St Luke's
ANDERSON CAMPUS

Community Health Needs Assessment

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I.   St. Luke's Anderson Community Health Needs Assessment Report

A. Background

As part of the Patient Protection and Affordable Care Act, all non-profit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years in order to remain a tax-exempt organization under section 501(c)(3) of the Internal Revenue Code. The goal of the assessment is to identify critical health disparities faced amongst residents within the community. The needs assessment must state every health priority addressed by community stakeholders, hospital professionals, or public health experts. Additionally, campus specific implementation plans will be crafted for each of the St. Luke's University Health Network (SLUHN) campuses in order to determine how resources will be allocated to address the specified health needs.

B. Summary of the Needs Assessment Methodology

Our CHNA is comprised of both primary and secondary data. The primary data was collected through our community health surveys, where approximately 3,000 surveys were conducted in our seven campus geographic region. Primary data was also collected through campus specific key stakeholder focus groups, where the main priority health needs were identified for each entity. Secondary data included the use of hospital network, county, state and national level data obtained via the U.S. Census, the Robert Wood Johnson Foundation, Vital Statistics, Community Commons, the American Community Survey, U.S. Department of Labor, the Behavioral Risk Factor Surveillance System as well as other data sources. The needs identified in the focus groups were supplemented by the survey data and secondary data to provide us with a more comprehensive picture of the needs in the community and what factors are affecting these health issues.
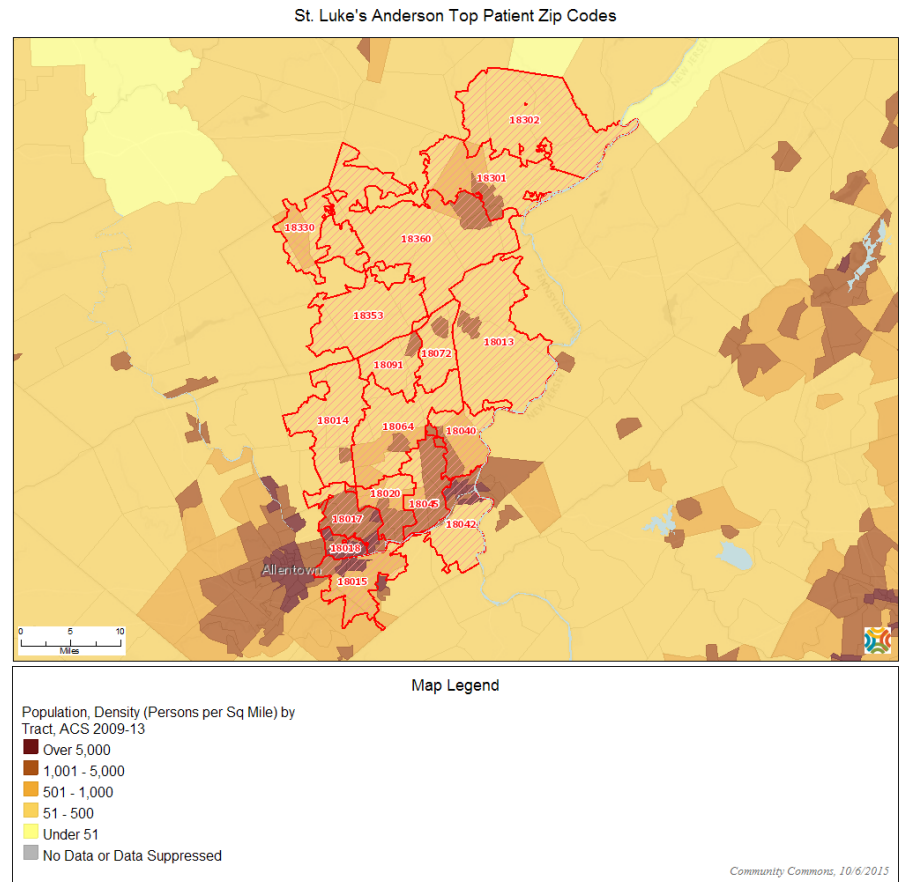
C. About St. Luke's University Health Network Anderson Campus

St. Luke's Anderson Campus is a modern health care facility that provides an extensive array of services. The hospital is located on Freemansburg Avenue, conveniently off of Route 33. The state-of-the-art medical and surgical services are provided in three general areas: the main hospital, the Cancer Center, and the medical office building. St. Luke's Anderson Campus is highly involved in improving the health of the surrounding community. One of the healthy lifestyles initiatives the hospital is involved in is the Community Garden. St Luke's Community Garden is situated on a 20,000 square foot area with 20 plots of land close by the hospital that allows SLUHN employees to plant some of their own vegetables and reminds them of the value of healthy eating. There is also the St. Luke's Rodale Institute Organic Farm at the Anderson Campus that grows organic produce to distribute to the hospitals across the network. St. Luke's Anderson provides high quality services to patients including an emergency center, a Cancer

Center, heart and vascular center, outpatient testing, women's healthcare, and a bone and joint institute.

D. <u>Geographic Description of Medical Service Area and Community Served</u>

A total of 369,247 people live in the 474.16 square mile report area defined for this assessment according to the U.S. Census Bureau American Community Survey (2009-13) 5-year estimates. The population density for this area, estimated at 778.74 persons per square mile, is greater than the national average population density of 88.23 persons per square mile. According to the U.S. Census Bureau Decennial Census, between 2000 and 2010 the population in the report area grew by 42,559 persons, a change of 13.05%. This percent change in population is much higher than the population increase in Pennsylvania at 3.43% and in the United States at 9.74%.

St. Luke's Anderson Top Patient Zip Codes

Map Legend

Population, Density (Persons per Sq Mile) by Tract, ACS 2009-13
- Over 5,000
- 1,001 - 5,000
- 501 - 1,000
- 51 - 500
- Under 51
- No Data or Data Suppressed

Community Commons, 10/6/2015

We defined our service area by determining the top patient zip codes of our residents who receive services from St. Luke's Anderson. We defined the top zip codes as those that make up 80% of the population served by this hospital. This report will refer to this area as the "St. Luke's Anderson service area". The top five counties served by St. Luke's Anderson include Northampton, Lehigh, Monroe, Pike Counties (in Pennsylvania) and Warren County (in New Jersey). There are a total of 17 zip codes that were included. The map above identifies the areas served. On the following page is a table listing the top zip codes as well as the percentage that the population from each zip code constitutes for the patient population seen at St. Luke's Anderson and at SLUHN as a whole.

Analysis of Top Patient ZIP Codes, All Patients St. Luke's Anderson, 2014				
Facility	**ZIP**	**Encounters**	**% Facility**	**% SLUHN**
Anderson	18042	17,602	10.57%	1.78%
Anderson	18045	16,989	10.20%	1.72%
Anderson	18064	12,882	7.73%	1.30%
Anderson	18020	12,436	7.46%	1.26%
Anderson	18360	9,544	5.73%	0.97%
Anderson	18013	8,297	4.98%	0.84%
Anderson	18017	8,295	4.98%	0.84%
Anderson	18301	7,652	4.59%	0.78%
Anderson	18353	6,720	4.03%	0.68%
Anderson	18091	6,557	3.94%	0.66%
Anderson	18040	6,432	3.86%	0.65%
Anderson	18072	5,267	3.16%	0.53%
Anderson	18302	3,498	2.10%	0.35%
Anderson	18014	3,053	1.83%	0.31%
Anderson	18330	2,750	1.65%	0.28%
Anderson	18018	2,552	1.53%	0.26%
Anderson	18015	2,446	1.47%	0.25%
Grand Total		132,972	79.82%	13.47%

E. Demographic Profile of Community Served

The following sections give a brief overview of the population we serve. Having a sense of what the community looks like will be helpful when reviewing the five priority health categories later in the report.

i. Gender

Data from the ACS (2009-13) show that the percentage of females in our service area ranges from 50.11% (Pike County) to 51.41% (Lehigh County). The percentage of males ranges from 48.59% (Lehigh County) to 49.89% (Pike County). In our 2016 community survey, the majority of our respondents from all of the SLUHN campuses were female. In the St. Luke's Anderson service area, 77% of respondents were female and 23% were male.


Sex Distribution by Campus
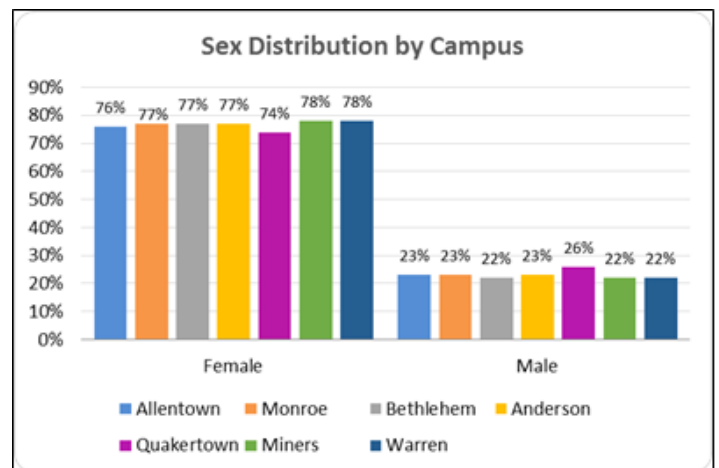
ii. Age

According to the American Community Survey (ACS, 2009-13) 5 year estimates, 21.52% of the St. Luke's Anderson service area is under the age of 18 and 15.43% of the population is over the

age of 65. This leaves 63.05% of the population between the ages of 18-65. It is interesting to note that even though the over 65 population only makes up about 15% of the population, according to St. Luke's internal data they accounted for 37% of the patient visits at St. Luke's Anderson in 2014. This is likely due to the fact that the elderly represent a vulnerable population that tend to have many chronic diseases and are more prone to accidents as they age. This age distribution graph covers all types of medical care, i.e. inpatient, outpatient, ER, primary care. (SLT refers to St. Luke's Anderson campus).
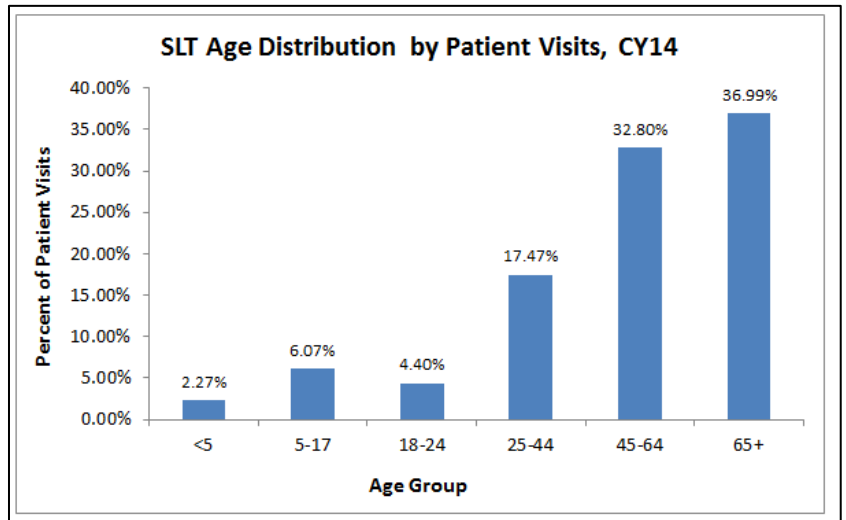

In terms of our 2016 community survey, the age distribution of those who took the survey yielded interesting results. Although the 65 and older population constitutes 36.99% of the patients seen at St. Luke's Anderson (in 2014), only 9.4% of respondents who completed the survey were in this age bracket (referring to the bottom bar graph). One
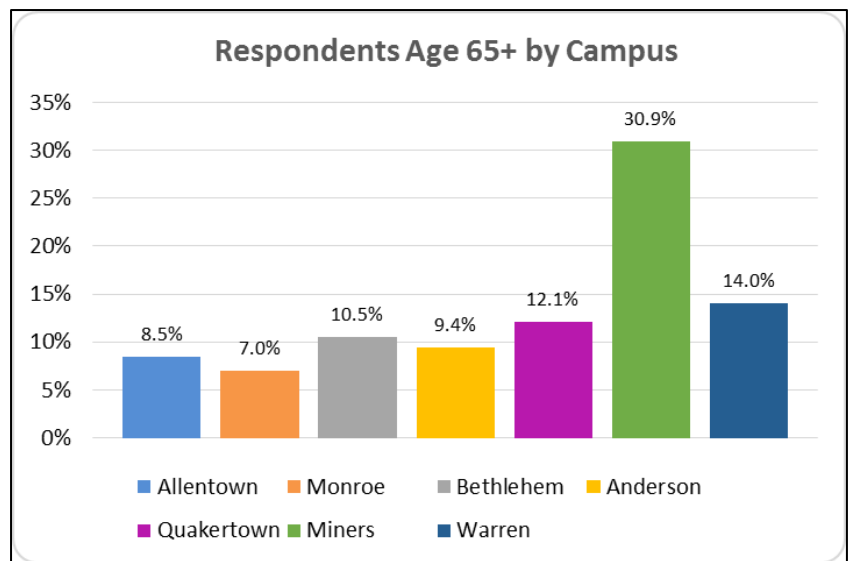

potential reason for such a low response rate from the post-retirement age population may be that the majority of surveys were conducted via iPad or on a computer, which could be prohibitive for people who are unfamiliar with how to use such technology as the elderly population often is.

iii. Race

As evidenced by the pie chart to the right, when the St. Luke's Anderson population is broken down by race, it can be seen that most individuals identify as White, constituting 83.82% of the population. The second largest race group in this service area is those who identify as Black, representing 7.39% of the population (ACS, 2009-13). This is followed by some other race (3.15%) and Asian (2.69%). The pie chart on

the following page shows similar results from our 2016 community survey, where we found that
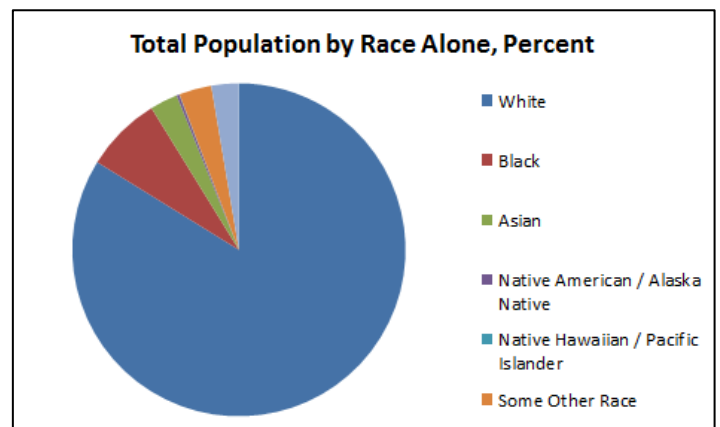
78% of the respondents identified as White and 8% identified as Black/African American. 13% of respondents identified their race as other, which may be higher than the some other race category for the total service area population because people in our service area who are Hispanic/Latino may not consider themselves to fall in the White race category.

Race Distribution Anderson
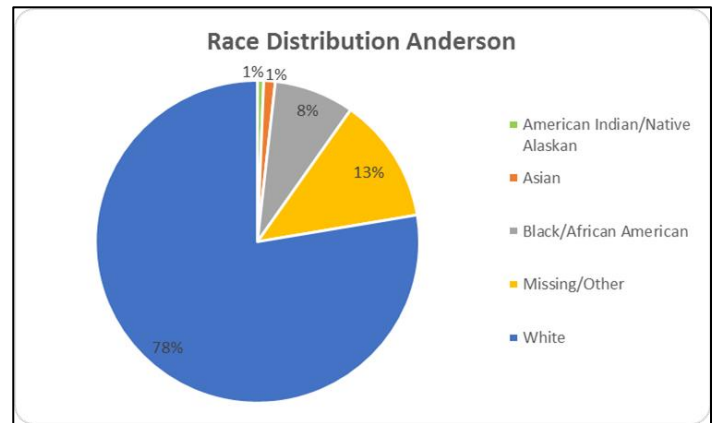
iv. Ethnicity

By examining ethnicity displayed in the pie chart below, we can better understand what the St. Luke's Anderson population looks like. Most of our population served identifies as Non-Hispanic (87.22%), rather than Hispanic or Latino (12.78%) (ACS, 2009-13). This breakdown by ethnicity is similar to what we see in our other hospital campuses, but there is a slightly lower percentage of Hispanic or Latino population in the St. Luke's Anderson area as compared to St. Luke's Bethlehem and St. Luke's Allentown. Our 2016 survey was able to capture this vulnerable population in our data due to the larger proportion of Hispanic respondents than is seen in the total population. According to the bar graph below that displays our 2016 survey results, we found that 28% of the respondents from St. Luke's Anderson identified themselves as Hispanic.

