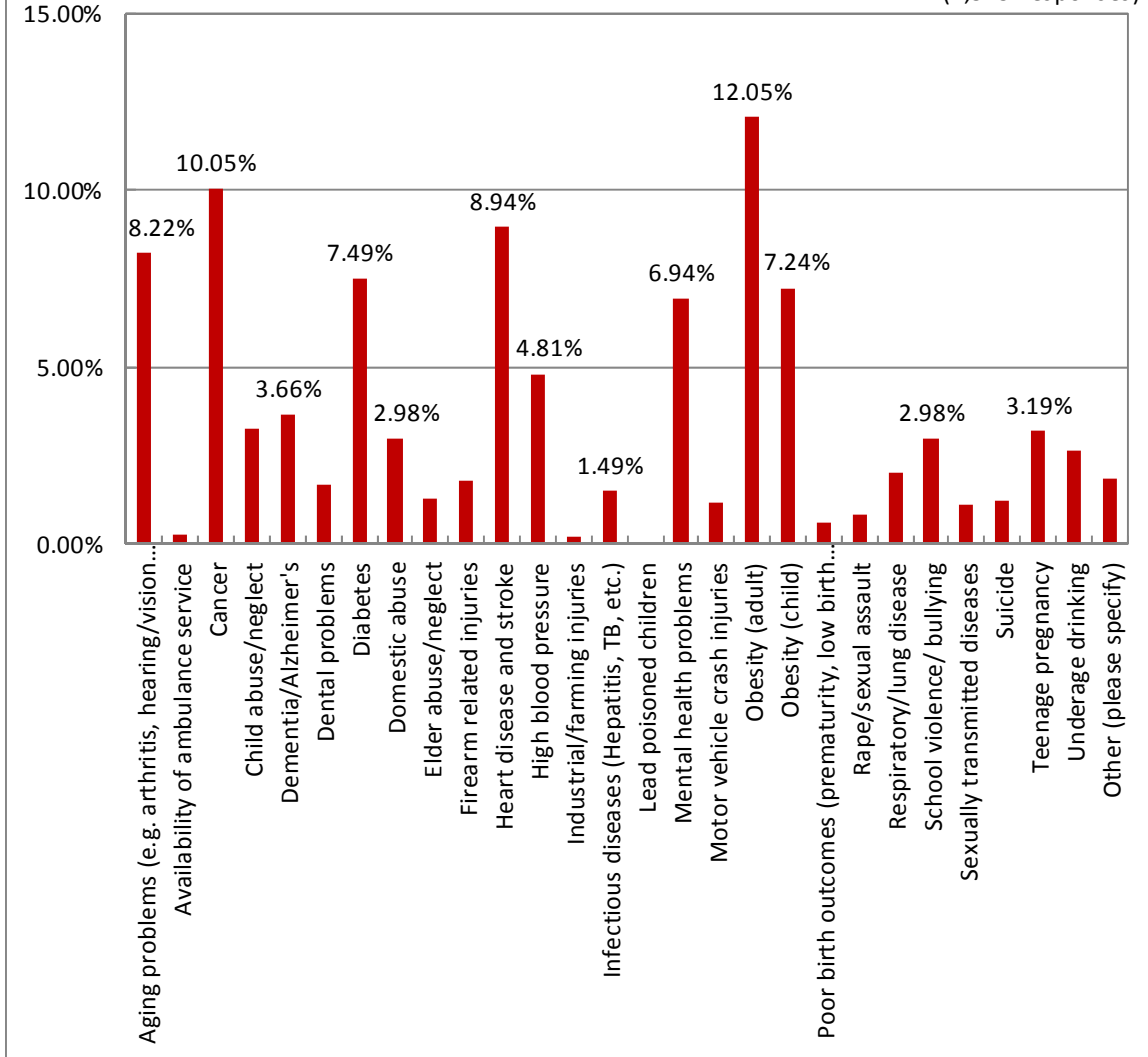


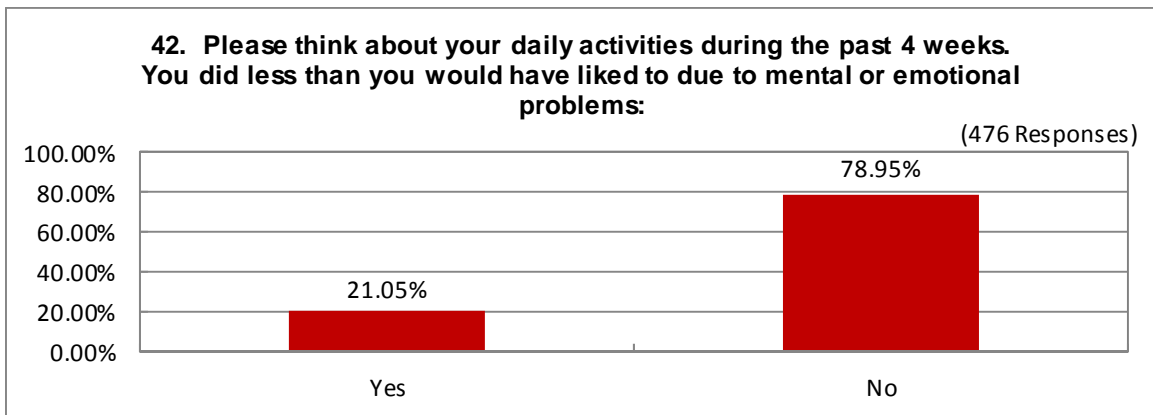
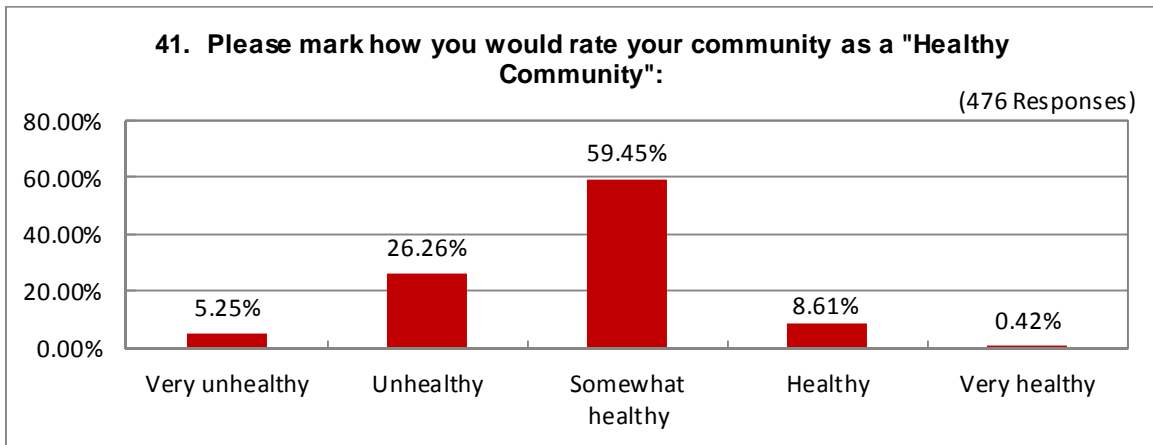
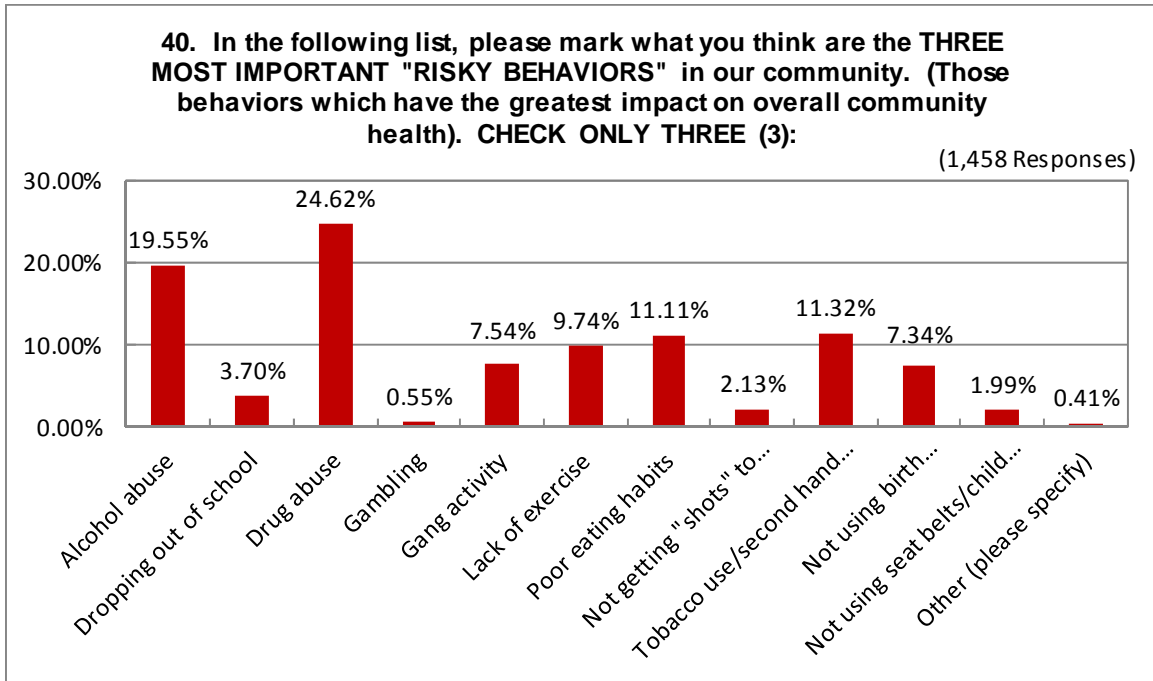
**38. In the following list, please mark what you think are the FIVE MOST IMPORTANT FACTORS FOR A "HEALTHY COMMUNITY". (Those factors that most improve the quality of life in a community). CHECK ONLY FIVE:**

