

Community Health Needs Assessment 2016



*Divine Providence Hospital
Muncy Valley Hospital
Williamsport Regional Medical Center*

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Introduction

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

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

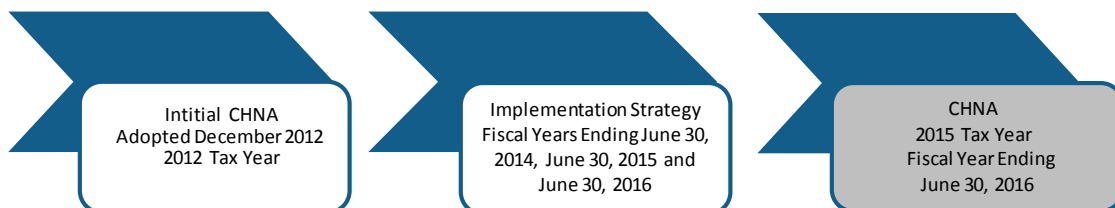
The CHNA must take into account input from persons including those with special knowledge of or expertise in public health, those who serve or interact with vulnerable populations and those who represent the broad interest of the community served by the hospital facility. The hospital facility must make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

This CHNA, which describes both a process and a document, is intended to document Susquehanna Health System's (Health System or Susquehanna) compliance with IRC Section 501(r)(3). Health needs of the community have been identified and prioritized so that the Health System may adopt an implementation strategy to address specific needs of the community.

The *process* involved:

- ✓ An evaluation of the implementation strategy for fiscal years ending June 30, 2014 through June 30, 2016, which was adopted by the Health System board of directors in 2013.
- ✓ Collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, health care resources and hospital data.
- ✓ Obtaining community input through interview meetings and surveys with key stakeholders who represent a) persons with specialized knowledge in public health, b) populations of need or c) broad interests of the community.

This *document* is a summary of all the available evidence collected during the CHNA conducted in tax year 2015. It will serve as a compliance document, as well as a resource, until the next assessment cycle. Both the *process* and *document* serve as the basis for prioritizing the community's health needs and will aid in planning to meet those needs.



Summary of Community Health Needs Assessment

The purpose of the CHNA is to understand the unique health needs of the community served by the Health System and to document compliance with new federal laws outlined above.

The Health System engaged **BKD, LLP** to conduct a formal CHNA. **BKD, LLP** is one of the largest CPA and advisory firms in the United States, with approximately 2,000 partners and employees in 34 offices. BKD serves more than 900 hospitals and health care systems across the country. The CHNA was conducted from February 2016 to June 2016.

Based on current literature and other guidance from the treasury and the IRS, the following steps were conducted as part of the Health System's CHNA:

- An evaluation of the impact of actions taken to address the significant health needs identified in the tax year 2013 CHNA was completed to understand the effectiveness of the Health System's current strategies and programs.
- The "community" served by the Health System was defined by utilizing inpatient data regarding patient origin. This process is further described in *Community Served by the Health System*.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties (see references in *Appendices*). The health status of the community was then reviewed. Information on the leading causes of death and morbidity information was analyzed in conjunction with health outcomes and factors reported for the community by the Center for Disease Control and Prevention (Community Health Status Indicators). Health factors with significant opportunity for improvement were noted.
- Community input was provided through nine key stakeholder meetings and a community health survey. Results and findings are described in the *Community Input – Key Stakeholder Interviews and Survey* section of this report.
- Information gathered in the above steps was analyzed and reviewed to identify health issues of uninsured persons, low-income persons and minority groups and the community as a whole. Health needs were ranked utilizing a weighting method that weighs 1) the size of the problem, 2) the seriousness of the problem, 3) the impact of the issues on vulnerable populations, 4) the prevalence of common themes, 5) how important the issue is to the community and 6) how the issue aligns with the Hospital's strategic plan.
- An inventory of health care facilities and other community resources potentially available to address the significant health needs identified through the CHNA was prepared and collaborative efforts were identified.

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

General Description of the Health System

Susquehanna Health is a four-hospital integrated health system in northcentral Pennsylvania with a total of 332 licensed acute and 259 long-term care beds, along with two skilled nursing units, home care division, physician services and ambulance service. The system's emergency departments have a total of some 79,000 visits each year and its maternity units welcome 1,500 babies annually.

The hospitals included in this report are:

- Divine Providence Hospital
- Muncy Valley Hospital
- Williamsport Regional Medical Center



Susquehanna Health is made up of the three hospitals listed above, plus Soldiers + Sailors Memorial Hospital in Wellsboro, Pennsylvania. While Susquehanna Health is relatively young, the hospitals that form the foundation of the healthcare system are very much a part of the area's rich history, and have a long-standing tradition of providing care to generations of area families.