Total Population by Ethnicity Alone
Custom Area Estimates *



Hispanic Respondents by Campus
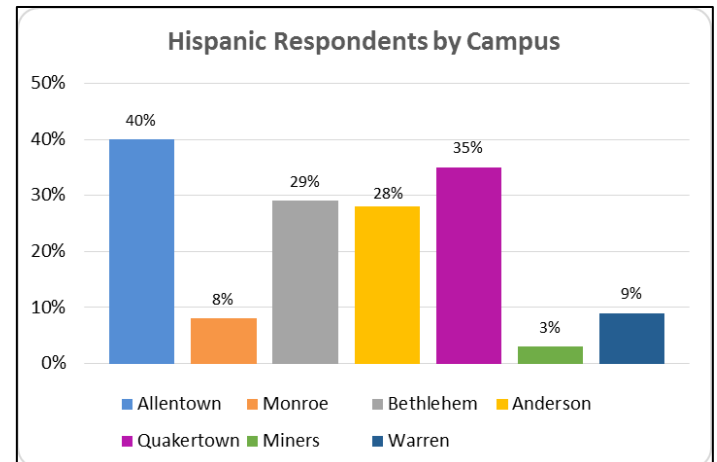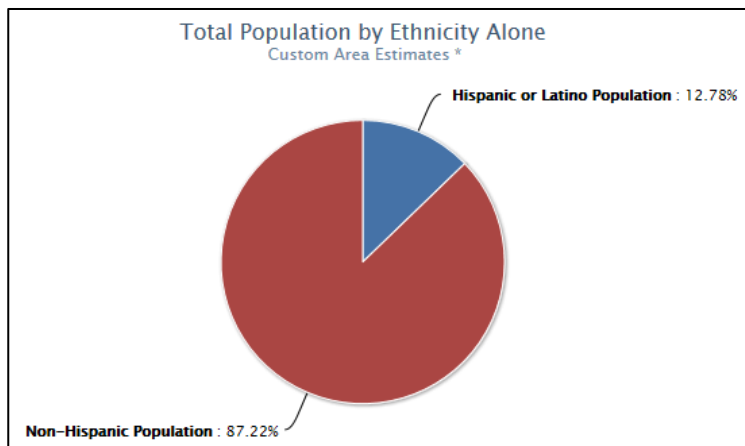
v. Language

From the chart on the following page we can see that the St. Luke's Anderson service area has community members who speak a wide variety of languages. Translators/interpreters are required in locations where either over 5% of the community speaks a different language or over 1,000 community members mainly speak that language. The chart shows that the predominant language other than English is Spanish, where 10.17% of the people who live in the zip code 18301 and 9.82% of the people who live in 18042 speak Spanish. The next most frequently spoken languages are categorized as other Indic languages and African languages, although not in sufficient numbers to require translation/interpretation services.

ZIP	% Facility	% Spanish Speaking in zip code	% of zip code who speaking Spanish but speak English less than "very well"	Next Frequent Language
18042	10.57%	9.82% (3,885 people)	3.69% (1,459 people)	Other Indic Languages (0.65% - 259 people)
18045	10.20%	2.87% (702 people)	1.00% (247 people)	Other Indic Languages (1.88% - 461 people)
18064	7.73%	1.26% (295 people)	0.33% (78 people)	German (0.7% - 154 people)
18020	7.46%	6.26% (1,230 people)	1.82% (358 people)	Portuguese (1.4% - 278 people)
18360	5.73%	5.74% (1,531 people)	1.48% (395 people)	Arabic (1.10% - 294 people)
18013	4.98%	0.85% (144 people)	0.16% (27 people)	Portuguese (0.60% - 101 people)
18017	4.98%	9.8% (3,447 people)	4.25% (1,492 people)	Arabic (1% -363 people)
18301	4.59%	10.17% (2,778 people)	2.72% (744 people)	African Languages (1.29% - 353 people)
18353	4.03%	3.06% (353 people)	0.46% (53 people)	Korean (0.53% - 61 people)
18091	3.94%	1.70% (95 people)	0.70% (39 people)	German (0.73% - 41 people)
18040	3.86%	5.86% (878 people)	1.90% (284 people)	Chinese (1.08% - 162 people)
18072	3.16%	1.94% (120 people)	0.42% (26 people)	Italian (0.27% - 17 people)

vi.   Health Insurance Plans

As evidenced by the bar graph on the following page, our patients utilize a variety of health insurance plans. According to internal reviews, the highest percentage of our patients utilized Medicare as their primary insurance plan in 2014, representing 39% of the distribution of insurance. The other two most utilized methods of coverage include Blue Cross (24.68%), followed by commercial insurance (10.35%). As a network and throughout all of the campuses Medicare and Blue Cross are the two most used insurance plans, but interestingly, in most of the other campuses medical assistance plans represent the third highest percentage in the distribution of insurance plans. St. Luke's charity care (free care covered by the network) is included in the self-pay category, which represents 3.35% of the methods used for coverage at St. Luke's Anderson. Throughout SLUHN as a whole, the total cost of healthcare provided to uninsured and vulnerable populations in 2014 was $48,796,104. This insurance plan distribution graph covers all types of medical care, i.e. inpatient, outpatient, ER, primary care.
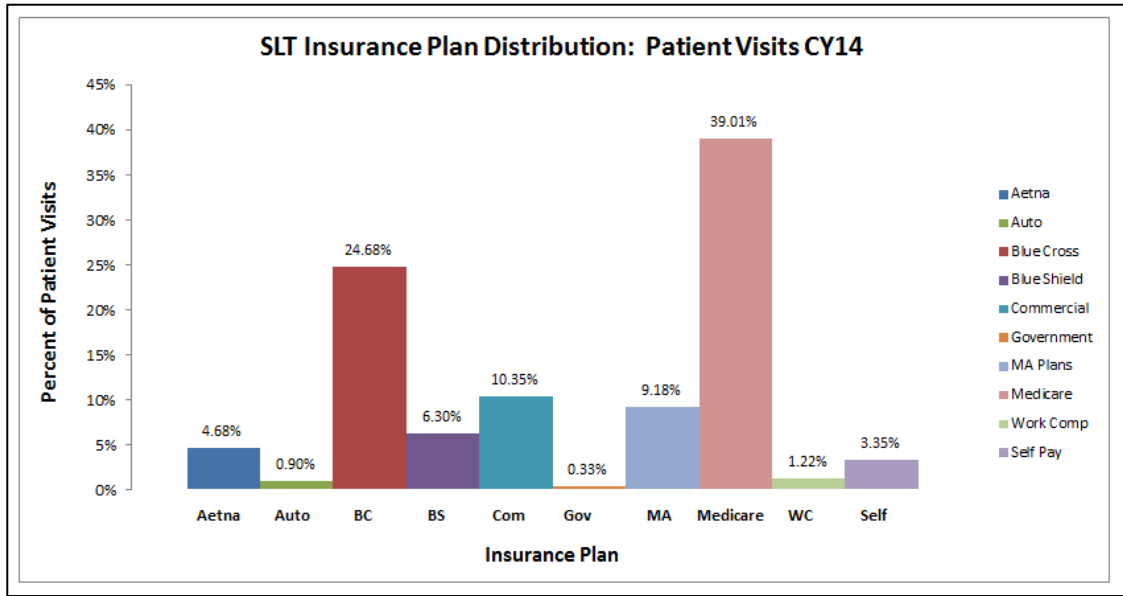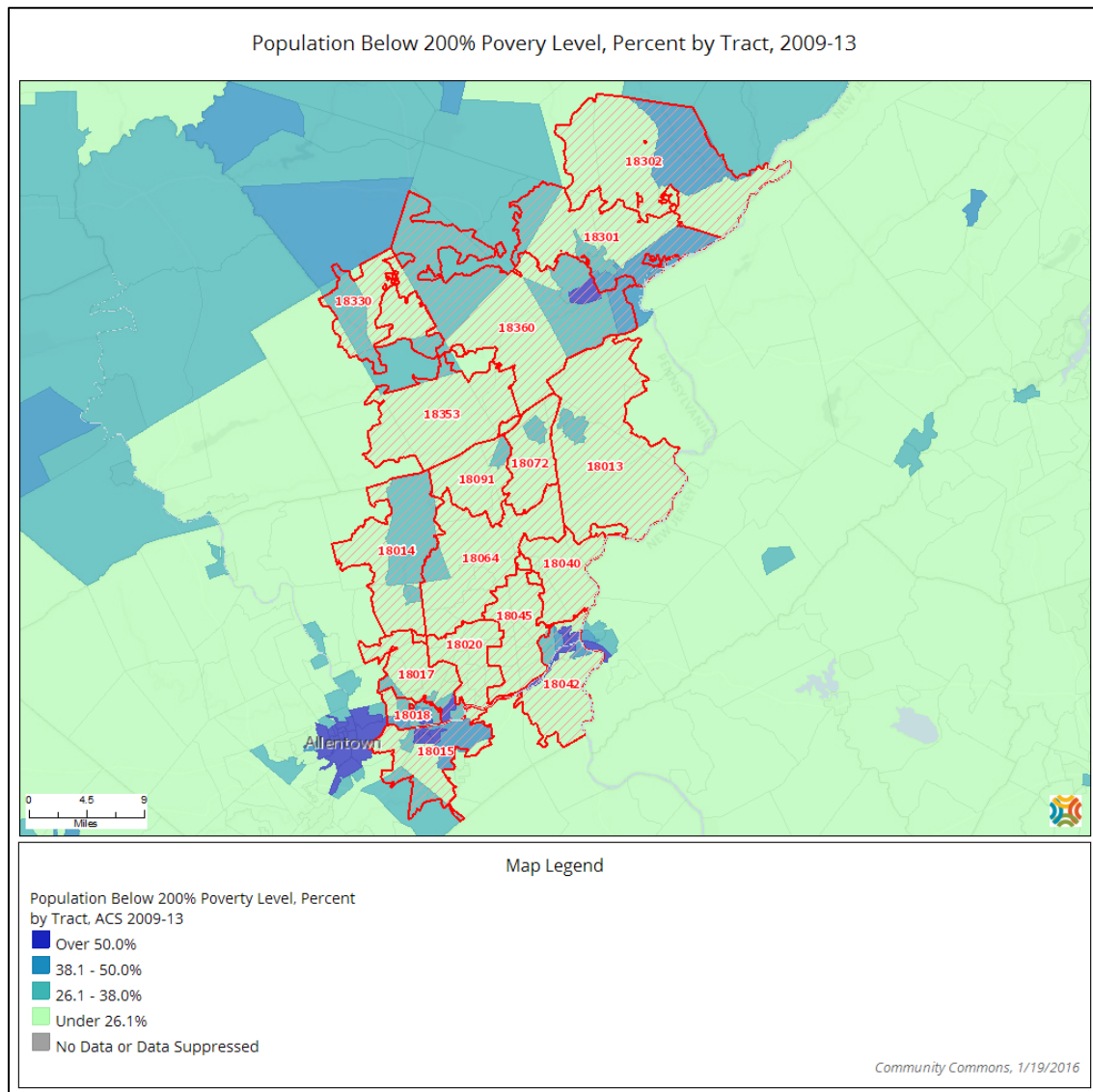
The bar graph below shows the breakdown of primary insurance types by SLUHN campus from our 2016 community survey data, in which we found that 63.2% of respondents from the St. Luke's Anderson service area used private insurance, and 3.6% of respondents were uninsured or pay cash for their medical expenses. These percentages are similar to the distribution seen in the other SLUHN campuses.
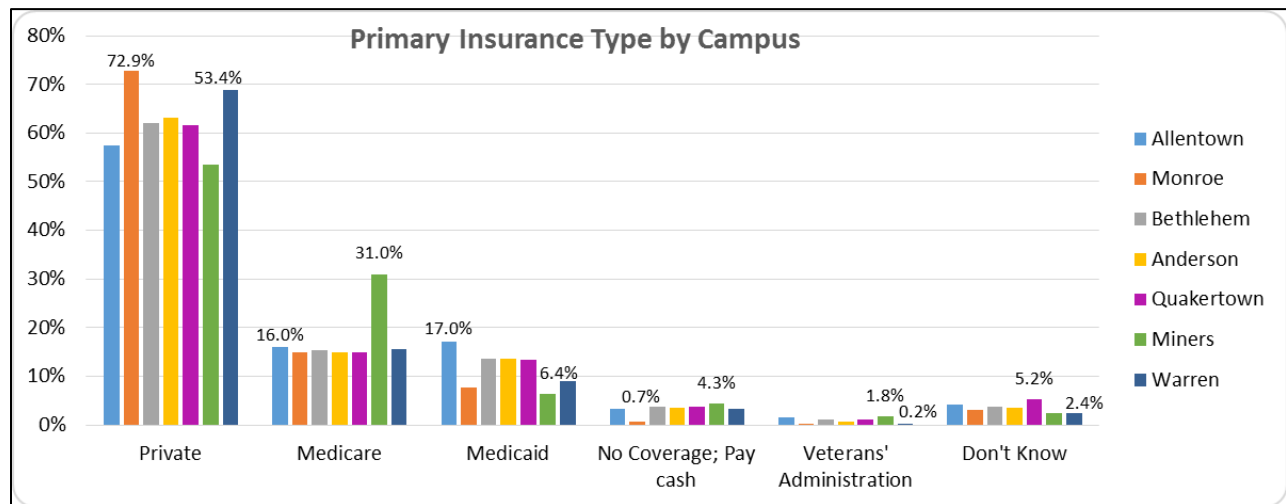
vii.   Poverty

According to the ACS (2009-13), 27.2% of the St. Luke's Anderson population served has incomes at or below 200% of the Federal Poverty Level (FPL); this percentage is slightly lower than the percentages of those living with incomes at or below 200% FPL in Pennsylvania (30.51%) and in the U.S. as a whole (34.23%). As can be seen from the map on the following page, there are pockets of the St. Luke's Anderson service area that have 26-38% and 38%-50% of the population living below 200% of the FPL. Poverty is an important factor to take into

consideration when looking at health status, health disparities, and issues of access to care, which will be discussed later in this report.