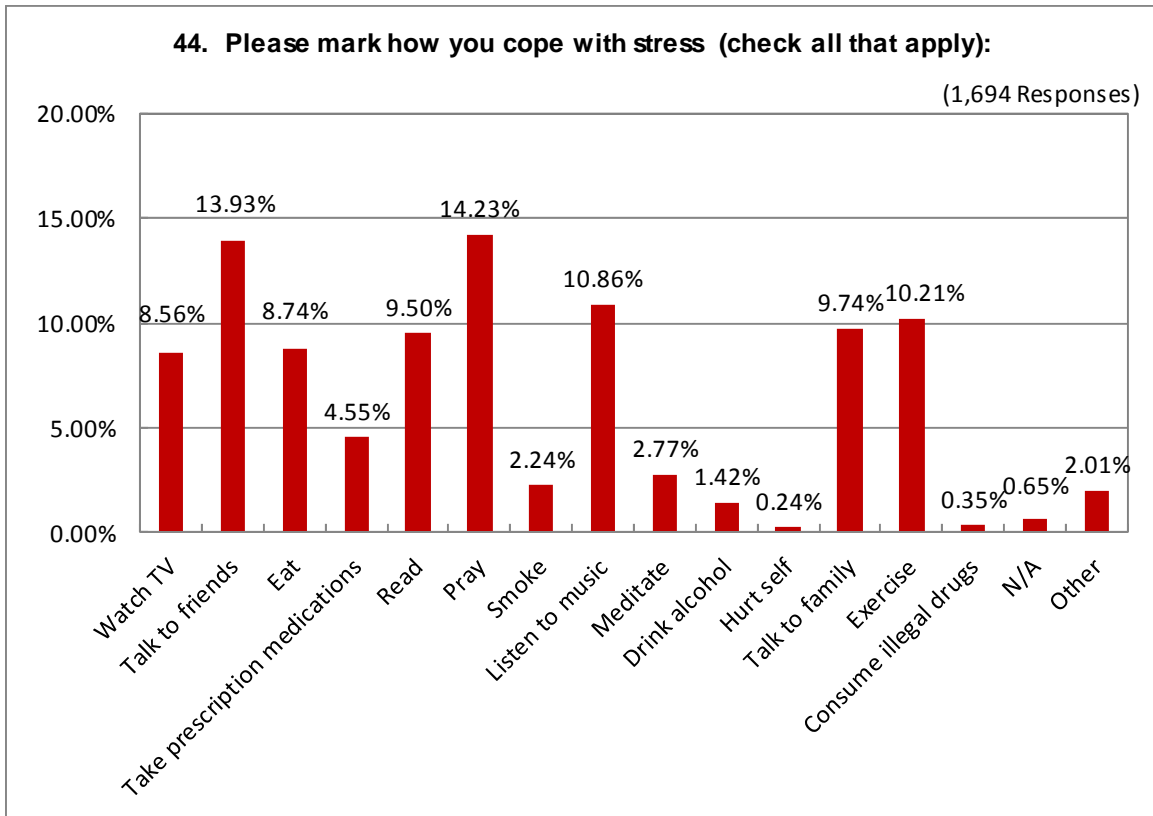
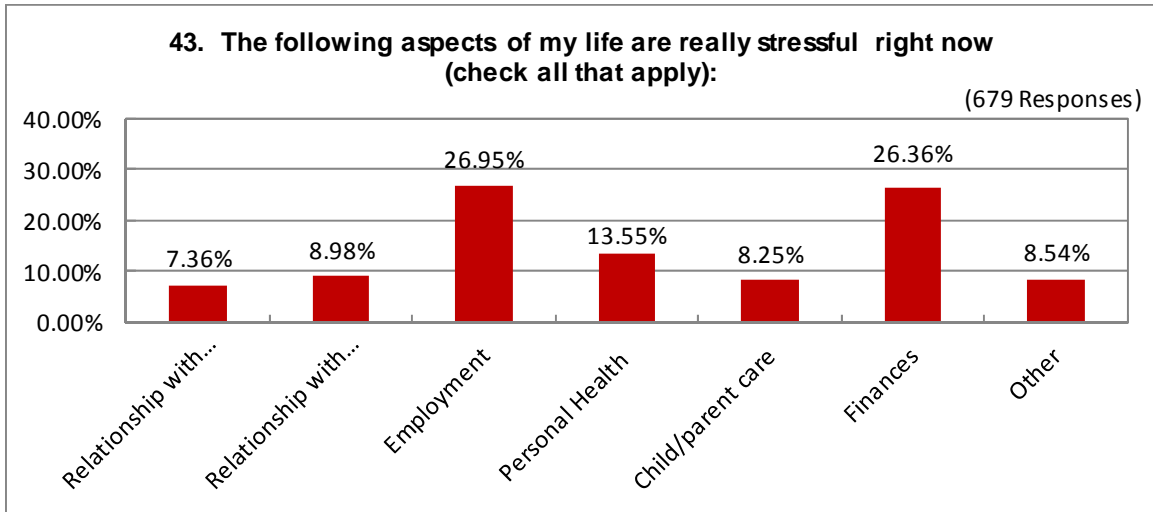


**39. In the following list, please mark what you think are the FIVE MOST IMPORTANT "HEALTH PROBLEMS" in our community. (Those problems which have the greatest impact on overall community health). CHECK ONLY FIVE:**