Mission

To extend God's healing love by improving the health of those we serve

Vision

To create an integrated community health system that delivers world class care.

Values

To carefully place our patients and their families first, share ownership with all of our caregivers and lead with a servant's heart.

Evaluation of Prior Implementation Strategy

The implementation strategy for fiscal years ending June 30, 2014 – June 30, 2016, focused on three priorities to address identified health needs. Based on the Medical Center's most recent evaluation, the Medical Center has made significant progress in meeting their goals and strategies outlined in their 2013 Implementation Strategy as reported below.

Summary of 3-year Results – 2013 Implementation Strategy

Priority 1: Cancer

- Opened new cancer center on the campus of Soldiers & Sailors Memorial Hospital (SSMH) to increase access to cancer services in Tioga County.
- Conducted a transportation study, including five focus groups, to help identify and remedy transportation barriers for cancer patients in Lycoming and Tioga Counties.
- Expanded the program to provide smoking-cessation counseling and low-dose computed tomography lung cancer screenings. The new program follows guidelines established by the National Lung Screening Trial and the Centers for Medicaid and Medicare services and provides lung screening navigators in Lycoming and Tioga counties with resources to help patients and providers determine eligibility, offer complete shared decision making conversations around the benefits and harms of low-dose.

Priority 2: Shortage of Physicians/Access to Specialists

- Conducted a physician needs study to assess and document community need for various physician specialties in Lycoming and Tioga Counties.
- Based upon the physician needs study, the physician recruitment plan was revised as to number and mix of physicians and advanced practice professionals needed.
- Implemented a primary care extended hours clinic in Lycoming County to provide additional patient access for evening and weekend hours.

Priority 3: Mental Health

- Increased the number of mental health providers in Lycoming County by adding additional per diem psychiatrists and an additional certified registered nurse practitioner to increase access to services.
- Implemented telepsychiatry consult services with local nursing homes to increase access to mental health services to nursing home patients.
- Completed plans for mental health facility upgrades and renovations.
- Implemented new group therapy programs to expand access to mental health services.
- Developed a primary care physician (PCP) outreach program to educate PCP's in how to better identify mental health needs among their patients and better understanding the community resources that are available.

Summary of Findings – 2015 Tax Year CHNA

Health needs were identified based on information gathered and analyzed through the 2016 CHNA conducted by the Health System. These identified community health needs are discussed in greater detail later in this report and the prioritized listing is available at *Exhibit 25*.

These needs have been prioritized based on information gathered through the CHNA.

- Substance abuse
- Lack of mental health services
- Heart disease
- Financial barriers/Poverty/Low Socioeconomic
- Cancer
- Lack of preventative care
- Lack of health knowledge/Education
- Obesity
- Lack of primary care physicians

The Health System's next steps include developing an implementation strategy to address these priority areas.

Community Served by the Health System

The three hospitals within this report are located between Williamsport, Pennsylvania and Muncy, Pennsylvania in Lycoming County. Williamsport and Muncy are both approximately 175 miles northeast from Philadelphia, Pennsylvania. Both cities are not close to any major metropolitan area and are accessible by a state highway and secondary roads.

Defined Community

A community is defined as the geographic area from which a significant number of the patients utilizing hospital services reside. While the CHNA considers other types of health care providers, the Health System is the single largest provider of acute care services. For this reason, the utilization of hospital services provides the clearest definition of the community.

Based on the patient origin of acute care inpatient discharges from July 1, 2014, through June 30, 2015, management has identified Lycoming County as the defined CHNA community. Lycoming County represents nearly 94% of the inpatient discharges as reflected in *Exhibit 1* below. The CHNA will utilize data and input from this county to analyze health needs for the community.

Exhibit 1
Susquehanna Health System
Summary of Inpatient Discharges by Zip Code
7/1/2014 - 6/30/2015