Population Below 200% Poverty Level, Percent by Tract, 2009-13

Map Legend

Population Below 200% Poverty Level, Percent by Tract, ACS 2009-13
- Over 50.0%
- 38.1 - 50.0%
- 26.1 - 38.0%
- Under 26.1%
- No Data or Data Suppressed

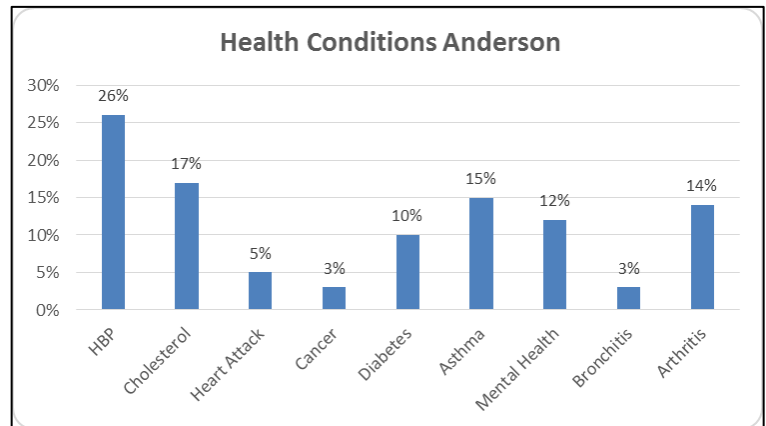*Community Commons, 1/19/2016*

viii. <u>Overall Health and Health Conditions</u>

According to our 2016 community survey, most people in the St. Luke's Anderson service area reported excellent or very good health, followed by good health and then poor or very poor health, which is similar to the pattern seen in other campuses. For the

Overall Health Rating by Campus
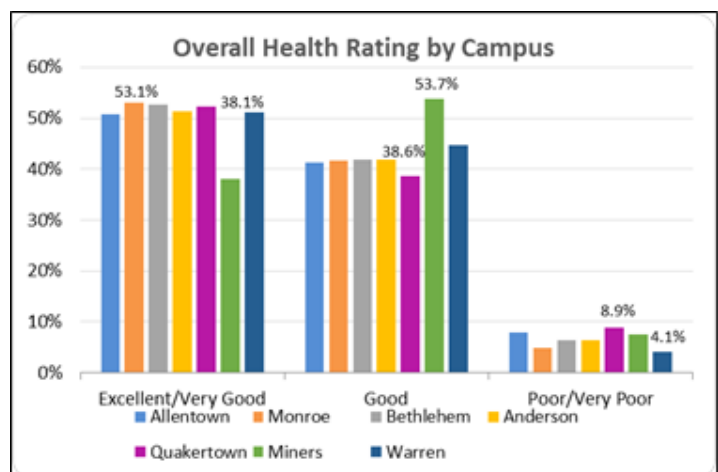
network as a whole, 93.4% of respondents rated their health as good or better.

After examining people's perceptions of their own health, it is important to look at the prevalence of specific health conditions reported by the respondents in order to assess the health status and needs of the community. According to our 2016 survey results, the highest percentage of patients in the St. Luke's Anderson service area reported having high blood pressure (26%), high cholesterol (17%), or asthma (15%).

Health Conditions Anderson

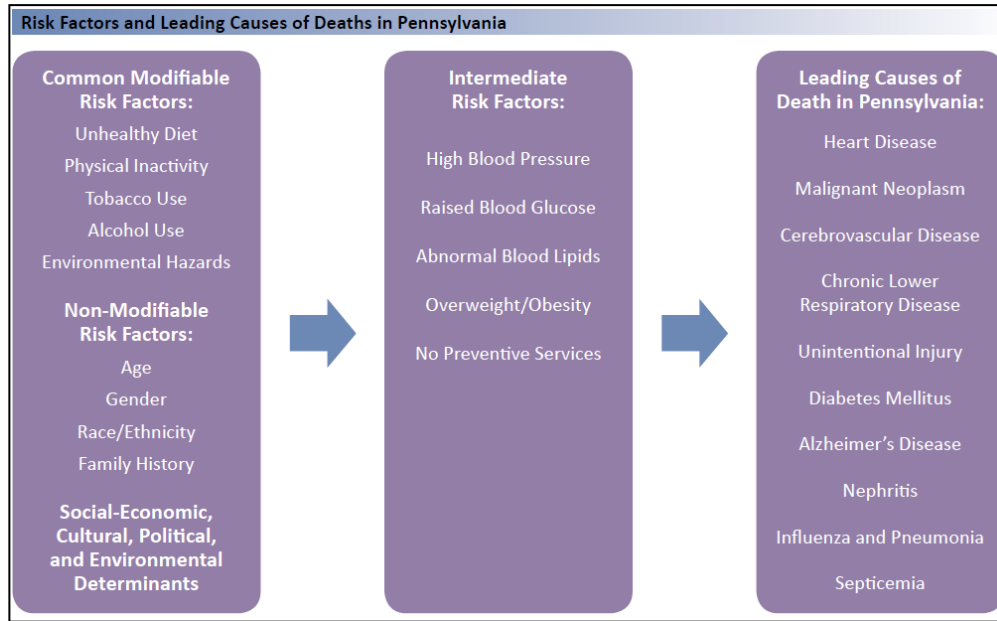| Condition	Percentage
HBP	26%
Cholesterol	17%
Heart Attack	5%
Cancer	3%
Diabetes	10%
Asthma	15%
Mental Health	12%
Bronchitis	3%
Arthritis	14%

ix.   Top Reasons for Hospitalization

The chart to the right displays the top 10 reasons for inpatient hospitalization in the St. Luke's Anderson service area for 2014. Examining these reasons for hospitalization will help to better understand the priority health categories that will be discussed in the next section. The top reason for inpatient hospitalization, cardiovascular problems, vastly outnumbers the rest of the reasons, according to the number of encounters. Interestingly, the highest percentage of respondents from our 2016 community survey in the St. Luke's Anderson service area reported high blood pressure and high cholesterol as conditions they had been diagnosed with, which are both risk factors for cardiovascular disease, our top reason for inpatient hospitalization,.

Top 10 Reasons for Hospitalization by Service Line, Inpatients St. Luke's Anderson, 2014

Service Line	Encounters	Rank
Cardiovascular	1,364	1
Gastroenterology	820	2
General Medicine	805	3
Pulmonary Medicine	794	4
Infectious Disease	538	5
Neurology - Other	314	6
General Surgery	299	7
Urology	267	8
Endocrinology	258	9

x.   Leading Causes of Death

The flow chart on the following page shows the risk factors that contribute to the leading causes of death in Pennsylvania. The top three leading causes of death in Pennsylvania are heart disease, cancer, and cerebrovascular disease. These modifiable and intermediate risk factors as well as the leading causes of death will be interesting to keep in mind when viewing the priority health categories later in this report (Pennsylvania Department of Health- Bureau of Health Promotion and Risk Reduction, 2011).

Risk Factors and Leading Causes of Deaths in Pennsylvania

Common Modifiable Risk Factors:	Intermediate Risk Factors:	Leading Causes of Death in Pennsylvania:
Unhealthy Diet	High Blood Pressure	Heart Disease
Physical Inactivity	Raised Blood Glucose	Malignant Neoplasm
Tobacco Use	Abnormal Blood Lipids	Cerebrovascular Disease
Alcohol Use	Overweight/Obesity	Chronic Lower Respiratory Disease
Environmental Hazards	No Preventive Services	Unintentional Injury
Non-Modifiable Risk Factors:		Diabetes Mellitus
Age		Alzheimer's Disease
Gender		Nephritis
Race/Ethnicity		Influenza and Pneumonia
Family History		Septicemia
Social-Economic, Cultural, Political, and Environmental Determinants		

In Northampton County specifically (since many patients in our service area come from Bethlehem and Easton, which are situated in Northampton County), accidents was the leading cause of death for people ages 5-24 and 25-44 in 2012. For people ages 45-64 and 65 and older, the top two leading causes of death were cancer and heart disease, with cancer as the number one leading cause of death for those 45-64 and as the number two cause of death for those 65 and older. These leading causes of death for the two older groups follow what is seen in Pennsylvania, where cancer and heart disease are the top two leading causes of death. The other leading causes of death for each age bracket in Northampton County are listed in the chart below (Pennsylvania Department of Health- Division of Health Informatics, 2014).

Selected Leading Causes of Death, Number by Age Group (2012)

Under 5 Years of Age		5-24 Years of Age		25-44 Years of Age		45-64 Years of Age		65 Years and Older	
Perinatal Conditions	15	Accidents	14	Accidents	24	Cancer	134	Diseases of Heart	598
Birth Defects	6	Assault (Homicide)	4	Cancer	17	Diseases of Heart	77	Cancer	503
Accidents	3	Cancer	3	Suicide	14	Accidents	25	C.L.R.D.**	107
		Suicide	3	Diseases of Heart	7	Diabetes Mellitus	14	Stroke	101
				Assault (Homicide)	3	Septicemia	13	Alzheimer's Disease	63
TOTAL	27	TOTAL	32	TOTAL	89	TOTAL	389	TOTAL	2,226

^In situ, benign, and uncertain neoplasms — Note: Total includes all other causes.

xi.   Promise Neighborhood

St. Luke's Anderson has a large portion of its patient population come from the city of Easton. The West Ward region of Easton (purple region on the map on the following page) has just recently been designated as a Promise Neighborhood. The goal of the Promise Neighborhoods is to provide "cradle-to-career" services in order to create a safe and inspirational environment where children can grow and learn. The neighborhoods focus on utilizing key stakeholders, current programs and policies, community members, and school districts to improve educational

and health outcomes for children. Planning and implementation grants are awarded to underprivileged communities to help them accomplish the aforementioned goals. The Promise Neighborhoods of the Lehigh Valley (PNLV) just recently gained 501(c)(3) status. PNLV does not have an official federal designation. In order In order to receive a Promise Neighborhood designation, the organization must be representative of the community that they intend to serve (meaning that some members of the advisory board live in the community being served and members in the community who are low income are involved in decisions being made), that they have in place at least one of the solutions to a community problem that was mentioned in their project proposal, and intends to collaborate with a public school to implement the projects.

xii. Urban/Rural

The majority of the areas that St. Luke's Anderson service area covers are urban, where 14.9% of the population lives in rural areas and 85.1% of the population lives in urban areas (Decennial Census, 2010). This is similar to the U.S. as a whole, where 80.89% of the population lives in urban areas and only 19.11% live in rural areas. We bring up the larger rural population served by St. Luke's Anderson because urban and rural areas tend to have differing barriers to care, which may influence the health status of their residents. According to the Rural Health Reform Policy Research Center's 2014 Rural-Urban Chartbook, rural residents areas are more likely to be uninsured than those who live in the outskirts of large metro areas. The report also identified differences in mortality rates, with ischemic heart disease, chronic obstructive pulmonary disease (COPD) and suicide having higher mortality rates in rural areas.

F. Prioritized Health Categories

There are various socioeconomic, cultural, and environmental factors that constitute the social determinants of health, and they undoubtedly influence the health and well-being of our population, as can be seen from the previous discussion of the demographics of the community that St. Luke's Anderson serves. We can see that we live in an area where poverty is a prevalent issue, there are language barriers to care, and a large portion of our patients utilize medical assistance. During the 2013-2016 CHNA cycle we focused on child and adolescent health, mental and behavioral health, promoting healthy lifestyles and education, improving access to healthcare, and elder health. Through reviewing our primary data, including input from community stakeholders, public health professionals and our community wide survey, as well as our secondary data analyses; we were able to categorize the identified health needs into five

major categories for the 2016-2019 CHNA cycle. These priority health categories include improving access to care/reducing health disparities, promoting healthy lifestyles and preventing chronic disease, improving mental/behavioral health, improving child and adolescent health and improving elder health. We will expand upon the health needs within each priority health category individually. The focus group summary and list of participants can be found in appendix A and B respectively. Implementation plan strategies will be written for the 2016-2019 timeframe with attention to the specific priority categories reviewed.

II.   Health Category Profiles

1. Improving Access to Care and Reducing Health Disparities

This section will discuss issues related to improving access to care and reducing health disparities in our service area. While this category title is specific, we are actually examining the broader category of the social determinants of health. Social determinants of health include the economic, environmental, and social conditions in which people live that influence their access to basic needs, healthcare services, education, health behaviors, amongst other factors that shape a person's health status (Healthy People 2020, 2014). When reading this section, please take into consideration this more comprehensive idea of addressing the social determinants of health, which have an enormous influence on issues related to accessing healthcare and disparities seen in health outcomes.

Access to primary care physicians is an important determinant of access to healthcare. According to the Area Resource File (2012), in the St. Luke's Anderson service area the rate of primary care physicians per 100,000 population is 71.8, which is lower than the rate in Pennsylvania (80) and in the U.S. (74.5). This means in our service area we have fewer primary care physicians to accommodate our population. The members of the stakeholder focus group for St. Luke's Anderson campus mentioned that the mobile health vans would be a great asset to utilize in order to improve access to care for children and adolescents. The mobile vans may partially make up for the lower rate of access to primary care physicians by providing physicals and other general care to students at the schools. The focus group members said this would help with the issue of transportation, and may also be a more comfortable setting for community members to receive care. The members also discussed how the partnership with LANTA (Lehigh and Northampton Transportation Authority) has been improving issues of transportation to and from healthcare facilities, but still should be improved upon so that more families can be provided with transportation at a low fare.

The social determinants of health such as poverty, education, and unemployment may all be reasons why people are not accessing care even if it is available. From our 2016 community survey, we found that most respondents in the St. Luke's Anderson service area had visited their PCP within the past year (70.7%).
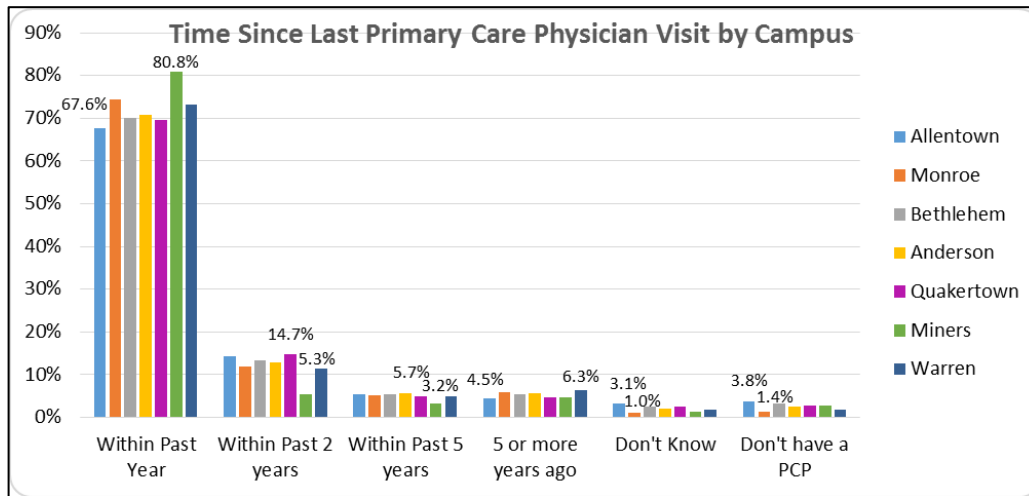
For SLUHN as a whole we found interesting relationships between the type of insurance the respondent had and the last time they visited their PCP. 69.2% of respondents with private insurance saw their PCP within the last year compared to 41.1% with no insurance coverage. However, 80.9% of the people with Medicaid saw their PCP in the last year along with 83.5% of respondents with Medicare. 14.4% of people with no insurance coverage did not have a primary care doctor compared to 1.7% of those with private insurance and 2.1 % of those with Medicaid.

If an individual has not visited their primary care physician for a routine checkup within the past year, this could be impacting their overall health status due to conditions not being treated or conditions progressing. We can examine a piece of health status by examining the number of days the respondent could not perform daily functions due to physical health issues in the St. Luke's Anderson service area. From our 2016 community survey, we found that 42% of respondents reported missing one or more days of normal activity in the past month due to poor physical health. (This

percentage includes one to two days, three to seven days and eight or more days of poor physical health from the pie chart).
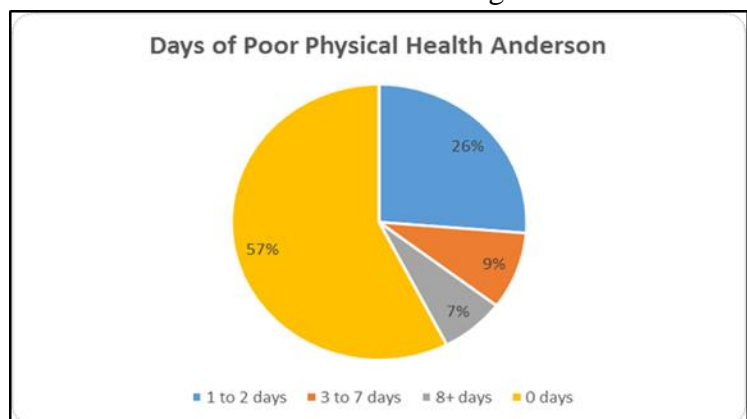
Another barrier to accessing care is access to dentists. Measuring access to dentists is one way to examine the ability for people to receive dental care. Lack of preventative and restorative dental

services can result in higher risk for heart disease or stroke, gum disease, tooth decay, diabetes, and some types of cancer. According to the Area Health Resource File (2013), in the St. Luke's Anderson service area, the rate of dentists per 100,000 population was 49.92, which is much lower than the state (62.5) and the U.S. (63.2) rates. Focus group members emphasized that utilizing the dental vans and clinics will be very important in order to improving dental care for children and adolescents.