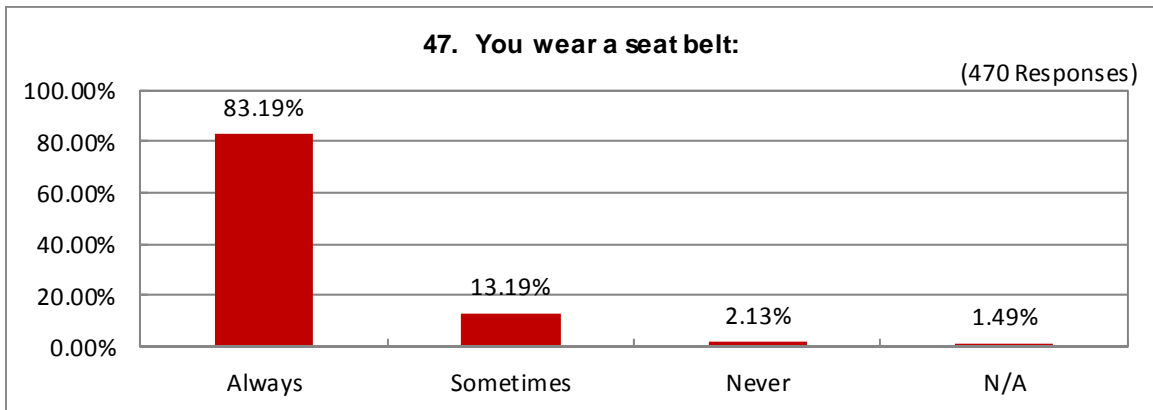
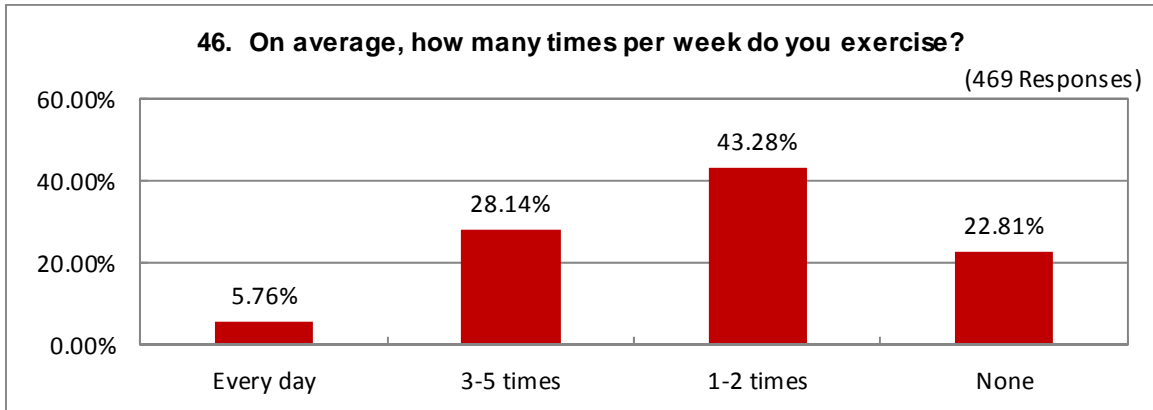
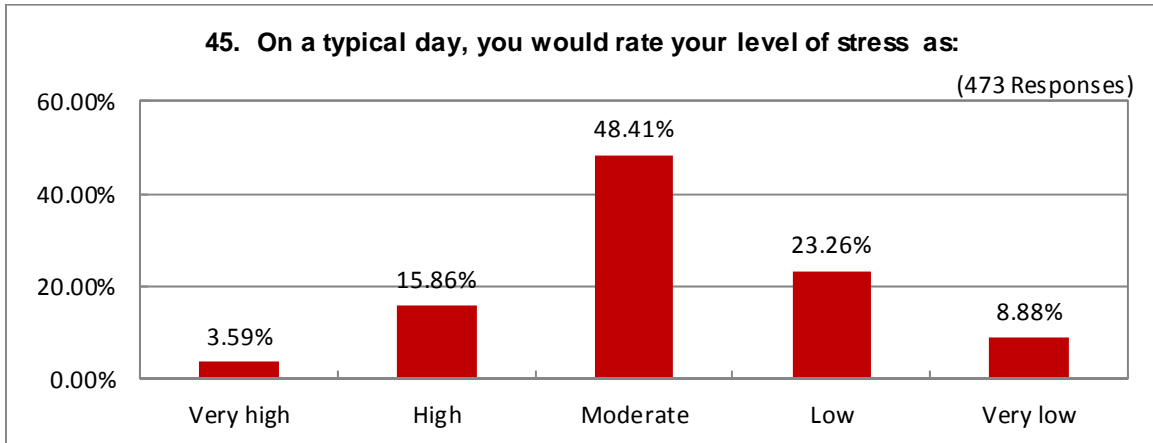
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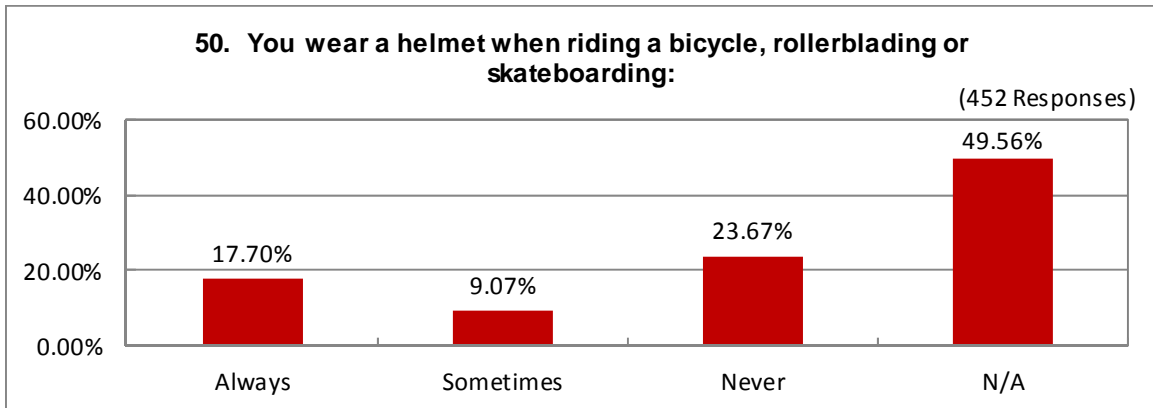
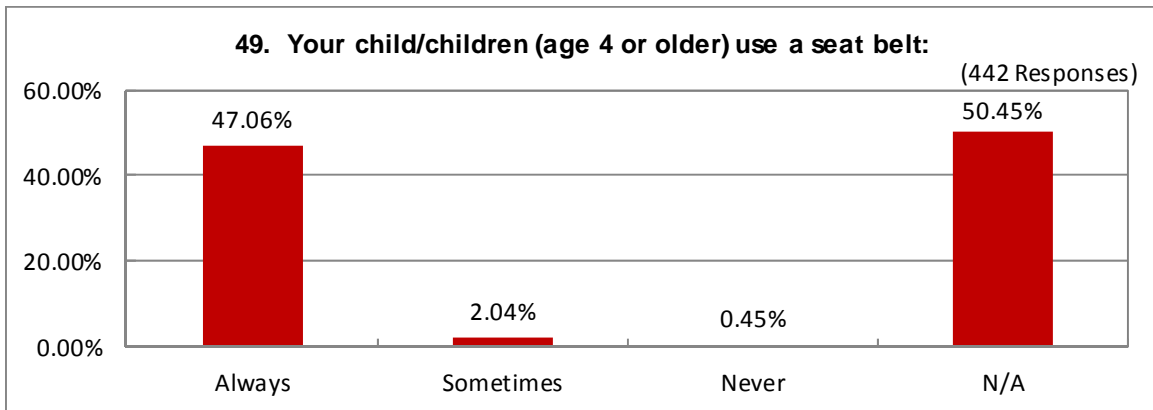
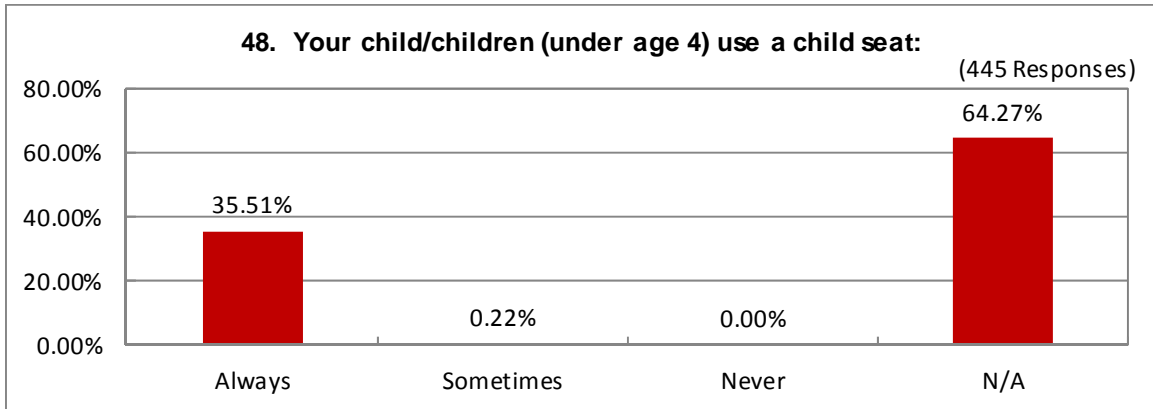


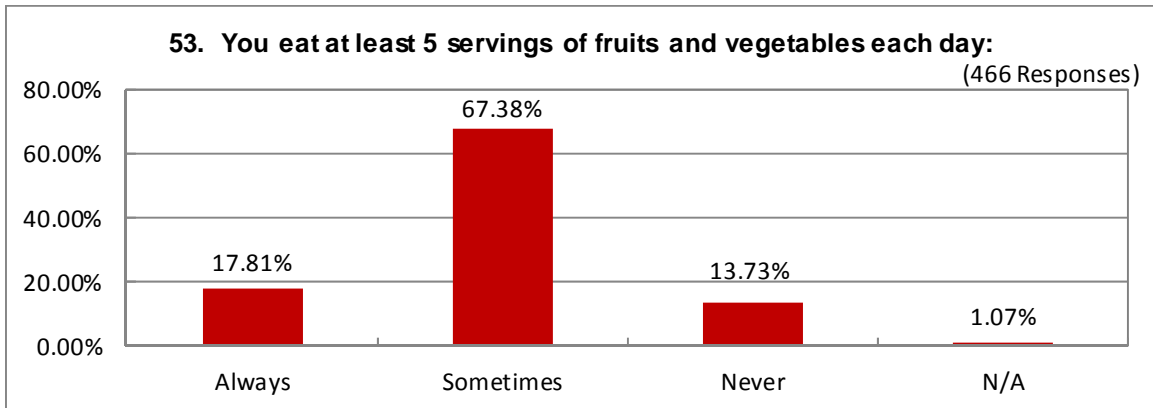
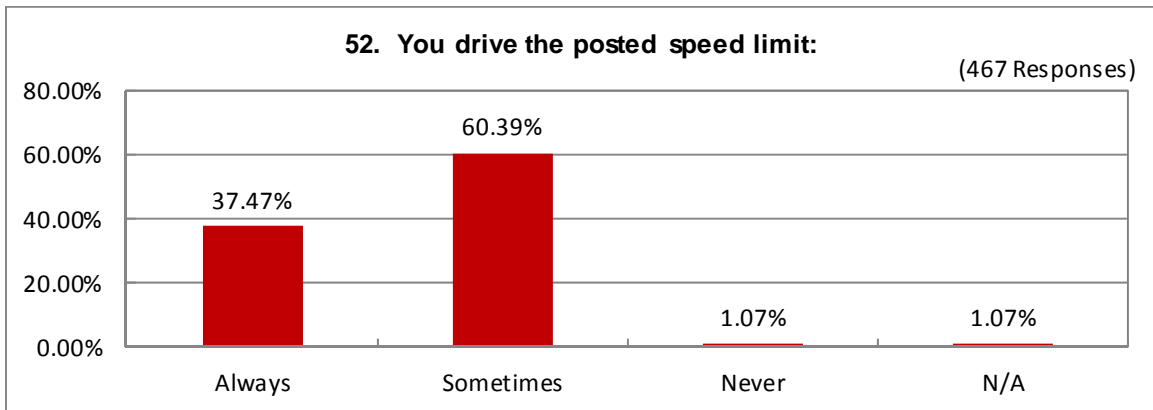
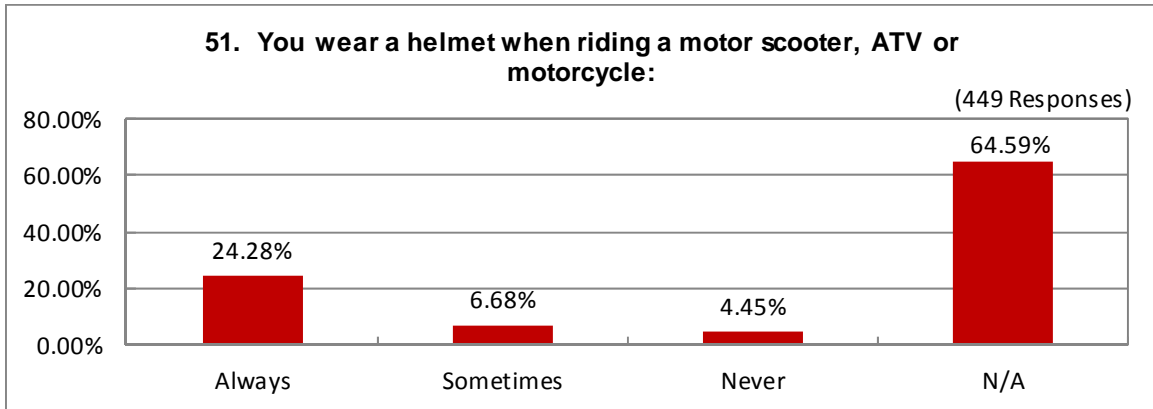