Since it seems that access to dentists may be limited due to availability and insurance coverage, we examined when was the last time respondents visited the dentist, as well as the type of dental insurance that they used in our 2016 community survey. As evidenced by the bar graph, the majority of respondents throughout the network had seen their dentist within the past year.
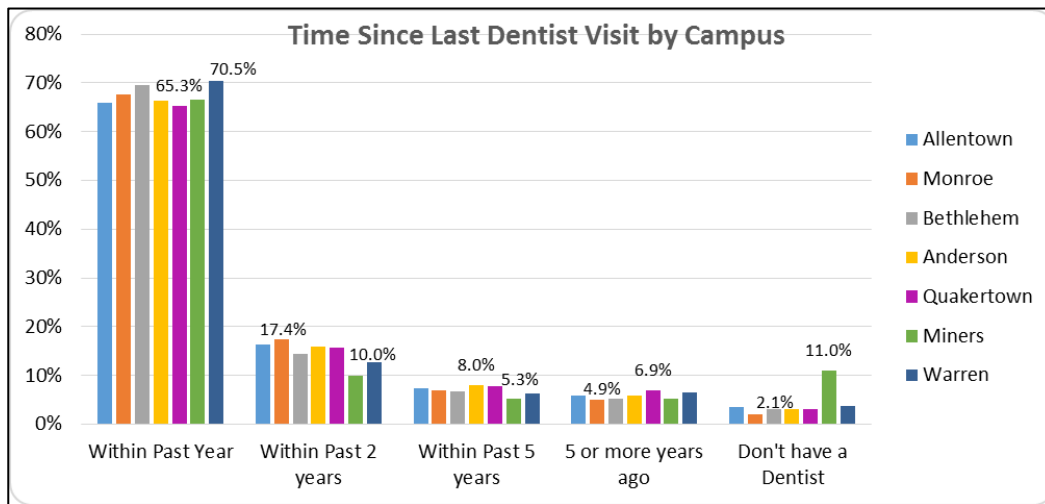
For SLUHN as a whole, we found a pattern between income and time since last dentist visit. Our 2016 survey results showed us that 51.3% of respondents who reported making less than $24,999 saw a dentist in the past year as compared to 82.3% of respondents who reported making over $60,000. Additionally, 8.0% of those making less than $24,999 do not have a dentist compared to 1.0% of those making more than $60,000.

We also examined type of dental insurance respondents used in the network as a whole, comparing data from our community survey in 2012 to our survey from 2016. The percentage of respondents throughout the network using private insurance to cover their dental care increased to 62.4%, the percentage using Medicaid more than doubled (6.3% to 14%), and the percentage of those who had no coverage or paid cash greatly decreased. This shows a great improvement because
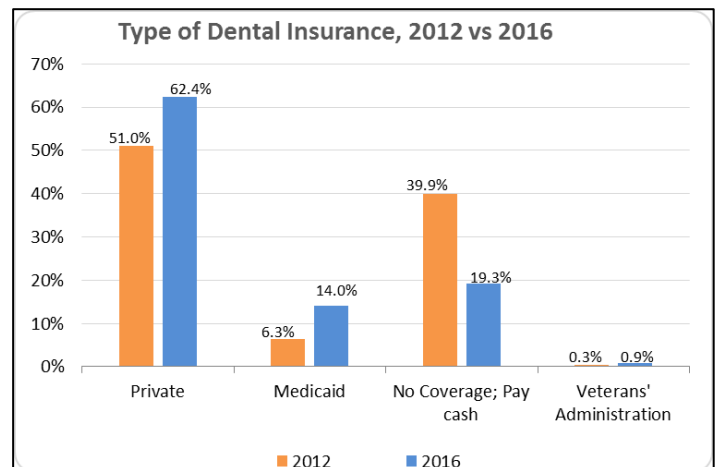
it tells us that more people have become insured and less people are uninsured or having to pay with cash since 2012, which should ultimately help boost access to dental care.

Although these results are promising, we found interesting disparities when examining type of dental insurance used in relation to income for SLUHN as a whole. 22.9% of respondents who reported making less than $24,999 used private insurance to pay for dental care as compared to 86.8% of respondents who reported making more than $60,000. Additionally, 30.7% of respondents who reported making less than $24,999 did not have a dentist as compared to 10.5% respondents who reported making more than $60,000.

Lack of insurance is another major barrier to receiving healthcare, because without insurance, receiving health services are very difficult and costly. In the St. Luke's Anderson service area, 9.9% of the population does not have medical insurance, as compared to 9.81% not having insurance in Pennsylvania and 14.87% in the U.S. as a whole (ACS, 2009-13). The focus group members talked about the insurance enrollment night, which was supposed to be a way to boost insurance coverage for community members, but unfortunately the attendance was low. The focus group members said that relationships need to be built within the community to improve the trust between the hospital and community members. One strategy mentioned was to possibly adjust the marketing strategy to show St. Luke's Anderson's role in improving community health. Looking at the percentage of the population with insurance who are enrolled in Medicaid (or other types of public health insurance) is important because Medicaid enrollees are a vulnerable population of individuals, since they are likely to have lower incomes and may have more barriers to receiving care. The percentage of population receiving Medicaid for St. Luke's Anderson service area is 15.6%, as compared to 18.24% of the population receiving Medicaid in Pennsylvania and 20.21% in the U.S. as a whole (ACS, 2009-13).

Our 2016 survey also showed that when asked to choose the reasons why the respondent missed a medical appointment, many respondents chose responses that revolved around insurance coverage. In terms of the St. Luke's Anderson service area, out of the top five reasons for postponing care, 11.3% of the responses were that their share of the cost was too high and 11.0% of the responses were that they postponed care because they didn't have health insurance. This shows that lack of insurance or coverage for certain services poses a significant challenge to receiving care.

Top Five reasons for Postponement of Care at St. Luke's Anderson

Reason for Postponement of Medical Care at Anderson	% of Responses
My share of the cost was too high (deductible/copay)	11.3%
Didn't have health insurance	11.0%
Didn't think problem was serious	10.3%
Couldn't get time off from work	8.7%
Insurance didn't cover what I needed	7.3%

Besides some of the more visible barriers to care such as lack of PCP's or health insurance, unemployment and poverty are two additional important indicators of access to care. According to the Bureau of Labor Statistics (August 2015), the percentage of the population 16 or older that is unemployed in the St. Luke's Anderson service area was 6.5%, which was higher than the rate in Pennsylvania (6.1%) and the rate in the U.S. as a whole (6.3%). Our 2016 community survey revealed that 13% of respondents from St. Luke's Anderson service area were unemployed, which is greater than the percentage that was seen for the St. Luke's Anderson service area as a whole (6.5%). The pie chart shows the employment distribution for our service area, where we can see that more than half of respondents were employed or self-employed (67%), but it is important to keep in mind the high unemployment rate reported by respondents.

Employment Distribution by Campus

Anderson Employment Distribution
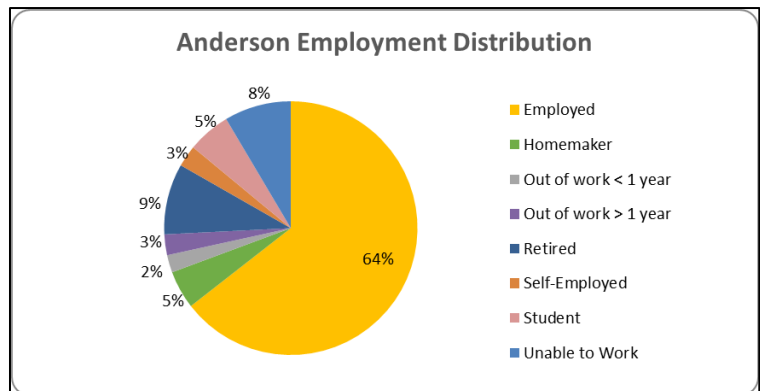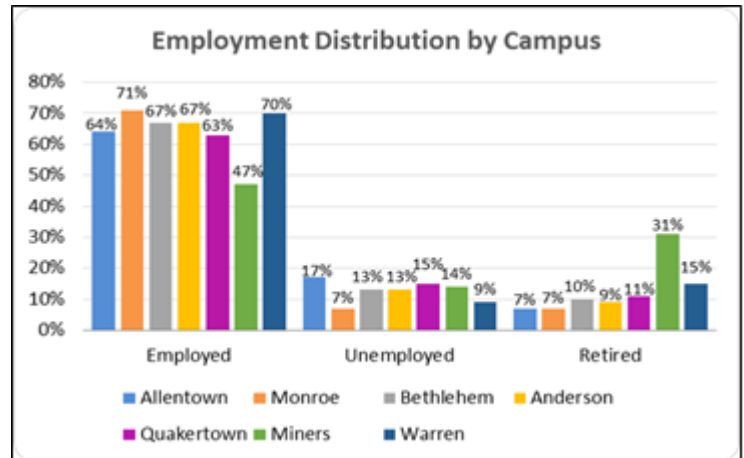
Poverty is related to unemployment because if people do not have an income they may be more likely to fall into poverty. As discussed previously, 27.2% of the St. Luke's Anderson service area had incomes at or below 200% of the Federal Poverty Level (FPL), This percentage is slightly lower than the percentages of those living with incomes at or below 200% FPL in Pennsylvania (30.5%) and in the U.S. as a whole (34.23%) (ACS, 2009-13). We can also examine per capita income and household income to understand what poverty looks like in our service area. A lower per capita income along with the large population of individuals living in poverty suggests that people may be less likely to afford care that may not be covered by insurance (i.e. dental care) and may have difficulty paying out of pocket for care if they are uninsured. The per capita income in the St. Luke's Anderson service area is $28,057 as compared to $28,502 in Pennsylvania and $28,154 in the U.S. as a whole (ACS, 2009-13). This bar graph refers to our 2016 community survey data, where we compared the income distribution


Income Distribution Anderson vs SLUHN
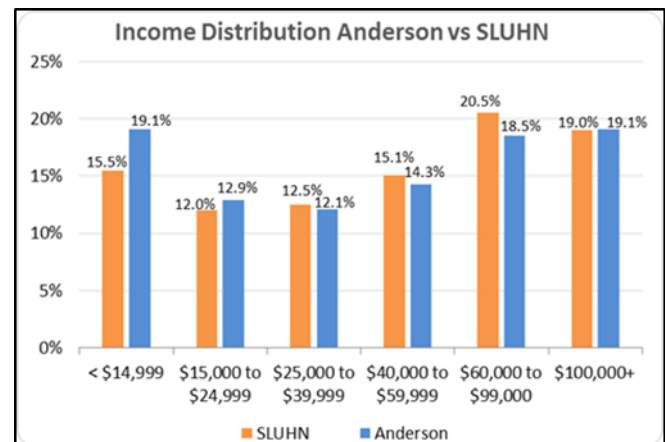
within the St. Luke's Anderson service area to the income distribution of SLUHN as a whole. The graph shows that the two income distributions are very similar, with slight variations. More respondents from the St. Luke's Anderson service area reported being in the under $24,999 brackets and fewer reported being in the $40,000-$99,000 brackets as compared to the network as a whole. In 2015, the federal poverty level for a family of four was $24,250 (U.S. Department of Health and Human Services, 2015). Interestingly, about 19% of respondents from the St. Luke's Anderson service area reported having incomes below $14,999 and 19% reported having incomes over $100,000, exemplifying the income inequality that is present in this service area.

From these past two discussions, we can see that poverty and unemployment are both social determinants of health that are important to understand when addressing the health status of our community.

Level of education is yet another social determinant of health that influences health disparities. Research has taught us that education is tied to earning capacity, and studies such as the renowned Whitehall Study have directly correlated socio-economic status with health outcomes. In the St. Luke's Anderson service area, 11.16% of adults over the age of 25 do not have a high school degree, as compared to 11.34% in Pennsylvania and 13.98% in the U.S. (ACS, 2009-13). Additionally, 35.14% of the population over the age of 25 have an Associate's level degree or higher, which is the same as the percentage in Pennsylvania and is lower than the percentage in the U.S. (36.65%) (ACS, 2009-13).

Our 2016 community survey data revealed that the highest percentage of respondents in the St. Luke's Anderson service area either reported having education beyond high school (69.6%) or had a high school diploma or GED (19.8%). As evidenced by the distribution in the graph below, we can see that there is considerable variation in educational attainment within the St. Luke's Anderson service area. This is important to take into consideration when addressing the health needs of our service area, since education has been noted to influence health behaviors and health status.
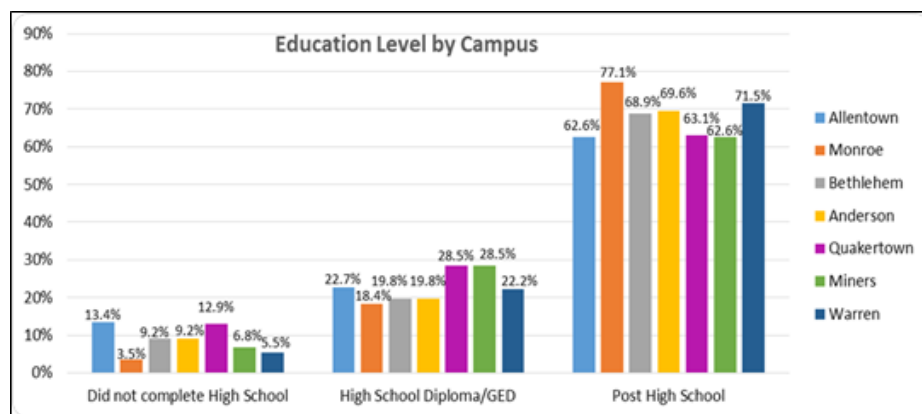

Language barriers were recognized as a barrier to improving overall access to care for children and adults, because many patients have trouble communicating with their healthcare

professionals. The population with Limited English Proficiency is represented by the percentage of the population over the age of five that speak a language other than English at home and speak English less than "very well." For the St. Luke's Anderson service area, the percent of the population with limited English proficiency (LEP) is 4.53%, as compared to 3.92% of the Pennsylvania population and 8.63% of the total U.S. population (ACS, 2009-13). The focus group suggested that there should be support services to help the Hispanic and Latino populations who have trouble communicating with doctors. In addition to that, the focus group members said that parents should be educated about health issues and health terminology so that when they do go to the doctor they can receive the most benefit from their visit. The focus group members also identified cultural beliefs of different groups as a barrier to care, because different cultural groups have varied views about health and treatments.

2. <u>Promoting Healthy Lifestyles and Preventing Chronic Disease</u>

Access to grocery stores has implications for preventing chronic disease and promoting healthy lifestyles, because people must eat healthy food in order to maintain good health. Access to grocery stores is measured as the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Looking at the rate of grocery stores per population is an important indicator of health because it can show us the level of access that people have to healthy food. This is especially important for child and adolescent health, where healthy eating habits should be introduced at a young age to ingrain healthy eating as an important part of life. In the St. Luke's Anderson service area, the rate of grocery stores per 100,000 population is 15.82, which is significantly lower than the Pennsylvania rate of 21.4 and the U.S. rate of 21.2 (County Business Patterns, 2013). Low food access is a problem because if grocery stores are not within a close distance, people are likely going to fast food establishments or convenience stores as their primary source of food.
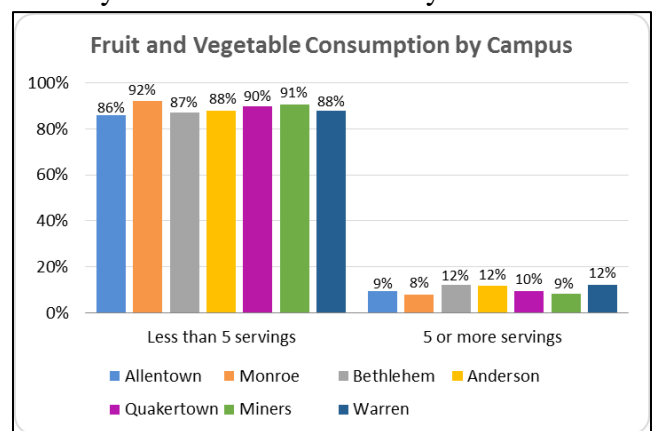
In addition to grocery stores we can also examine the presence of food deserts. This map shows the regions of Easton that are considered food deserts and have low vehicle access or low access to grocery stores (or both). According to the United States Department of Agriculture (USDA), a food desert is a place in which people do not have easy access to fresh
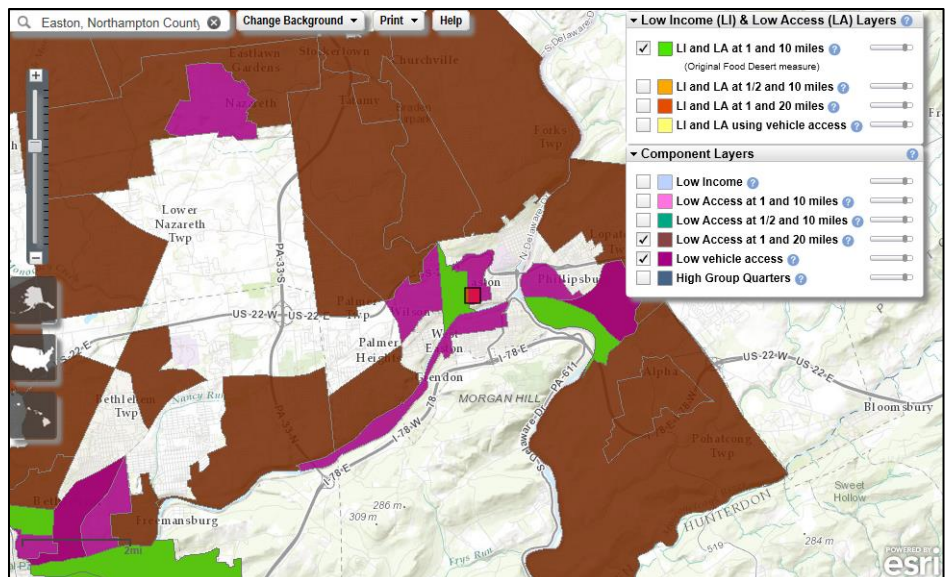
and healthy food, resulting in much of their food coming from fast food restaurants and convenience stores. Looking at the food desert map, the green areas show the low income census tracts where a large portion of the residents live 1 mile away (for urban areas) or 10 miles away (for rural areas) from a grocery store. The purple represents areas where a significant number of families do not have a car and live more than half of a mile from the closest grocery store. The brown shows areas where at least 1/3 of the population lives greater than 1 mile (for urban areas) or 20 miles (for rural areas) from the closest grocery store. The map shows that many sections of our service area have low food access at 1 and 20 miles, as well as surrounding areas that are food deserts or have low vehicle access. This means that there is a sizeable population of individuals who do not have cars, and live in areas with low food access, causing it to be nearly impossible to obtain healthy food.

We can also examine food insecurity, which reports people's ability to access food and to be able to live a healthy lifestyle. Food insecurity may also represent an inability to provide all necessities for one's family; therefore people may have to result to buying fast food instead of healthy foods such as fruits and vegetables. In Lehigh County 11.8% of the population is food insecure, in Northampton County it is 11.4%, in Monroe County it is 12.4%, and in Pike County it is 11.4% (Feeding America, 2013). As discussed in the focus group, the Kellyn Foundation and the Two Rivers Health and Wellness Partnership should be utilzied to help improve health education, but providing the actual healthy food is another issue that must be tackled.

After examining access to grocery stores, food deserts, and food insecurity, it is important to look at fruit and vegetable consumption in our service area, since the previously mentioned factors may be limiting people's ability to meet the FDA recommendations for fruit and vegetable consumption. Fruit and vegetable consumption is an important indicator of healthy lifestyles. In Northampton County, Lehigh County, and Monroe County, over 72% of the adults in the population were recognized as having inadequate consumption of fruits and vegetables (BRFSS, 2005-09). The bar graph below from our 2016 survey shows the breakdown by each SLUHN campus in regard to respondents meeting the FDA recommended consumption of fruits and vegetables (five or more servings per day). In the St. Luke's Anderson service area, 12% of respondents were meeting the recommendations for consuming five or more servings of fruits and vegetables per day. 88% of respondents in this service area reported consuming less than five servings a day, with the largest number of respondents reporting consuming one to two servings per day (43%). The low number of respondents consuming five or more servings of fruits and vegetables per day could be related to the issues of grocery store access and food insecurity discussed previously.

Fruit and Vegetable Consumption by Campus

Less than 5 servings: Allentown 86%, Monroe 92%, Bethlehem 87%, Anderson 88%, Quakertown 90%, Miners 91%, Warren 88%

5 or more servings: Allentown 9%, Monroe 8%, Bethlehem 12%, Anderson 12%, Quakertown 10%, Miners 9%, Warren 12%

Legend: Allentown, Monroe, Bethlehem, Anderson, Quakertown, Miners, Warren

In terms of fruit and vegetable consumption, the members of the focus group pointed to access to these healthy foods as a main barrier to promoting healthy lifestyles. St. Luke's Rodale Institute Organic Farm at the Anderson Campus and other community gardens are great for producing fresh vegetables, but more needs to be done to get this food to the community. The focus group members also said that the Two Rivers Health and Wellness Partnership was recognized as an asset to improving healthy lifestyles, such as the food trucks that deliver fresh produce as well as the greenhouses and hydroponic gardens sponsored by Lafayette College. Additionally,

Servings of Fruits and Vegetables Per Day Anderson

cooking lessons for families via the United Way was cited as another way to improve healthy eating behaviors. Overall, the focus group members said that there is not enough shared data on food access and insecurity, so more information must be collected so that it can be determined where food services are needed the most.
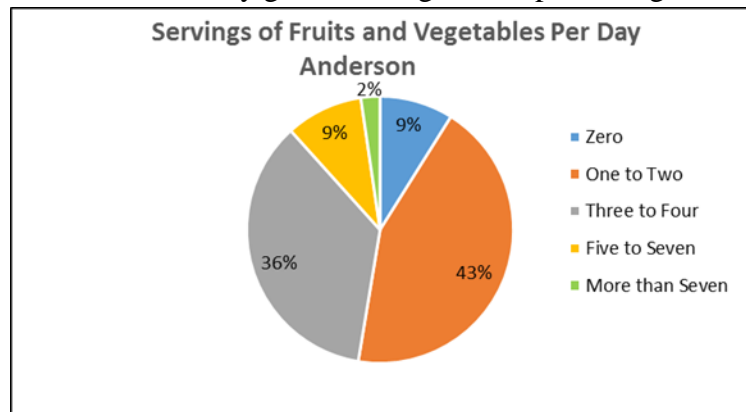
Lack of physical activity among community members is another major barrier in promoting healthy lifestyles and preventing chronic disease. Consistent exercise has been shown to improve physical and mental health, and is important in decreasing rates of obesity and cardiovascular problems. According to the National Center for Disease Control Prevention and Health Promotion (2012), 24.6% (Northampton County), 21.4% (Lehigh County), and 23.8% (Monroe County) of the adult population reported taking part in no physical activity. These percentages are similar to the percent of the population reporting no physical activity in Pennsylvania (22.9%) and the U.S. (22.6%). From our 2016 community survey, we found that in the St. Luke's Anderson service area 22% of respondents reported exercising no times per week, which is similar to the percentages seen for the counties listed above. Although nearly half (45%) of respondents reported exercising more than three times per week (including three to four days and five or more days), this still means that the other half of respondents are not exercising as much and may not be engaged in enough physical activity to be healthy. The Healthy People 2020 target recommends that adults should be exercising 150 minutes per week, an average of 30 minutes per day for five days a week. The target for 2020 is that 47.9% of adults reach this benchmark and currently, only 16% of survey respondents in the whole SLUHN service area are exercising at least five times per week.


Days of Exercise Per Week Anderson
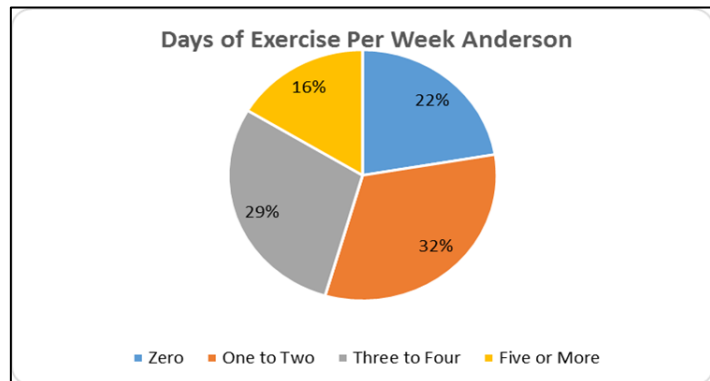
To gain a better sense of what physical activity looks like in our region, we can examine the Robert Wood Johnson 2015 County Health Rankings, which has an access to exercise opportunities indicator. This indicator measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. The Pennsylvania state average is 85%, with Lehigh County and Northampton County having higher percentages of access to exercise opportunities. Although it seems that there are many exercise opportunities, the general lack of usage is likely indicative of a barrier to physical activity, whether this is due to long work hours, community safety issues, cultural barriers to exercise, or lack of knowledge about the importance of exercise.

Another important topic within the health category of promoting healthy lifestyles and preventing chronic disease is obesity. Obesity is a very prevalent health issue in our community, and according to the State of Obesity (a project of the Trust for America's Health and the Robert Wood Johnson Foundation), rates in Pennsylvania are on the rise. Pennsylvania is ranked 20th amongst the

50 states (where 1 is the most obese state and 50 is the least obese state). Due to the limited access to grocery stores that serve healthy foods (such as fresh fruits and vegetables) and high poverty levels, which restrict families to buying cheaper counterparts such as fast food, obesity is growing quickly. Obesity is also a risk factor for other health issues such as diabetes, high blood pressure, some cancers, heart disease, stroke, and breathing problems. Obesity is determined by Body Mass Index (BMI), which is an indirect measure of an individual's body fat. For a person who has a normal weight the BMI range is from 18.5-24.9, for someone who is overweight the range is 25-29.9, and for someone who is obese the BMI is 30.0 or more (CDC, 2015). In the St. Luke's Anderson service area, 27.6% (Northampton County), 28.1% (Lehigh County), and 26.1% (Monroe County) of adults in the population are obese. According to our 2016 survey data, 37% of respondents in the St. Luke's Anderson service area are obese and 31% are overweight (BMI was calculated using respondent's weight and height).

This map shows a breakdown by the counties in Pennsylvania to show the percentage of the counties that are obese, where the percentage of the population that is obese within each of the counties is represented by white/light blue (lower percentages) and dark blue (higher percentages). The focus group members
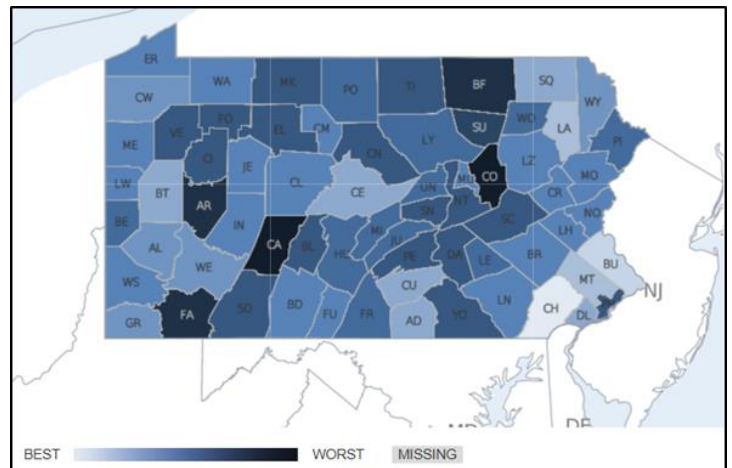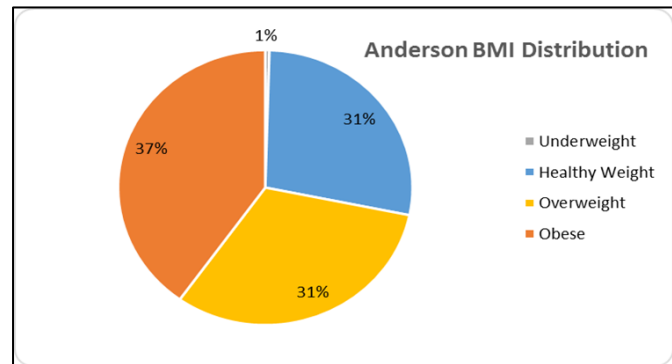
recommended emphasizing the partnership with the Kellyn Foundation to continue and sustain promoting healthy lifestyles through education programs. School field trips to Wegman's (a grocery chain) were also discussed as a program that should be continued in order to teach students about healthy eating.

While focusing on programing is important in reducing levels of obesity, results from our 2016 community survey identified several demographic characteristics that were linked with a respondent's BMI. For SLUHN as a whole, amongst all respondents with a morbidly obese BMI, the largest percentage was evident among those earning less than $14,999 per year (19.8%). Conversely, only 8.9% of the morbidly obese respondents reported making more than $100,000 per year. The income range with the highest percentage obesity was $15,000 - $24,999 at 44.3%, while the lowest percentage of obesity was in the $100,000 or more range at 31.0%. This is interesting because it shows us that there is an association between level of income and BMI, which reaffirms that the social determinants of health (such as income) must be taken into consideration when determining how to improve the health of our community. We also examined education, where 45.9% of those who did not receive a high school degree reported BMIs in the obese category and 41.7% of those who attained a high school diploma or GED reported BMIs in the obese category. 36.5% of those who completed education beyond high school fell into the obese category. This shows us that lower levels of educational attainment may be related to obesity. Making connections to the social determinants of health related to obesity is important so that a multifaceted approach can be taken to reduce rates of obesity in our service area.