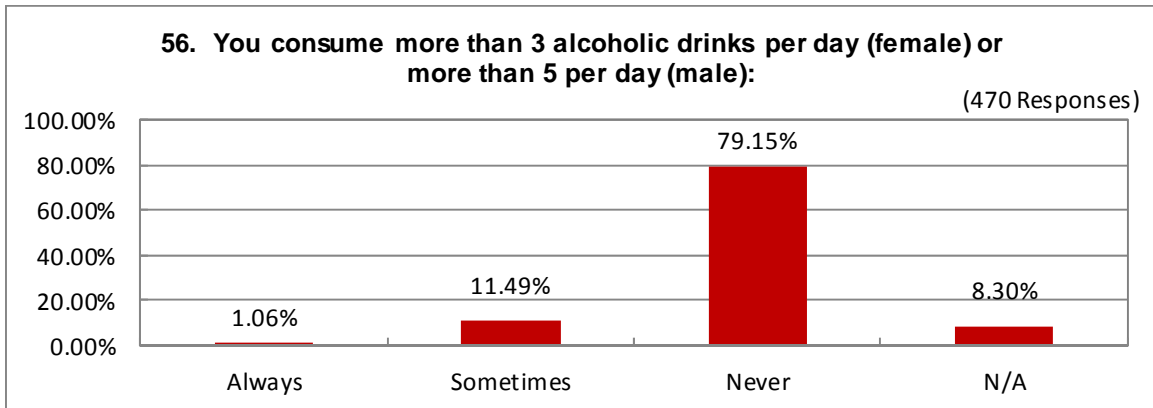
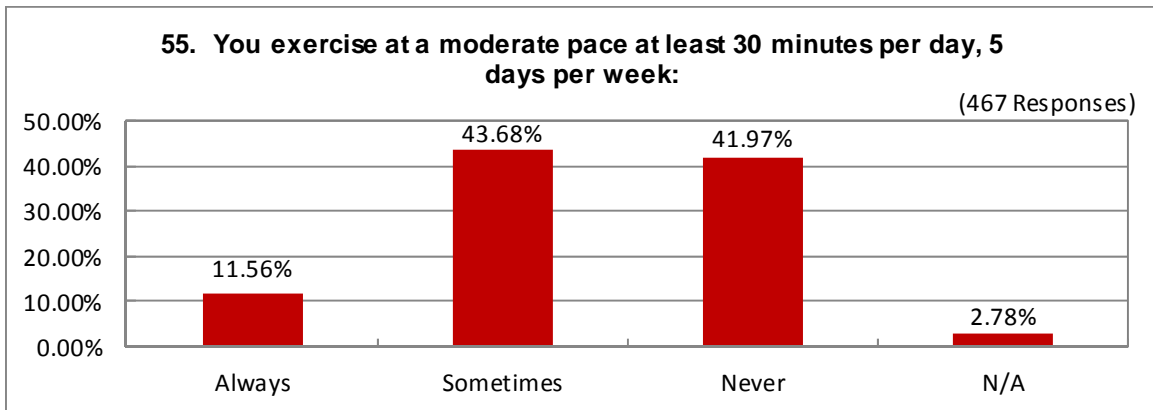
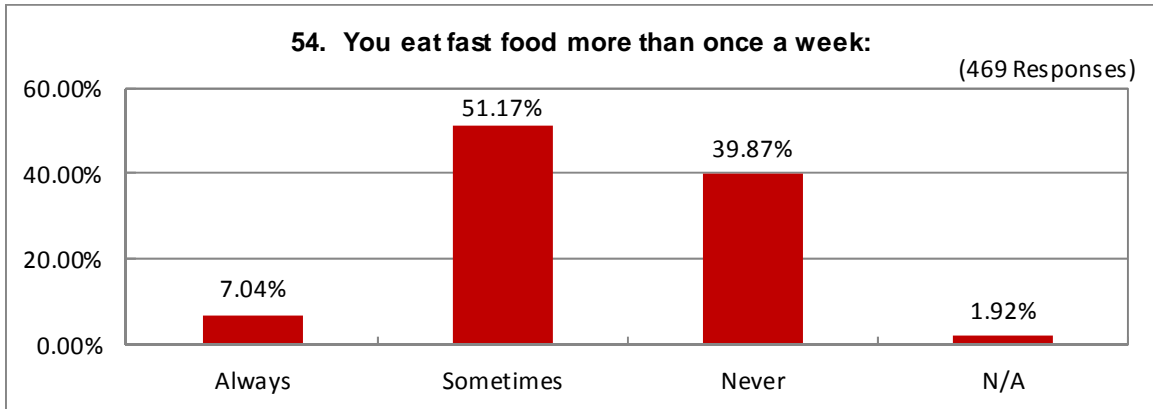


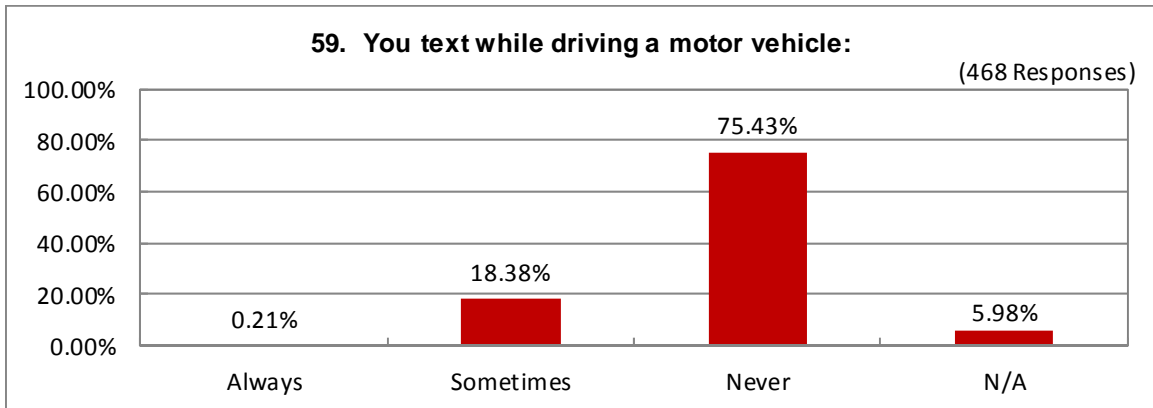
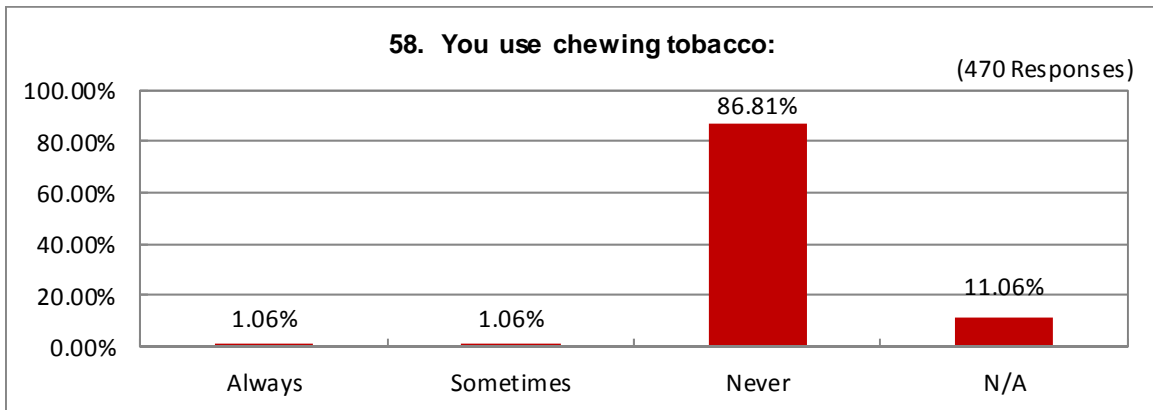
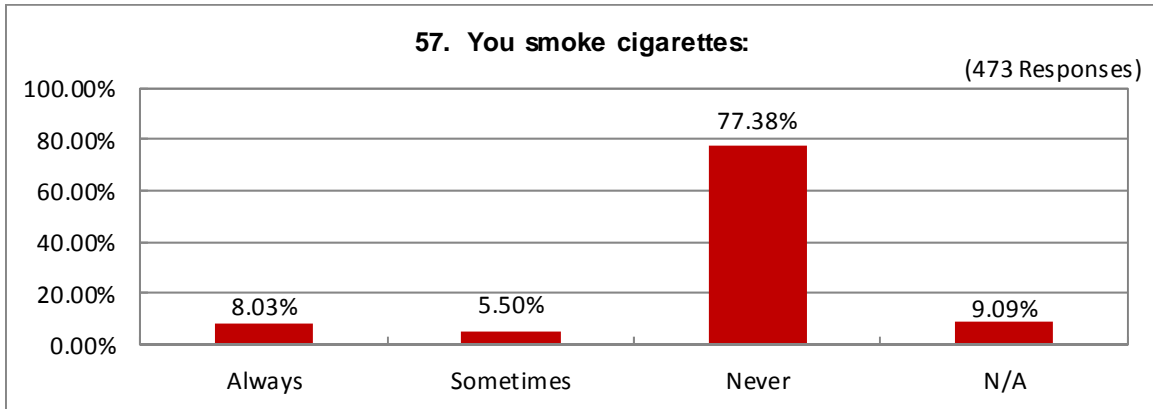