Diabetes is a prevalent chronic health condition, especially due to increasing rates of obesity, so it is important to examine it in more detail. Diabetes is a disease where a person's blood glucose levels are too high. Type I diabetes (juvenile diabetes) is generally found in children under the age of 20, where the pancreas does not produce enough insulin. Type II diabetes is of great concern in our community served, because type II can be caused by being overweight or obese. Diabetes can also cause other health issues such as blindness, kidney disease, foot problems, and heart disease. There are treatments for type II diabetes including medications, better diet, and exercise, but some people with type II diabetes have it for life. The percentage of adults over the age of 20 in the St. Luke's Anderson service area who have ever been diagnosed with diabetes ranges from 7.5% in Warren County to 9.4% in Lehigh County (National Center for Chronic Disease Prevention and Health Promotion, 2012). According to the National Diabetes Statistics Report (2014), diabetes was the 7th leading cause of death in the United States in 2010, but it is likely that many more deaths resulted from diabetes but were not reported as such. This happens because of the various co-morbid conditions associated with diabetes. From 2010

American Population With Diabetes
(Millions of People)
2010: 25.8
2012: 29.1
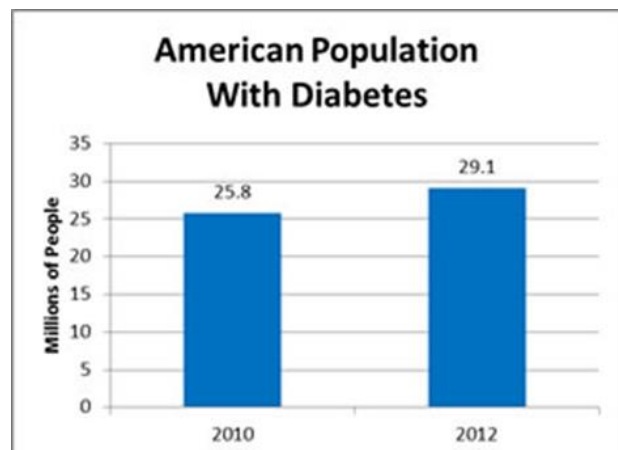
to 2012 the rate of diabetes in the United States has risen from 25.8 million to 29.1 million people, this current statistic represents 9.3% of the U.S. population. The number of people in the U.S. over the age of 20 who were pre-diabetic also increased from 2010 to 2012, from 79 to 86 million people (National Diabetes Statistics Report, 2014).

Tobacco usage is another important factor to consider when discussing promoting healthy lifestyles and preventing chronic disease, because smoking contributes to chronic diseases such as cardiovascular disease and certain cancers. In order to promote healthy living, cutting down on tobacco usage within the community is a necessity. In the St. Luke's Anderson service area, the percent of the population that smokes cigarettes ranges from 18.1% (Northampton County) - 23.4% (Monroe County) (BRFSS, 2006-12). These

Smoking by Campus

Healthy People 2020 Target: 12% of adults smoking

Allentown 17.2%, Monroe 11.8%, Bethlehem 14.5%, Anderson 14.5%, Quakertown 15.3%, Miners 15.3%, Warren 16.3%

percentages are comparable to the percentage of smokers in Pennsylvania (20.8%) and the U.S. (18.1%) (BRFSS, 2006-12). According to our 2016 survey data in the bar graph, 14.5% of respondents in the St. Luke's Anderson service area reported that they currently smoke. This percentage is slightly above the Healthy People 2020 goal of having only 12% of adults smoking, so there are still improvements to be made in terms of reducing smoking in our service area.
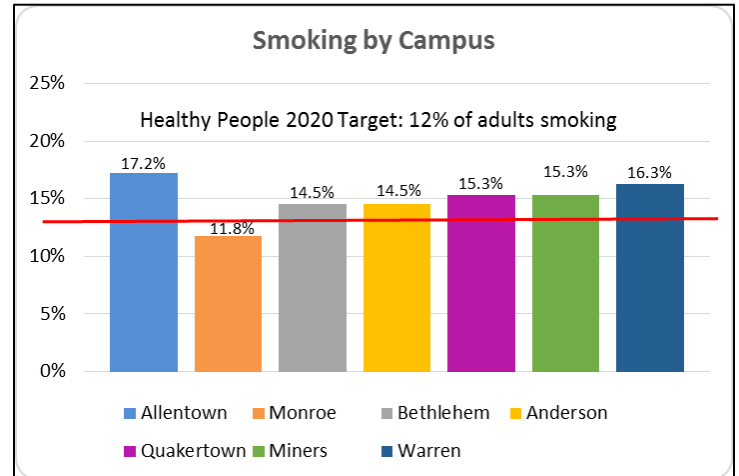
3. Improving Mental/Behavioral Health

In 2008, only 13.4% of adults in the U.S. received care to treat a mental health issue (National Institute of Mental Health). Additionally, greater than half of those who have problems with drugs and one third of those with a substance abuse problem have some sort of mental health problem (National Alliance on Mental Illness- Dual Diagnoses). To improve mental wellness of people in the community, the stakeholders in the focus group mentioned the partnership with the Bangor Area School District, Two Rivers Health and Wellness Foundation, and the Slater Family Network, who together run the clinic downtown to provide mental health support to parents and children. In this section we will look at what mental health looks like in the St. Luke's Anderson service area and what is being done or can be done to improve the mental well-being of community members.

By first examining the number of days of poor mental health people report, we can begin to assess the mental health status of the St. Luke's Anderson service area. According to our 2016 survey data, in the St. Luke's Anderson service

Days of Poor Mental Health Anderson

1 to 2 days 23%, 3 to 7 days 9%, 8+ days 6%, 0 days 61%
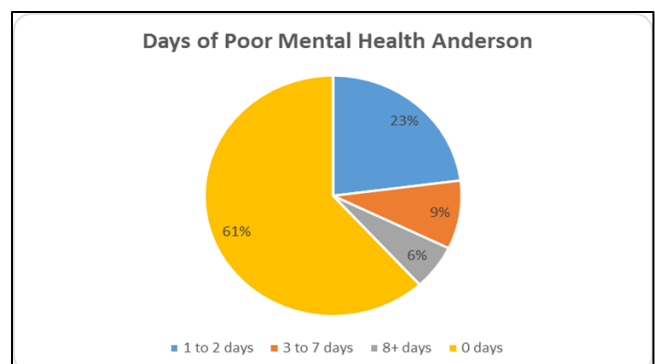
area, 38% of respondents reported missing one or more day of normal activity in the past month due to poor mental health. (This percentage includes those who missed one to two, three to seven, or eight or more days due to poor mental health). Those who are missing normal activity due to poor mental health may not be receiving any type of treatment for their condition, which is important to take into consideration when reading the rest of this section about the other issues related to mental health within our service area.

Access to mental health professionals is another indicator to examine in order to understand the availability of mental health services in an area. This indicator from the Robert Wood Johnson 2015 County Health Rankings is reported as the ratio of the population within the county to the number of mental health professionals in that region. In this case, a better ratio is represented by a smaller number in the population per 1 mental health provider. The population per provider in our counties are 647:1 (Lehigh County), 592:1 (Northampton County), and 2,314:1 (Carbon County). These ratios are worse than the top performing counties in the U.S. (386:1), and only Northampton County has a better ratio than seen in Pennsylvania (623:1). In terms of increasing mental/behavioral health services for the elderly, the focus group members identified the Episcopal Apartments of the Slate Belt as a resource to utilize. There are mental health counselors who meet with seniors within the building, so there is easy access to the mental health professionals. For youth and parents, the focus group recommended that mental health counseling could be addressed within the schools (mostly directed at the community schools, i.e. the Bangor Area School District), since there may be a stigma associated with going to a mental health professional at a traditional practice.

It is important for community members to have social or emotional support in order to feel confident getting through everyday problems; more importantly, social and emotional support is vital to maintaining positive mental health. Additionally, if we are able to indicate whether certain communities are lacking in emotional support or have minimal social associations, we can address these shortcomings in programming and care. The indicator looking at lack of social or emotional support looks at adults over the age of 18 who expressed that they do not receive enough support the majority of the time. The percentage of those who say they do not receive enough emotional support ranges from 17.9% in Lehigh County to 21.9% in Northampton County. The Pennsylvania state average is 20.9%, the national average is 20.7% (BRFSS, 2006-12).

As discussed previously, unemployment and poverty are two barriers to accessing care, and they are also important risk factors to take into consideration when examining issues of mental health. Not having a stable job and the stress of providing for oneself and one's family may lead to poor mental health. The focus group members said this is especially an issue for mental health services, because these services tend to be costly and even if people are covered by some sort of subsidized insurance it may be turned down. The focus group members discussed the high financial burden of receiving mental health care because of high deductibles or co-payments for

behavioral health services and lack of insurance coverage.

It is also important to discuss excessive drinking and substance abuse disorders, since they are recognized as comorbidities with mental health issues. There are also many cases where mental health issues go undetected because alcoholism and substance abuse issues may overshadow these issues. According to the Robert Wood Johnson 2015 County Health Rankings, the Pennsylvania state average for excessive alcohol consumption was 17%, Lehigh County's average was 18% and Northampton County's average was 17%. According to our 2016 community survey, in the St. Luke's Anderson service area, 69% of respondents reported no episodes of binge drinking in the past month, however, 31% reported one or more episodes in the past month. Additionally, 19% reported one or two episodes of binge drinking and 12% reported three or more episodes of binge drinking. For the network as a whole, we examined the association of gender to binge drinking. We found that among those who reported no episodes of binge drinking, 74.4% of the respondents were female and 63.2% were male.
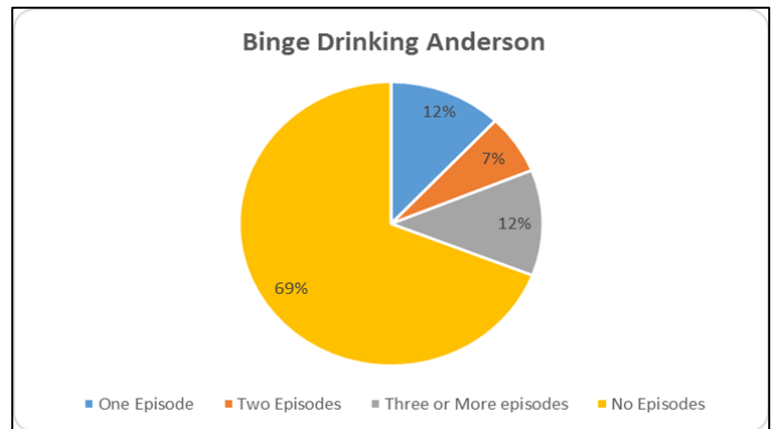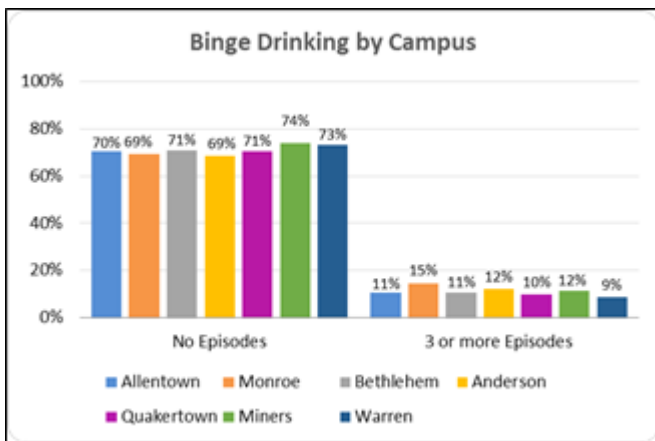
4. Improving Child and Adolescent Health

If children are living in poverty, providing the bare necessities may be the first priority for parents, rather than healthcare. 34.53% of children in the St. Luke's Anderson service area are living in households with income below 200% of the Federal Poverty Level (FPL) (ACS, 2009-13). This percentage is less than the percentages seen in Pennsylvania (38.97%) and in the U.S. as a whole (43.81%) (ACS, 2009-13). Living at or below 100% of the federal poverty level for a family of four was $24,250 in 2015 (U.S. Department of Health and Human Services, 2015). Members of the focus group discussed the need to focus on eliminating poverty first and foremost, before other issues surrounding healthcare are addressed. They said that basic needs such as food, shelter, and employment should be focused on in order to improve future health.

Along with poverty, lack of insurance coverage is another issue that may prevent children from receiving proper care. In the St. Luke's Anderson service area, 5.59% of children under 19 are uninsured, compared to 5.55% in Pennsylvania and 7.51% in the U.S. as a whole (Small Area

Health Insurance Estimates, 2013). Lack of insurance coverage is a barrier to receiving healthcare and may also lead to people not seeking care because they cannot afford the out of pocket costs.

Education is recognized as an important determinant of health, where higher education is linked to involvement in less risky health behaviors and better overall health status. According to the Easton Promise Neighborhood Environmental Scan, there are 10 schools in the Easton Area School District with a total of 8,938 students served. Below is a chart that shows the percentage of children in some of the Easton schools that are economically disadvantaged, are English Language Learners, or are in the special education programs. This shows that there are students who have varied socioeconomic statuses, language differences, and learning abilities that may impact their overall education. These three categories of students and their families represent vulnerable groups who may have trouble navigating the healthcare system due to their status.

	Economically Disadvantaged	English Language Learner	Special Education
Cheston	74.36%	6.96%	15.78%
Forks	14.59%	1.89%	8.65%
March	54.62%	6.86%	5.80%
Palmer	26.24%	3.19%	11.17%
Paxinosa	84.21%	14.04%	14.91%
Shawnee	16.93%	1.78%%	10.51%
Tracy	19.15%	1.24%	9.20%

For Easton Area High School, the percentage of students at or below basic scores on the Keystone Exams was relatively high, with 55% of the students at or below basic for math, 37% for reading, and 66% for science (Easton Environmental Scan, 2014). The Promise Neighborhood focuses on nurturing children when they are very young by having them in pre-school programs, and continue this emphasis on education throughout their years in the school system, hoping to improve their academics and future life prospects. Schools are a great resource to utilize in teaching children about healthy eating and exercise, drug and alcohol abuse, as well as issues regarding mental health. The Easton Promise Neighborhood is a great resource to utilize because of their growing impact and connection with the local schools.

In our service area there is also the Bangor Area School District, located in the Slate Belt of Northampton County. Bangor Middle School and DeFranco Elementary are community schools, which mean they provide comprehensive services for students and their families in order to promote mental, physical, and emotional well-being. This school district is located in one of the more rural areas that St. Luke's serves. St. Luke's Anderson is involved in the "Adopt-A-School Program", at all schools in the Bangor Area School District in order to better the health of the

students. Services and programs provided through this Adopt-A-School initiative include behavioral health services, other health services (medical, dental and vision), Tail on the Trail, as well as literacy and nutrition efforts.

Free or reduced lunch eligibility is determined based on income eligibility guidelines set forth by the USDA. Within the St. Luke's Anderson service area, 43.63% of children are eligible for free or reduced lunch, as compared to 43.58% in Pennsylvania and 52.35% in the U.S. as a whole (NCES- Common Core of Data, 2013-14). According to the Easton Promise Neighborhood Environmental Scan, a total of 44.36% of students in the Easton Area School District are currently enrolled for free and reduced lunch, and in the Paxinosa and Cheston schools these percentages are nearly double (82.69% and 77.93%, respectively). If children are eligible for free or reduced lunch this means their family income is sufficiently low, which may mean there is limited income to buy enough food at home or to pay for other things such as healthcare.

Looking at youth and adolescents health habits are important because they tend to carryover from childhood and adolescence into adulthood. Additionally, if we can identify what risky health behaviors are occurring among youth, we can target these behaviors and determine how to reduce their prevalence. The Pennsylvania Youth Survey (PAYS) looks at youth's attitudes, knowledge and behavior regarding drugs and alcohol. In 2013, the most used "gateway substance" was alcohol, with 46.5% of students in Northampton County having consumed alcohol at all during their life. Binge drinking was reported by 7.5% of the students who live in Northampton County, which is better than the state average of 9.7%. Marijuana was the second most popular substance tried, with 18.6% of students having tried it at some point during their life. In terms of prescription drug use, narcotic prescription drugs (i.e. pain management drugs) was reported as being used by 7.5% of students and prescription tranquilizers (i.e. sleep inducers, anxiety medication) was used by 3.7% of students. Amongst students in Northampton County, a staggering 47.5% of students in 12th grade said they have texted while driving before. In terms of mental health, 34.9% of students in Northampton County reported feeling "depressed or sad MOST days". Along the same lines, 17.1% of students reported that they strongly debated committing suicide. Overall for youth healthy lifestyles and behaviors, the focus group members discussed the issue of easy access to drugs and alcohol. They indicated that the schools should be used as an important asset to teach students about positive health behaviors.