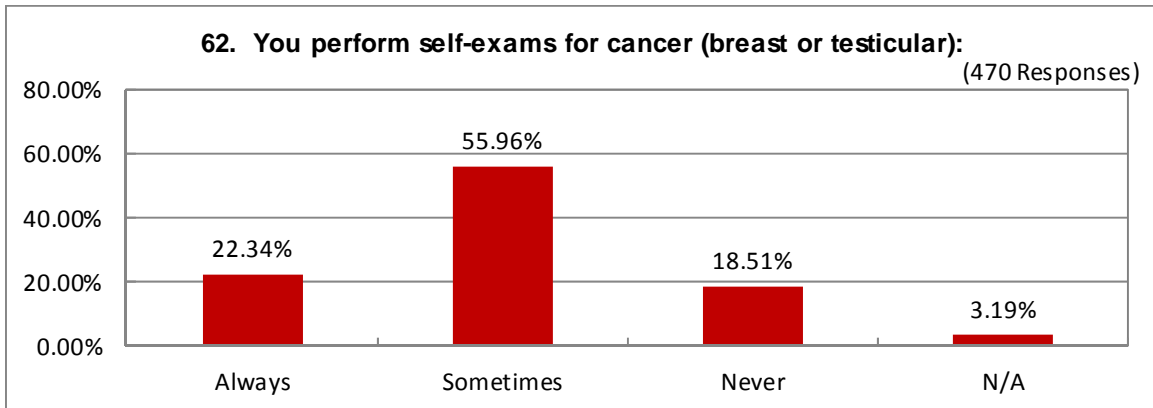
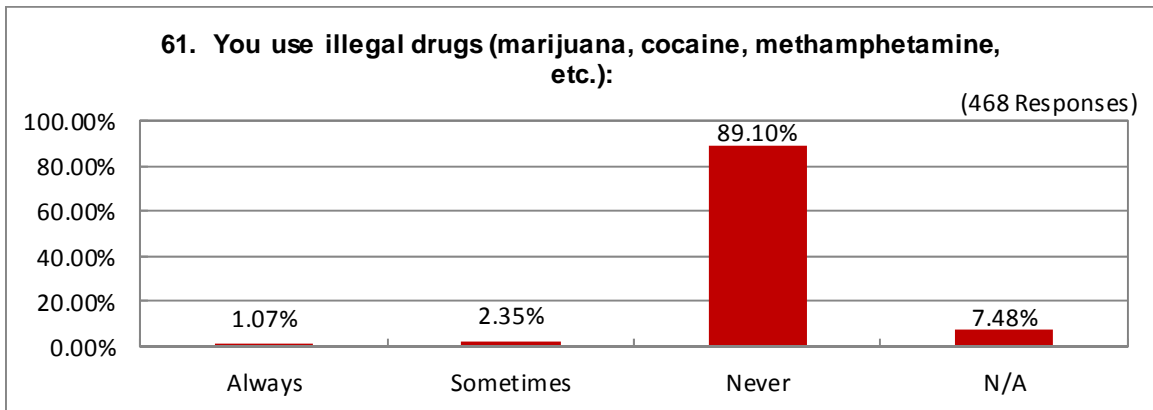
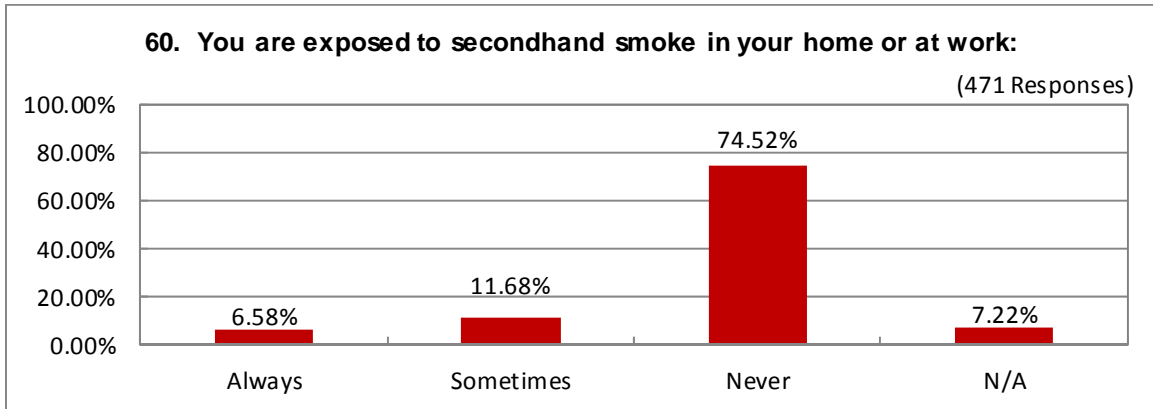


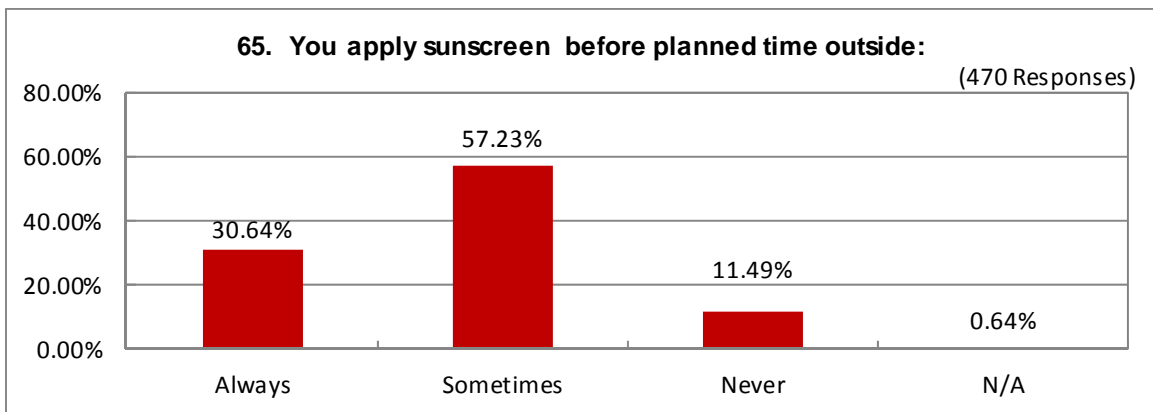
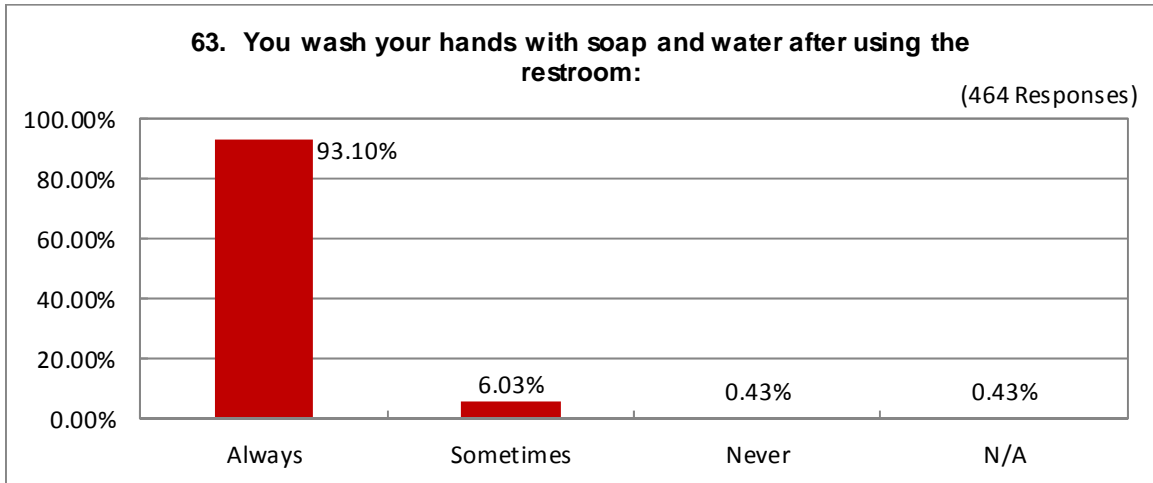


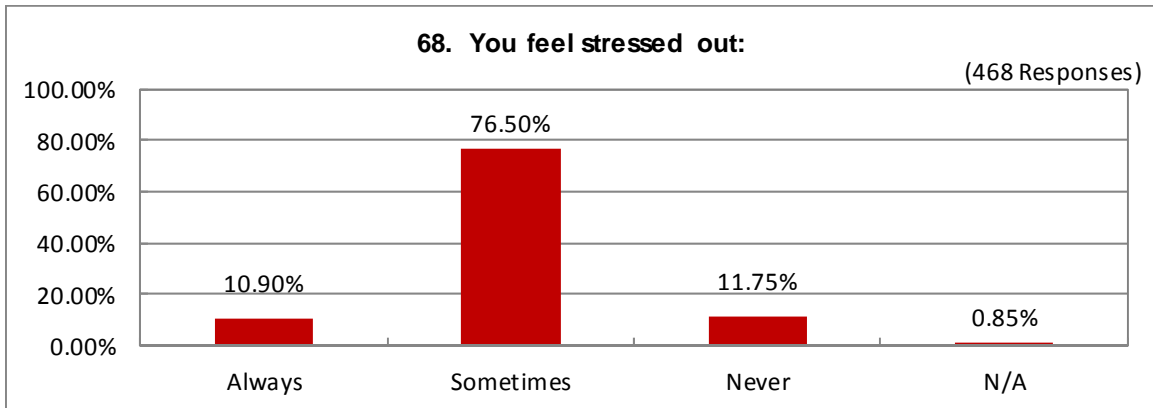
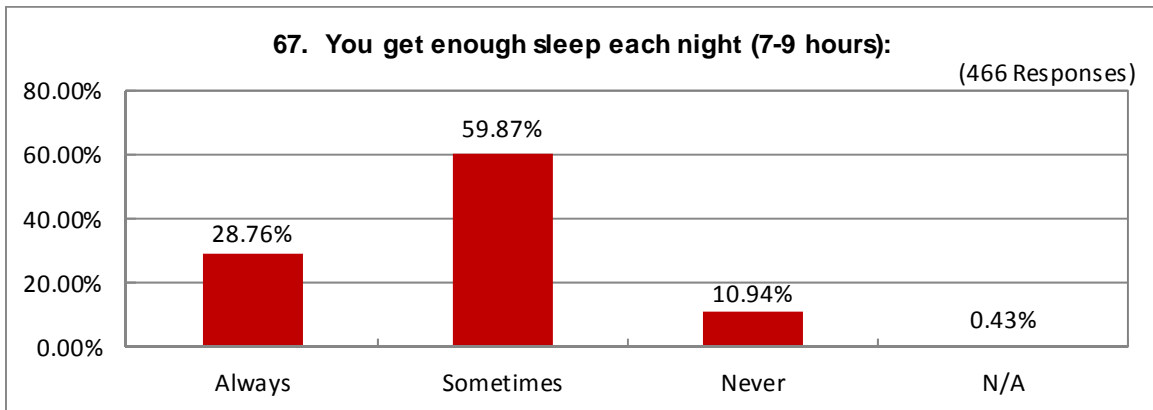
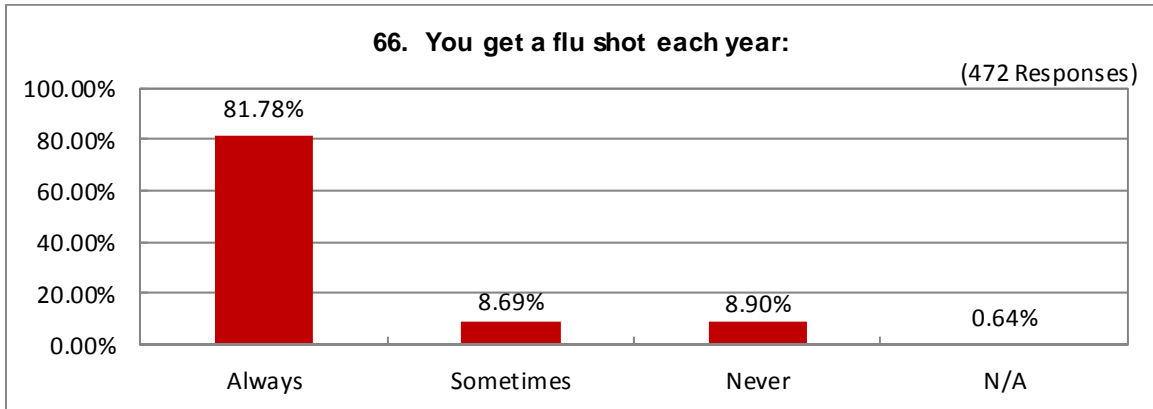




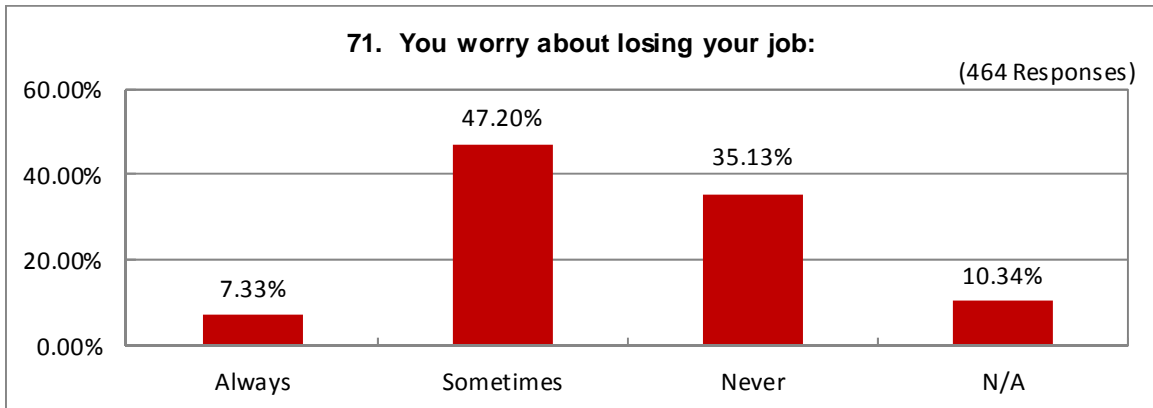
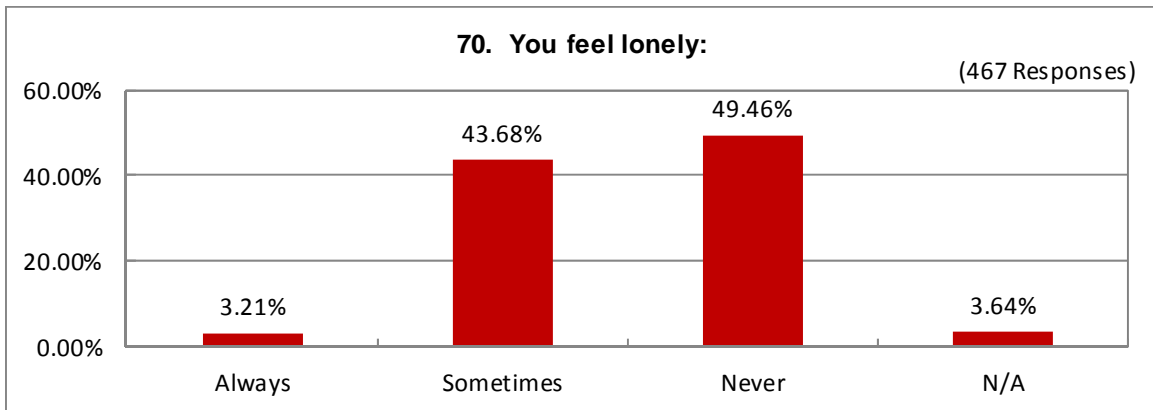
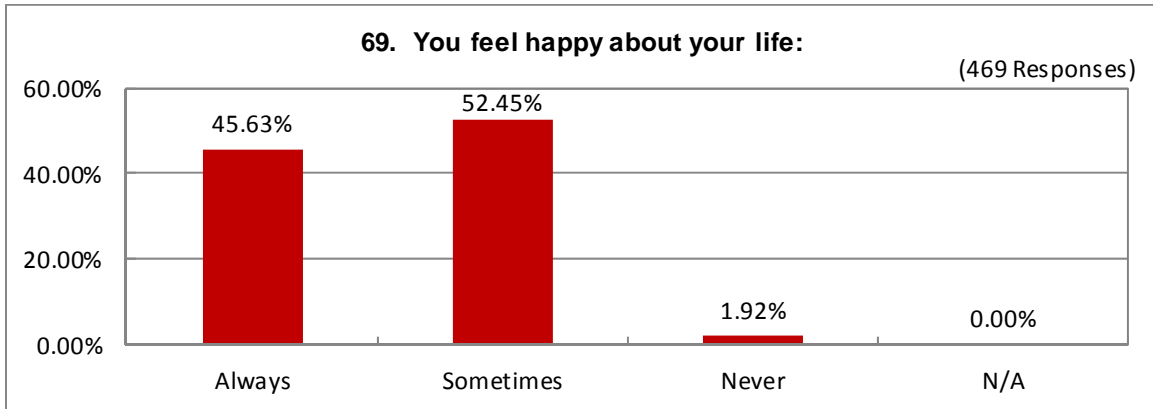