5. Improving Elder Health

Elder health is important to address because the elderly represent a very vulnerable population, who may have trouble navigating the healthcare system. We can see through America's Health Rankings that Pennsylvania ranks 25th out of 50 for elder health, placing it squarely in the middle of all of the states within the U.S. The main challenges that Pennsylvania faces in preserving the health of the elderly are the high prevalence of obesity, the lack of physical activity, and the low prevalence of high quality nursing home beds (America's Health Rankings, 2015). There are other demographic and socioeconomic health issues that influence elder health,

which will be discussed below. The focus group recognized the NICHE program (Nurses Improving Care for Health System Elders) as a program to build upon. In NICHE, nurses are trained about how to care for geriatric patients and what their specific needs are. Additionally, geriatric sensitivity programs have been implemented, which puts doctors and nurses in the shoes of their patients in order to help better understand what they are going through. One barrier to providing care to the elderly identified by the focus group is that many elderly residents do not know about the services available.

The Lehigh Valley Research Consortium (LVRC) in conjunction with United Way of the Greater Lehigh Valley completed a report on the status of the non-institutionalized elderly population for the Lehigh Valley Alliance on Aging. This report is based on surveys from elderly adults in Lehigh County, Northampton County, and sections of Montgomery County and Bucks County. According to the report, in the year 2010 approximately 15% of residents in Pennsylvania were over the age of 65. In the past 10 years there has been a growth of 66% in the elderly population over the age of 85 in Pennsylvania. The U.S. Census Bureau Population Estimates and Projections (2014) said the elderly population in the United States could rise to 83.7 million by the year 2050. With an increase in the aging population come specific health needs that must be addressed, such as mental health, accidents, and chronic disease. The focus group participants discussed how there will be a pressing need to improve the efficacy of programs and services because of the impending increase in the size of the elderly population.

The elderly population who are living to be the oldest tend to face more chronic illnesses (U.S. Census Bureau). In the LVRC (2012) report, this is exemplified by the large percentage of the elderly population who report various chronic conditions. The prevalence of diabetes amongst older adults in the Lehigh Valley is relatively high at 23%, which is greater than the U.S. average of 19% and the Pennsylvania average of 22%. Among the most common, the elderly discussed being diagnosed with arthritis (45% of the population), high blood pressure (50%), and high cholesterol (30%) (LVRC, 2012). The graph above exemplifies the breakdown by race, income and gender for
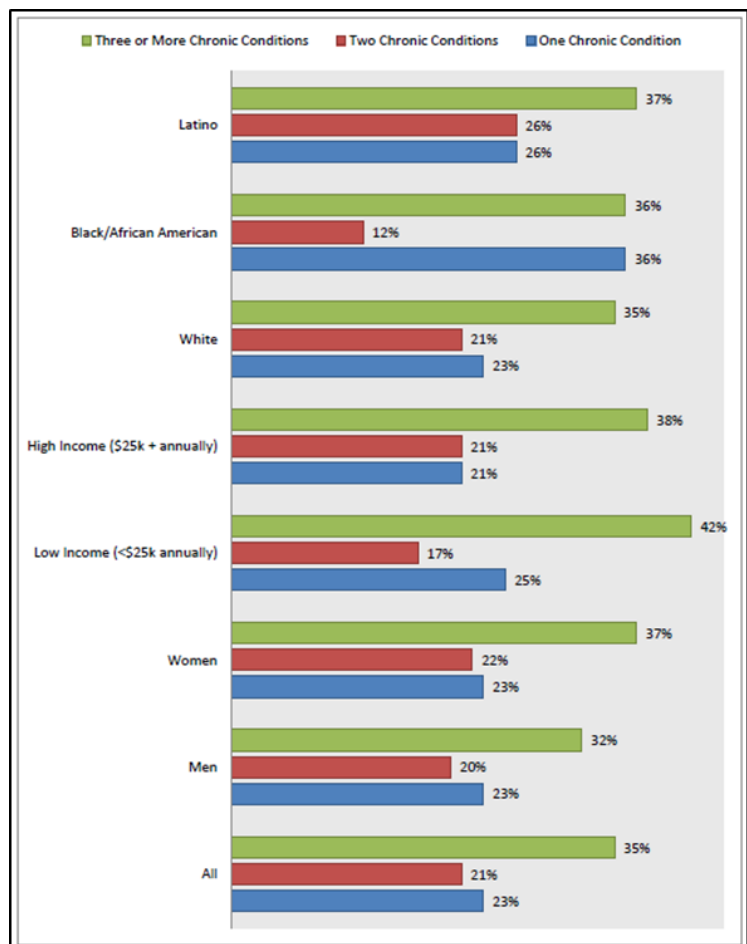
elderly who have one or more chronic health conditions (Lehigh Valley Seniors Healthy at Home Survey, 2014). The green bar represents three or more chronic diseases, the red is two or more chronic diseases, and the blue signifies having one chronic disease.

In our 2016 community survey we looked at the variety of different health conditions present within each of the SLUHN hospital campuses, but this was not broken down by age. A high prevalence of elevated blood pressure, high cholesterol, and arthritis were identified in the St. Luke's Anderson service area (for the whole respondent population-not broken down by age), which happens to correspond with the chronic disease conditions listed for the elderly in the Lehigh Valley Seniors Healthy at Home Survey (2014). Additionally, in our 2016 community survey, we looked at preventive health services utilized by respondents. In particular for the elderly, we examined whether or not they received their pneumonia shot. This bar graph below shows that 68.6% of respondents over the age of 65 in the St. Luke's Anderson service area reported receiving their pneumonia shot.
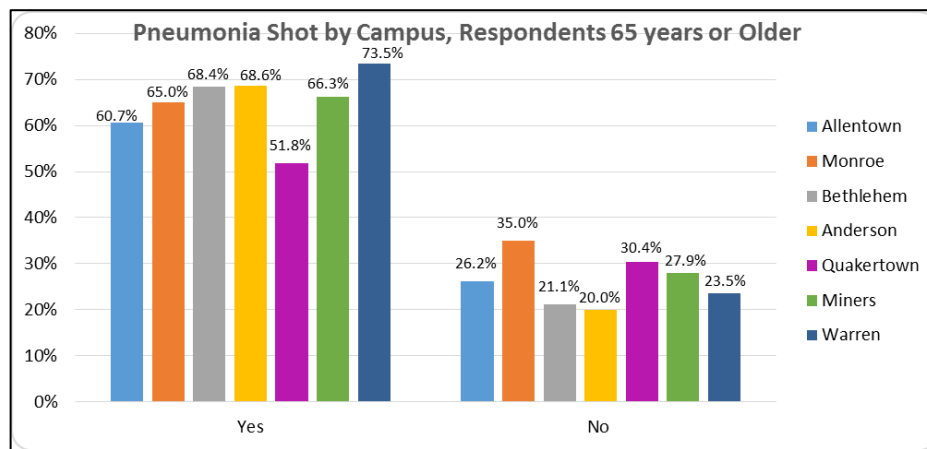

Mental health issues facing the elderly community are vast and many times are overlooked. The LVRC (2012) report identified depression as an issue for the elderly, specifically in nursing home facilities. According to the Centers for Medicare and Medicaid Services 2012, in the St. Luke's Anderson service area, 17.4% of the Medicare recipient population were identified as having depression, which is higher than the percentages seen in Pennsylvania (16.2%) and nationally (15.4%). Social and emotional support has been identified as a way to help improve mental health amongst elderly adults.

Elderly falls have been identified as an issue throughout the country, where the CDC reported that throughout the year one out of three seniors will experience a fall. In the LVRC (2012) report, surveys informed us that in the Lehigh Valley, approximately 22% of the elderly reported falling one or more times in the past three months. The report also found that most of the elderly who needed to be hospitalized for their falls stayed at the hospital for a little over 4 days, and 75% of them required help at home once they were discharged. As evidenced by the bar graph on the following page from the LVRC (2014) report, a relationship was found between the number of falls the elderly reported and the likelihood of hospital admissions in the past year. Falls are

not only dangerous for the elderly, since they may cause serious injuries, but they are also costly to the medical system. Each fall patient costs approximately $234,423 (LVRC, 2012). For these reasons it would be in the best interests of the community as well as hospitals such as ours to help prevent falls amongst the elderly.

**Occurrence of Falls and Admittance to Hospital in Past Year**
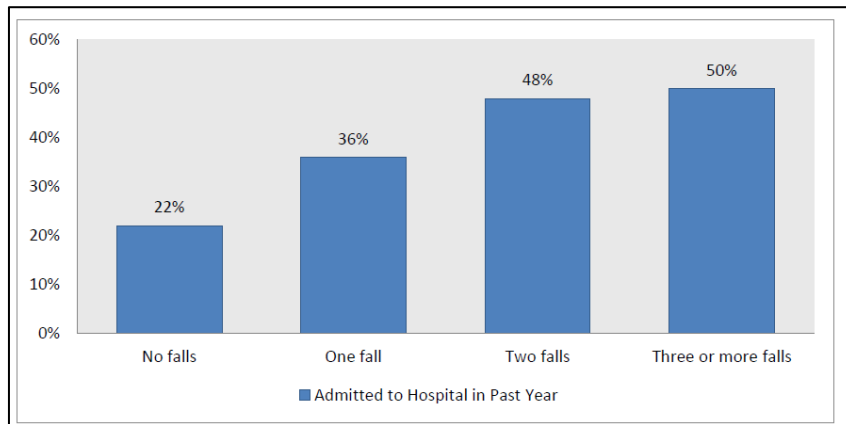
Approximately 6,000 individuals in the elderly population within the Lehigh Valley are living at or below 100% of the FPL. Older adults have to work longer to cover costs of living and to cover medical costs, since more health issues arise as they age. For an elderly individual living alone, 200% of the poverty level is $21,660. Examining the level of poverty at this level shows us that more than 25% of the elderly living in the Lehigh Valley have extremely low incomes (LVRC, 2012).

Percentage of Older Adults Living in Poverty (2000-2010)

Source: US Census 2010 B19037, self-calculations
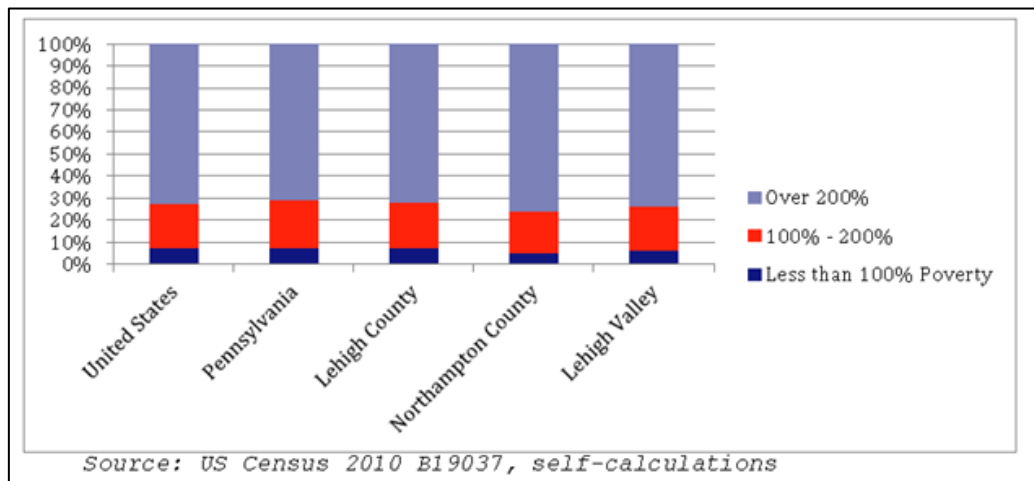
Affordable housing is an issue that is prevalent in the elderly population across the country. The elderly population may want to live on their own, or at least choose where they want to reside as they age. The graph below from the LVRC (2012) report shows that amongst those in the elderly population who rent their homes, for a little more than half of them their housing costs are equivalent to 30% or more of their income. Additionally, if housing costs become too high the elderly may have to depend on their children for help, putting financial and emotional strains on the senior and the family.

Lehigh Valley Older Adult Householder Costs as a Percent of Income

Source: U.S. Census Bureau, 2010 American Community Survey B25093 & B25072
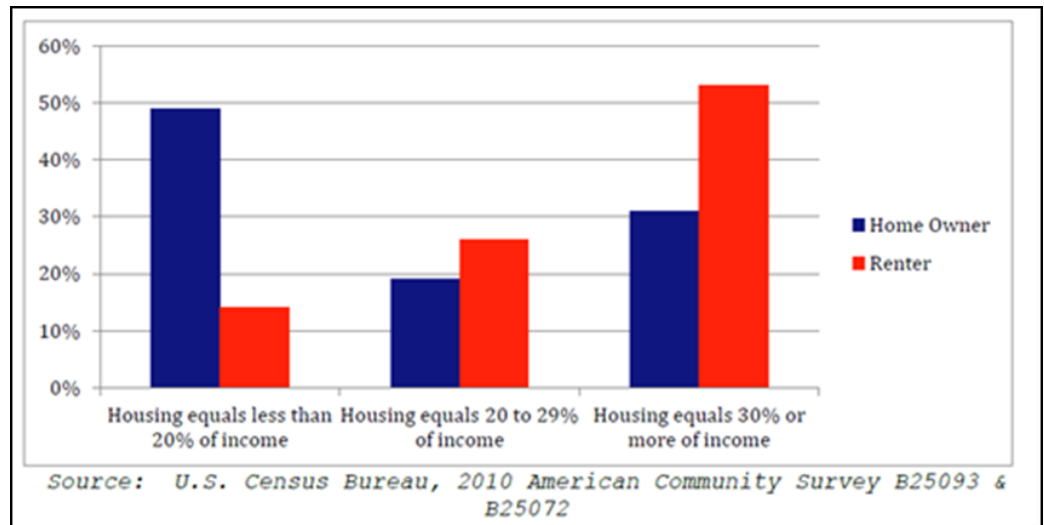
Lastly, the focus group members discussed other issues in providing care to the elderly. One issue was the time commitment associated with geriatric evaluations. These are in depth evaluations, so much time is needed for adequate completion. Additionally, there is a need for home visits by physicians so patients who are physically incapable of leaving their homes can receive care. On a more analytical level, the focus group members discussed how it is hard to measure the savings that result by providing preventative services for seniors, therefor it is hard to visualize the cost effectiveness of these programs.

III.   Conclusion

Improving access to care/reducing health disparities, promoting healthy lifestyles and preventing chronic disease, improving mental/behavioral health, improving child and adolescent health, and improving elder health are the five main health categories that were identified as areas for improvement through our community survey, our key stakeholder focus groups, and secondary data analyses. We already have many great services available to help improve health in our region, but a concentrated and sustained effort will be necessary amongst all those who contribute to our community's health to create new programs and continue existing programs to try even harder to address the current concerns. The needs discussed within the health categories

will serve as our guide in creating a campus specific implementation plan to best address the needs of the St. Luke's Anderson service area.

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Appendix A: Anderson Stakeholder Focus Group Overview

Anderson Campus Priority Areas

1. Child and Adolescent Health
2. Mental and Behavioral Health
3. Promoting Healthy Lifestyles and Education
4. Improving Access to healthcare
5. Elder Health

I. Priority Area Specific Questions

1) Child and Adolescent Health

a. What strengths and resources can be built upon and utilized to improve *child and adolescent health*?

Several stakeholders in the group decided that child and adolescent health could be improved upon by better utilizing the schools and school nurses in order to coordinate children's care. Increased use of the mobile vans was also suggested. Schools are an essential entry point for children to receive healthcare, especially for basic needs which are addressed by use of the mobile vans. Unfortunately, in the Bangor school district this van only comes once a month and only sees the older students.

b. What are the barriers and challenges that our community faces in improving *child and adolescent health*?

Transportation has been a huge issue in connecting children and adolescents to care. The clinics that these families are expected to go to are in downtown Easton, so for families who do not have cars or are unable to access public transportation this is an issue. A partnership with LANTA is beginning to form, where they are now recognizing the needs of the families in this area. There is a bus driving families directly to the offices for a low fare, but there needs to be a way to connect families to this service as well as work on the availability and timing of service.