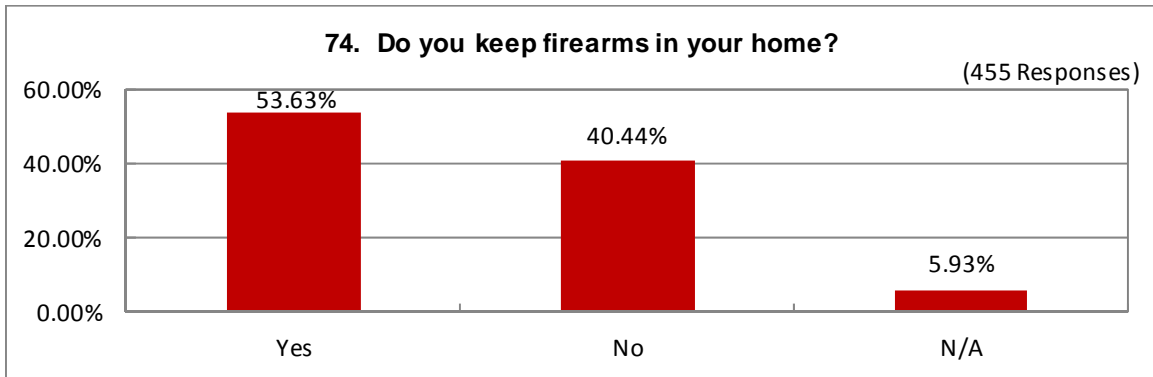
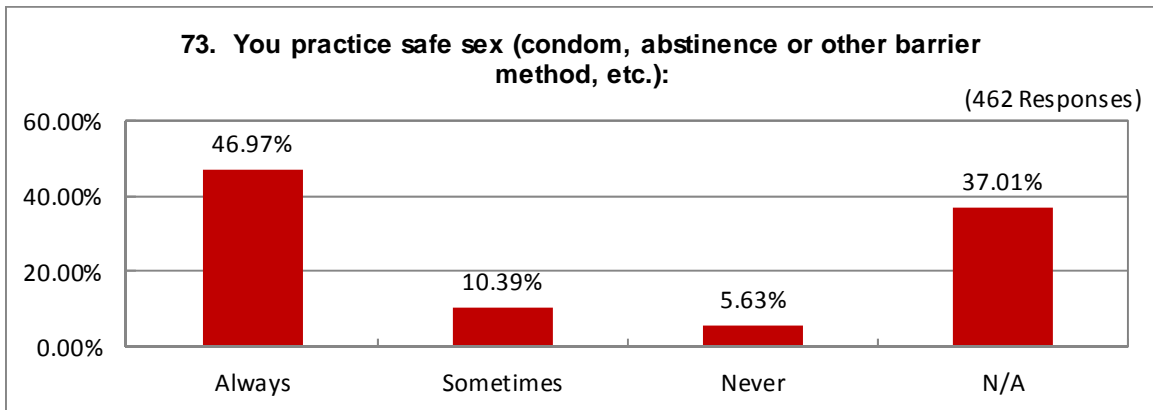
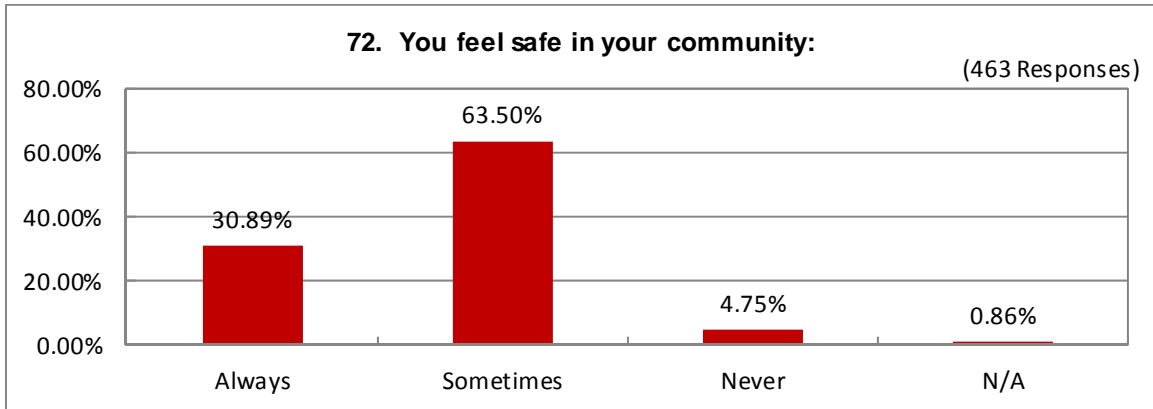


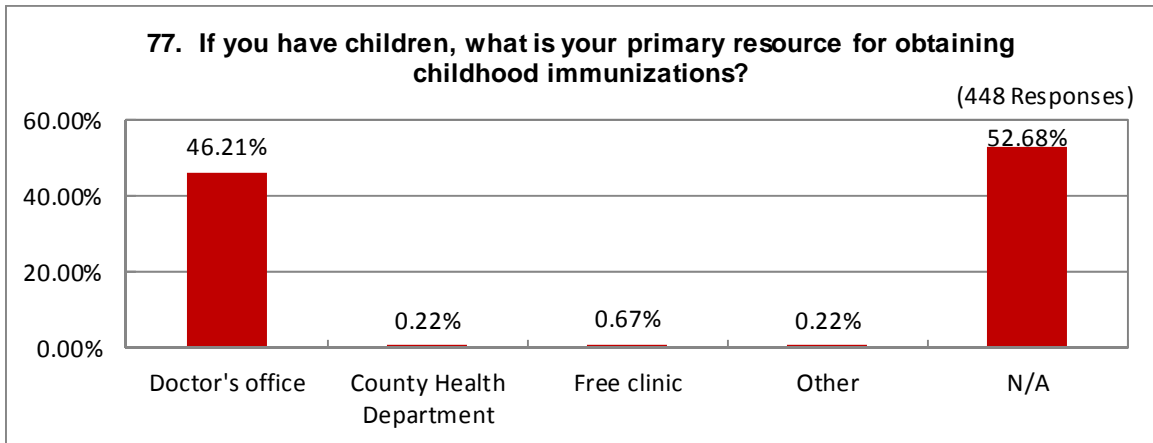
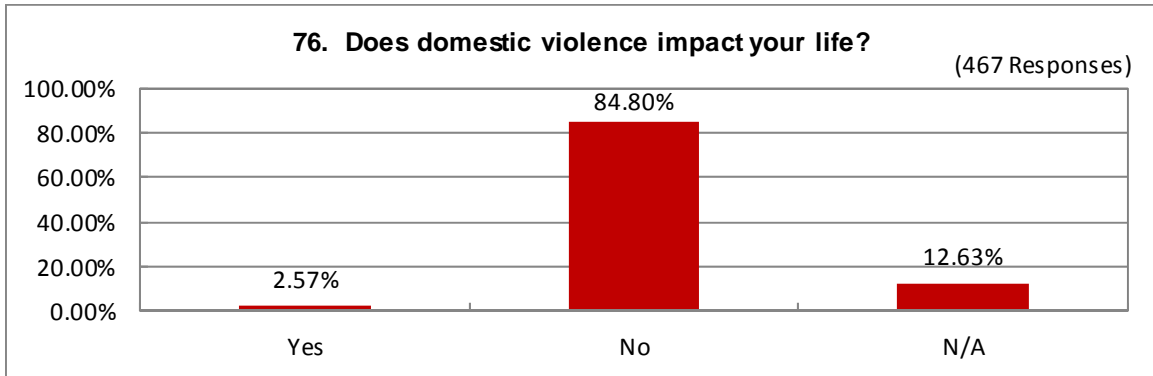
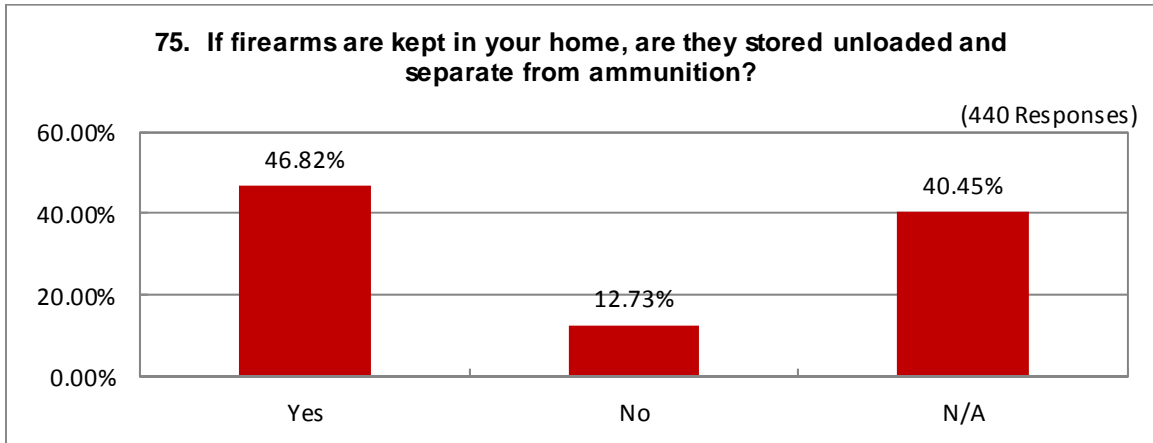














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**Muncy Valley Hospital**  
**Community Health Needs Assessment**  
**2013 – 2015 Implementation Plan**

## Overall Goal and Approach to Implementation Plan:

Muncy Valley Hospital (MVH), located in Muncy, Pennsylvania, is one of four hospitals that comprise the Susquehanna Health System (the System) based in Williamsport, Pennsylvania. MVH is a community resource that is committed to the core values of the System: To CAREfully place patients and their families first, collaboratively share ownership among all caregivers and to gratefully lead with a servant's heart. MVH seeks to provide patient centered care through its commitment to the System Mission, "To extend God's healing love by improving the health of those we serve".

MVH, along with the Williamsport Regional Medical Center (WRMC) and Divine Providence Hospital (DPH), both of which are located in Williamsport, Pennsylvania, primarily serve the Lycoming County community. Soldiers and Sailors Memorial Hospital (S+SMH), located in Wellsboro, Pennsylvania, primarily serves the Tioga County community. The System's approach to providing community benefit is to leverage the assets and expertise of all four hospitals to meet the needs and improve the health status of those who reside in the communities located in Lycoming and Tioga counties.