Another challenge is the language barrier and the limited health literacy of parents. The main issue that stems from this challenge is that parents are not able to communicate with and understand doctors. Many parents are unlikely to bring their children to the doctor because they will not understand what the doctor is saying. This issue is related to both a language barrier and education barrier, since a large percentage of parents in the Bangor school district never graduated from high school. There is also a sense of mistrust, where many families in different cultures have had negative experiences with receiving care in the past, so they are hesitant to believe in these doctors. There needs to be support services to help the Hispanic and Latino populations who have trouble communicating with doctors. In addition to that, parents need to be educated about health issues and health terminology so that when they do go to the doctor they can receive the most benefit from their visit.

One stakeholder pointed out that parents in these families are mainly focused on providing the basic necessities to their families such as food, shelter, and clothing, so healthcare is pushed to the side as non-essential. Many parents work multiple jobs and even if they can afford to bring their children to the doctor and have access to the available transportation, they do not have the time.

Lastly, a major barrier resides in differing cultural beliefs. There are many different aspects of culture that influence parent's decisions regarding children's healthcare. Some of these issues include lack of trust of medical professionals, fear of medical procedures, and the belief that children are strong and can deal with these health issues, because when they were younger these parents did the same.

2) <u>Mental and Behavioral Health</u>

  a. **What strengths and resources can be built upon and utilized to improve *mental and behavioral health*?**

Unfortunately, the key stakeholders said that there are not many current strengths or resources available to improve mental and behavioral health. A stakeholder from the Bangor school district mentioned one valuable resource that they have, which is their relationship with the Two Rivers Health and Wellness Foundation. The Two Rivers Health and Wellness Foundation helps fund a clinic in the down town area to provide mental health support to parents and children. One last resource mentioned is the Episcopal Apartments of Slate Belt, where seniors can sign up to meet with a mental health counselor within the apartment building.

  b. **What are the barriers and challenges that our community faces in improving *mental and behavioral health*?**

One important challenge the stakeholders recognized in this area is the financial burden imposed by mental health services. These issues include the need for funding, high deductibles or co-payments for behavioral health services, and patients' lack of insurance coverage.

Another important barrier recognized is the stigma associated with mental illness as well as denial of having a mental health problem. This is especially prevalent when it comes to children who may have mental health issues, where parents are not believing that a child so young actually has a mental health problem and therefor do not address the issue.

Lastly, a major barrier is the lack of access to mental health services. Some stakeholders suggested the employment of mobile services, so that transportation or not knowing where to go to receive services is no longer an issue.

3) Healthy Lifestyles and Education

   a. What are the strengths and resources can be built upon and utilized in order to promote *healthy lifestyles and education*?

There were many resources that stakeholders identified that can help promote healthy lifestyles and education. The partnership with the Kellyn Foundation is vital because of their funding of multiple healthy lifestyle programs such as their educational programs about farm to table eating. Additionally, they partner with the Two Rivers Health and Wellness foundation to run the fresh food truck that brings fresh produce to underserved areas 6 days a week.

In the Bangor school district there are new greenhouses, hydroponic gardens, and fish tanks sponsored by Lafayette College. Community members can come in and receive vegetables, as well as gain an understanding of how to cook them through cooking lessons funded by United Way.

Another important resource that can be built upon to improve healthy behaviors and education are the school fieldtrips to Wegman's grocery store. On these field trips 3rd and 4th graders are exposed to fresh fruits and vegetables and they learn about healthy recipes that they can try out at home. Children can also learn about healthy snacks through the Cooking Matters Program.

   b. What are the barriers and challenges that our community faces in promoting *healthy lifestyles and education*?

The most important barrier identified here is the access to fresh fruits and vegetable. In many areas there are no local markets within walking distance. There are some farmers markets within the area but many westward residents feel uncomfortable going with food vouchers. Some people who receive food vouchers also may not know where to go or what to do with the vouchers.

An important issue for the stakeholders is that there is not enough shared data on food access and insecurity in the region. If more data were available on specific communities it would help determine where food services are needed the most.

4) Access to Care

   a. What strengths and resources can be built upon and utilized in order to improve *access to care*?

One important resource that can be built upon is the school partnerships through United Way. Another way to improve access to care is by sending people to local schools to receive care from either school nurses or residents from local hospitals. It may be easier for community members to get to the schools and they may also feel more comfortable in this setting.

b. **What are the barriers and challenges that our community faces in improving** *access to care*?

Unfortunately stakeholders agreed that there were more barriers to accessing care than resources to build upon. One challenge that must be addressed is the need to build relationships and trust with community members. For example, insurance enrollment night was an event where community members could sign up for health insurance where babysitting and transportation services were offered so that parents could attend. Unfortunately, people did not understand the true intent of the program and did not trust the providers, so they did not attend the event. One on one communication has been effective for enrollment, but this is timely, cost ineffective, and there are huge portions of the underserved population who are not reached.

This general mistrust of business and government should be prompting local medical providers and healthcare facilities to better know their community. Some stakeholders suggested that there is a need to change the marketing of programs, because these programs identify people as poor and in need of assistance, which has a certain stigma attached to it. Along with a change in marketing strategy, people running these programs need to build personal relationships with the community members to show that they truly care, and are not just there to bolster their own agendas.

One last barrier related to access is the continuum of care. Community members may go to a school clinic or a primary physician, but once they receive a referral or are told to visit a specialist care becomes fragmented.

5) Elder Health

a. **What strengths and resources can be built upon and utilized in order to improve** *elder health*?

The NICHE (Nurses Improving Care for Health System Elders) on Anderson Campus is an important strength to build upon to improve elder health. This program trains nurses about how to care for geriatric patients. There have also been geriatric sensitivity programs where nurses and doctors are put in the shoes of the geriatric patients and are then able to truly see the struggles these patients are facing.

b. **What are the barriers and challenges that our community faces in improving** *elder health*?

Some community members do not know about programs being offered. Many times though they do know about these programs, but they do not know how to access them.

There is a huge time commitment associated with geriatric assessments, where only 3 patients may be seen in one day. Spending a long time with geriatric patients is important because there are important issues to discuss such as available resources and medication management.

There is also a pressing need for home visits by physicians or physician extenders. There are many elderly patients who are physically incapable of leaving their homes, so they are unable to receive the care or resources that they need.

An upcoming challenge is the fact that we may see a doubling of the elderly population in the Lehigh Valley by 2040. Programs and services for the elderly must be addressed now, so that as the aging population increases there is the capacity to care for them.

One last issue is the measurement of savings by providing preventative care to the elderly. Since it is difficult to measure the money that is saved by these programs, it is hard to visualize how these programs are actually cost effective for the future.

II. Non-Priority Specific Questions

1) Do you see any additional emerging community health needs especially among underserved populations?

One issue is preparedness for situations such as natural disasters or an infectious disease outbreak (i.e. Ebola). There must be a focus on how to reach families during these particular crises, and how to deal with these individual issues on a more general level.

Care coordination for seniors also continues to be an issue in the community. There should be programs that can help seniors organize the different services they need so that they are not receiving disjointed care.

A major general issue is funding for grassroots organizations and healthcare programs. Community members trust these organizations so it is of great importance to ensure that programs can be run and services can be utilized as promised.

Other emerging community health needs that were discussed included care of developmentally disabled individuals, programs for young adults coming out of prison, homelessness, and care for veterans.

2) Do you feel that people in the community are fully aware of the healthcare services/options that are available to them? How do they receive information about healthcare services?

All stakeholders believed that people in the community are not fully aware of the array of healthcare services and programs available to them. This can be evidenced by community members' unawareness of the Lanta bus service, where many did not know that this bus service

was even available in the area.

People mostly receive health information from schools, family members, or word from other people within the community. There is a website for school districts with information about healthcare services and events that parents can see. Also, physical fliers are given to students to bring home to their families. Another important channel through which people receive healthcare information is church. The Slate Belt Ministerium is a group of churches that help disseminate information about various health events and programs.

3) **Do you have any recommendations to improve communication about healthcare services?**

The use of social media to improve communication about healthcare services is highly valuable, especially for children and adolescents. Disseminating information through the internet and phone apps would allow health information to reach the younger generation, who could then share this information with their parents.

The utilization of grassroots organizations and local colleges in the area are also very important. There are a large number of people and resources that can be accessed, thereby contributing to the health promotion and education process.

4) **Are there groups who have been identified as underserved with regard to receiving vital information about healthcare services?**

Yes, there are certain groups who definitely are not being reached even though the information is out there. One group in particular is people who have health insurance, but need help utilizing services.

5) **What do you think St. Luke's role should be in improving health and quality of life in the community?**

St. Luke's should continue holding meetings in order to identify what the pressing health needs are within the community. SLUHN should continue its partnership with schools, and possibly even expand because of unmet needs such as mental health services. It is important to continue with SLUHN services, but there is a need to be careful so as not to overextend. It would be problematic if resources were spread too thin, because this may lead to a decrease in the quality of the services offered.

SLUHN should focus on creating programs that do not profile families, but help show that St. Luke's appreciates and is a part of their community. An example of this is the Tail on the Trail program, where employees are involved and out there in the community. This program is of little cost, builds off of grassroots, and strengthens relationships with the community.

6) **What do you see as the top 3 most important needs within our community? Please rank these in order from most to least important, with 1 being the most important need and 3 being important, but perhaps not quite as critical.**

1) Preventative Health and Mental Health (tied for 1st)
2) Elder Health
3) Physical Health

7) **What makes a need greater than the others?**

- The depth and breadth of the problem.
- The amount of resources available to address the need.
- The number of people in the population affected by the issue.

Appendix B: Stakeholder Focus Group Synopsis
Anderson Campus Community Health Needs Assessment

	Strengths	Challenges	Suggestions
Child and Adolescent Health	St. Luke's partnerships with schools Schools are an essential entry point for children to receive healthcare Beginning partnership with LANTA St. Luke's Mobile Youth Van services	Transportation – Easton Clinics too far for those without cars Language and Health Literacy of parents Mistrust when receiving care Families focused on basic needs of food shelter and clothing Cultural beliefs of not needing care	Utilizing the schools and nurses more Increase use of Mobile Vans Use of social media, grassroots organizations & local colleges to improve communications & disseminate health information Involve Children and Youth in assessment
Mental and Behavioral Health	Bangor Family Center cited the Relationship with Two Rivers Health & Wellness for funding of MH programs Episcopal Apartments of Slate Belt where seniors can meet MH provider on site Mental Health on St. Luke's Vans	Lack of funding for MH services; high deductibles, co payments and lack of insurance Stigma & denial of MH issues Lack of access to MH services Substance abuse & addictions	Mental Health Services on Mobile Vans to improve access and transportation Possibly expand St. Luke's programs for unmet needs such as mental health but focus on quality/careful not to overextend
Promoting Healthy Lifestyles and Education	TOT & Partnerships with the Kellyn Foundation & Two Rivers that brings fresh food via mobile van to underserved Cooking lessons and greenhouse at Bangor	Access to fresh fruits and vegetables Lack of shared data on food access and insecurity in the region Lack of knowledge on how/where to use food vouchers for fresh fruit/vegetables	Increased nutrition education, exposure to fresh fruits/vegetables and recipes for students to try at home, cooking programs School Field Trips to Wegmans, Shoprite
Improving Access to Healthcare	School Partnerships with United Way & hospitals Receiving health care at the schools either from school nurses or local hospitals One to one enrollment effective but timely	Mistrust of business and government Lack of attendance at insurance enrollment events even when transportation/babysitting provided Stigma attached those who need assistance Lack of continuum of care Those who have insurance but need help	Community members may feel comfortable accessing health care from a school setting Building trust and relationships with community members as opposed to marketing programs Slate Belt Ministries is a network that can help disseminate health information
Elder Health	NICHE sensitivity programs	Lack of awareness & access of programs for elder health Time commitment associated with geriatric assessments Need for home visits	Providing preventive and care coordination programs for the elderly Adult Day Care Assist the Veteran population

Anderson Focus Group Participant List: Community Stakeholders and Public Health Professionals
Thursday, April 23, 2015
8:00 AM-10:00 AM

	Name	Affiliation/Organization
1.	Deb Bowman	Bangor School District, Community School Director
2.	Bridget Pruett	Bangor School District, Slater Family Network Director
3.	Pastor Mike Poppa	Family Life Community Church
4.	Janet Mease	Two Rivers Health & Wellness
5.	Carolyn Serva	Easton School District, Family Connections Center
6.	Ashely Sciora	Easton School District, Family Connections of Easton
7.	Deirdre Darragh	Easton School District School Nurse
8.	Cassundra Amato	United Way Data Systems Manager
9.	Ammar Sharif	Promise Neighborhood of Easton
10.	John Mehler	Northampton County Area Agency on Aging
11.	Deb Bohr	Northampton Community College, Director of Civic Engagement
12.	Tuesday Smith	SLUHN NICHE, Anderson Campus
13.	Anne Grogan	SLUHN Center for Positive Aging
14.	Kira Bub	SLUHN Marketing Anderson Campus
15.	Ed Nawrocki	SLUHN Anderson President
16.	Darla Frack	SLUHN Anderson VP Patient Care
17.	Rajika Reed	SLUHN Epidemiologist
18.	Dr. Bonnie Coyle	SLUHN Director of Community Health
19.	Rosemarie Lister	SLUHN Anderson Campus Community Health Consultant
20.	Kathleen Lynch	SLUHN Community Health Intern

Appendix C. Community Resources and Programs

St. Luke's Anderson Campus

The following is a list of community resources, which include current partners as well as potential partners or organizations for our implementation plan:

Bethlehem Health Bureau
Northampton County, Department of Human Services
Bethlehem Partnership for a Healthy Community
Bethlehem Area School District
Bangor Area School District
Pen Argyl School District
Easton Area School District
Moravian College
Lehigh University
Lafayette College
East Stroudsburg University
Northampton Community College
United Way of the Greater Lehigh Valley
Two Rivers Health and Wellness Foundation
Auxiliary of St. Luke's University Health Network
Families First, PenArgyl
Family Connection, Easton
Hispanic Center of the Lehigh Valley
Lehigh Valley Research Consortium
Community Action Council of the Lehigh Valley
RENEW Lehigh Valley
Private Industry Council of the Lehigh Valley/PA Careerlink Lehigh Valley
Safe Harbor
Easton, Nazareth and Slate Belt YMCAs
Local Restaurants participating in St. Luke's Heart Smart program
Local grocery stores
Delaware &Lehigh Heritage Corridor
Kellyn Foundation
Buy Fresh Buy Local
Nature Nurture
Wildlands Conservancy
American Diabetes Association, local chapters
American Cancer Society, local chapters
American Heart Association, local chapters
Farmer's Markets
Sodexo
Second Harvest Food Bank
Northampton County MHMR Division
Northampton County Drug and Alcohol Division
Pinebrook Family Answers

Lehigh Valley Mental Health, Inc.
SADD chapters
AA meetings, groups
Valley Youth House
KidsPeace
Center for Humanistic Change
Pinebrook Services for Children
Easton Children's Home
Local Psychiatrists
Local Mental Health Counselors
Turning Point of the Lehigh Valley
Unity House
CONCERN
Crime Victims Council of the Lehigh Valley
Valley Youth House
KidsPeace
Planned Parenthood of Northeastern PA
Private Industry Council of the Lehigh Valley/PA Careerlink Lehigh Valley
Slater Family Network, Bangor
Boys and Girls' Clubs of Easton and Southside Bethlehem
Fund to Benefit Children and Youth
Northampton County Area Agency on Aging
Meals on Wheels
Local Senior Centers
Gracedale
Family Life Community Church
Lehigh and Northampton Transit Authority (LANTA)
Merchants Bank
Northampton County Medical Society Alliance
Promise Neighborhood
Cops n Kids
Pennsylvania Department of Health
Easton Main Street Initiative
Easton Library
Dr. Mary Eck, OD, Bangor Optometrist
St. Luke's Rodale Organic Institute