## Community Partners:

Muncy Valley Hospital believes in the value of working with other agencies, organizations, and institutions to maximize the value provided to the community, as well as leveraging limited resources in the most effective manner. Listed below are some of the partners that MVH intends to collaborate with to accomplish desired outcomes for the health needs selected for this implementation plan.

- Public health agencies
- Health care providers
- Local school districts
- Local colleges and universities
- State, county and municipal governments
- Social service organizations
- Faith based organizations

## Results of Needs Assessment:

The 2013 Community Health Needs Assessment identified a number of unmet or partially met health needs in the Community. Analysis of the community needs assessment data provided a

means to evaluate and prioritize areas of greatest need. Health needs were ranked based on five factors:

- The ability of Muncy Valley Hospital to evaluate and measure outcomes.
- How many people are affected by the issue?
- What are the consequences of not addressing the problem?
- Prevalence of common themes.
- The ability of Muncy Valley Hospital to impact change.

The graphical representation on the following page aided in identifying the health priorities for Muncy Valley Hospital. By addressing the needs in the upper right quadrant, community health will likely improve as these needs have the greatest impact on overall health and the hospital is more likely to have a positive impact on these needs. In this representation, the largest spheres represent the most significant health needs of the community.

## Focus Areas:

As a result of the analysis, **Cancers, Shortage of Physicians/Access to Specialists, and Mental Health** were identified as priority areas on which we will focus.

## Health Needs Not Addressed:

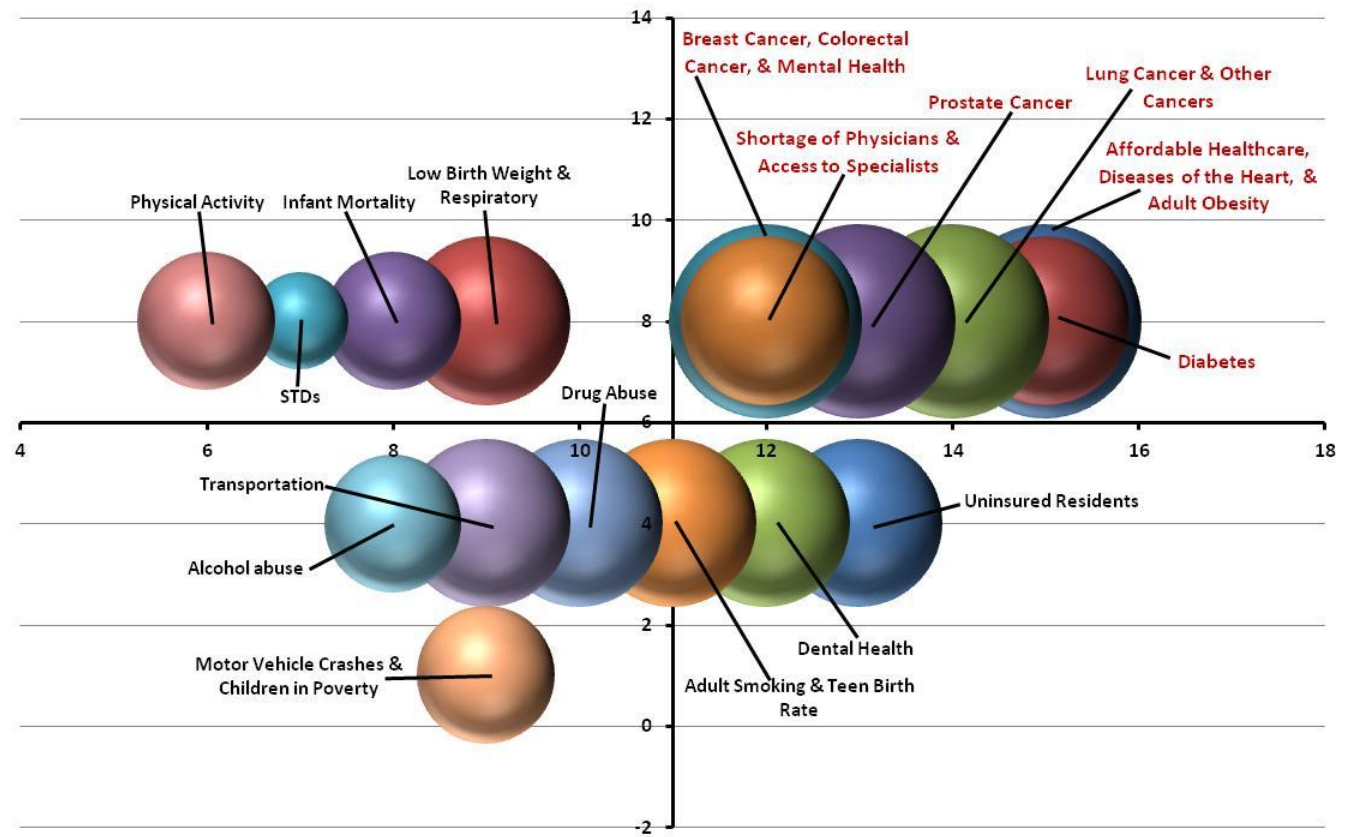
There were other areas of need located in the upper right quadrant of the sphere chart that are clearly important to improving the health of the community. However, they are deemed to have less immediate impact and will be considered for selection in a future plan, or if the opportunity arises, integrated into this plan as a sub-objective activity.

Most notable of the health needs not addressed at this time are diseases of the heart, adult obesity, and diabetes. Muncy Valley Hospital, along with its affiliated partners, does not have the resources and specialty staff that would be required to adequately address all identified health needs. In addition, other agencies and healthcare providers are already working to effect change in many of these areas by providing related community resources and services.

Despite not being formally selected as an area of need to be addressed, it should be noted that recent resource allocation decisions of affiliated partners have bolstered the physician complement, technology and facilities related to diseases of the heart. We will continue to explore potential partnerships and strategies that will assist in providing essential services to all of our patients. In addition, we will make every effort to assist our community partners in maintaining and/or expanding the services that they currently provide.



**Exhibit 23**  
**Susquehanna Health - Muncy Valley Hospital**  
**Prioritization of Identified Health Needs**



## **PRIORITY 1: Cancers**

### **Objective 1: Increase access to cancer services in Tioga County.**

- Strategies:**
- A. Develop outpatient facility plan for Medical Oncology services in Wellsboro, PA to include infusion, laboratory services, and physician offices.
  - B. Collaborate with the Susquehanna Health Cancer Center at the Divine Providence Hospital campus to improve the coordination of care for Radiation Oncology patients.

### **Objective 2: Identify and remedy Transportation barriers.**

- Strategies:**
- A. Conduct focus group studies to identify and analyze transportation barriers to receiving diagnostic and treatment services.
  - B. Identify existing transportation options available to the Community and analyze the need and logistical challenges of expanding transportation opportunities directly or in collaboration with other community organizations.

### **Objective 3: Increase early detection and enhance patient awareness of resources available for treatment.**

- Strategies:**
- A. Increase availability and access to screenings and preventive services.
  - B. Coordinate and offer free education programs that target high priority areas with greater incidence in Lycoming and Tioga Counties.
  - C. Make resources available that raise awareness of treatment options, counseling and prevention.

## **PRIORITY 2: Shortage of Physicians/Access to Specialists**

### **Objective 1: Assess and document Community need for physicians.**

- Strategies:**
- A. Assess Community needs based upon total number of physicians providing medical services to the area, not only those physicians on staff at the hospital.

B. Prepare a Medical Staff Development Plan.

## **Objective 2: Recruit high priority physician specialties.**

- Strategies:**
- A. Develop a physician recruitment strategy.
  - B. Collaborate with and assist Federally Qualified Health Clinics in the Community with physician recruitment efforts.

## **Objective 3: Increase capacity of existing physician resources.**

- Strategies:**
- A. Evaluate the potential of utilizing Advanced Practice Professionals to partner with existing physician compliment and to extend provider capacity and shorten wait times.
  - B. Evaluate the potential of extending physician office hours to provide evening and weekend access.

## **Objective 4: Increase the number of physicians and advanced practice professionals being developed locally.**

- Strategies:**
- A. Collaborate with local medical school and colleges to facilitate the development of programs and rotations that showcase our practice and community opportunities.
  - B. Collaborate with local Family Practice Residency program to develop “Rural Track Students” program and provide additional rotations in Tioga County.

## **PRIORITY 3: Mental Health**

### **Objective 1: Increase the number of mental health providers.**

- Strategies:**
- A. Recruit additional physicians and mid-level providers to the community in the specialty of Psychiatry.

B. Evaluate the use of Tele-psychiatry to expand the availability of diagnostic and treatment services.

## **Objective 2: Increase access to mental health services.**

**Strategies:** A. Identify inpatient and outpatient facility plan to meet the future needs of the Community, including increasing the number of inpatient beds to meet patient type and acuity demands.

B. Evaluate the expanded use of group therapies to provide greater access to treatment.

C. Develop an evidence-based collaborative model to include the emergency department, primary care physicians and community providers.

## **Objective 3: Increase early detection and improve evaluation of conditions affecting mental health and emotional well-being.**

**Strategies:** A. Coordinate and offer education to primary care physicians for the early detection and treatment of mental health conditions.

B. Collaborate with other organizations and agencies in the Community to offer screenings and events that will facilitate early detection of conditions and promote awareness of the availability of Community resources.