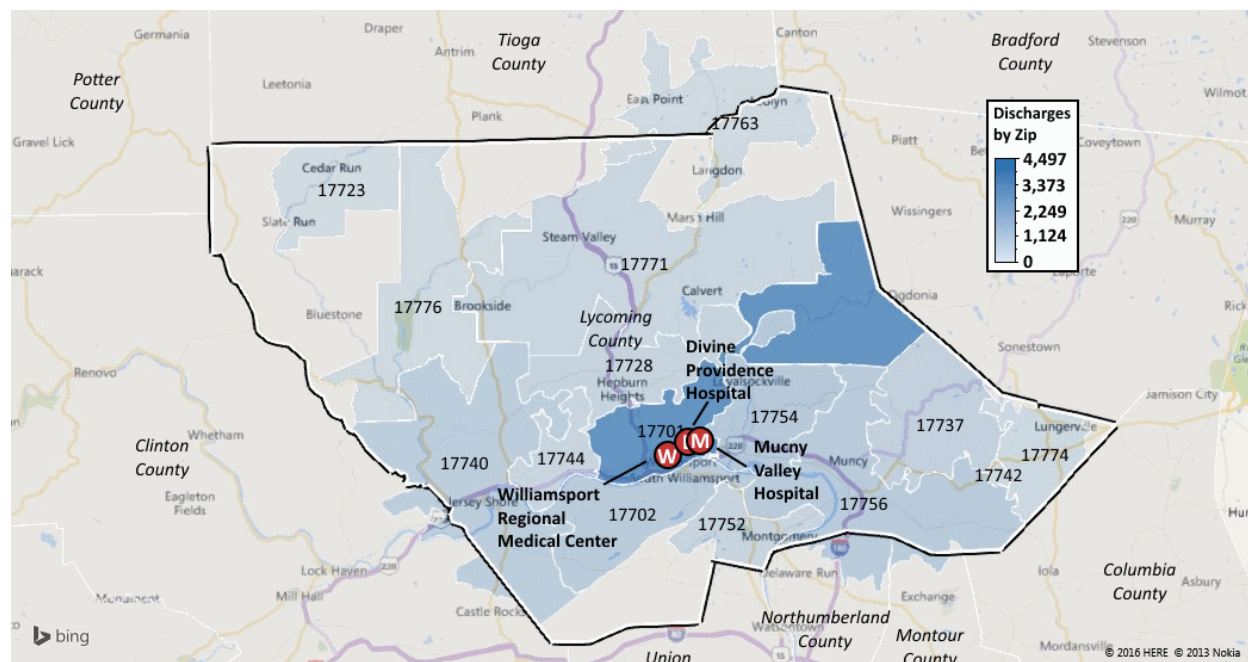
Zip Code	City	Williamsport Regional	Divine Providence	Muncy Valley	Total Discharges	Percent of Total Discharges
Lycoming County:						
17701	Williamsport	4,149	269	79	4,497	33.2%
17754	Montoursville	961	31	85	1,077	7.9%
17756	Muncy	632	30	249	911	6.7%
17702	Williamsport	797	35	18	850	6.3%
17740	Jersey Shore	727	24	2	753	5.6%
17737	Hughesville	362	18	148	528	3.9%
17728	Cogan Station	377	9	9	395	2.9%
17752	Montgomery	246	16	48	310	2.3%
17744	Linden	250	12	2	264	1.9%
17771	Trout Run	210	14	4	228	1.7%
17774	Unityville	51	1	15	67	0.5%
17763	Ralston	35	1	-	36	0.3%
17762	Picture Rocks	24	1	10	35	0.3%
17776	Waterville	16	-	1	17	0.1%
17703	Williamsport	12	-	2	14	0.1%
17742	Lairdsville	10	-	3	13	0.1%
17720	Antes Fort	10	-	-	10	0.1%
17723	Cammal	2	-	-	2	0.0%
17739	Jersey Mills	1	-	-	1	0.0%
17769	Slate Run	1	-	-	1	0.0%
	Total Lycoming	9,334	1,136	10,684	10,009	73.9%
	Total Other Discharges	3,221	198	121	3,540	26.1%
	Total				13,549	100.0%

Source: Susquehanna Health

Community Details

Identification and Description of Geographical Community

The following map geographically illustrates the Health System's community by showing the community zip codes shaded by number of inpatient discharges. The map below displays the Health System's geographic relationship to the community, as well as significant roads and highways.



Community Population and Demographics

The U.S. Bureau of Census has compiled population and demographic data. *Exhibit 2* below shows the total population of the community. It also provides the breakout of the community between the male and female population, age distribution, and race/ethnicity.

**Exhibit 2
Demographic Snapshot
Susquehanna Health System**

DEMOGRAPHIC CHARACTERISTICS						
	Total Population					Lycoming
Lycoming County	116,676			Total Male Population		57,253
Pennsylvania	12,758,729			Total Female Population		59,423
United States	314,107,083					

POPULATION DISTRIBUTION						
Age Group	Lycoming	Age Distribution				
		Percent of Total Community	Pennsylvania	Percent of Total PA	United States	Percent of Total US
0 - 4	6,489	5.56%	719,941	5.64%	19,973,712	6.36%
5 - 17	17,618	15.10%	2,020,279	15.83%	53,803,944	17.13%
18 - 24	12,345	10.58%	1,253,769	9.83%	31,273,296	9.96%
25 - 34	13,990	11.99%	1,579,903	12.38%	42,310,184	13.47%
35 - 44	13,390	11.48%	1,557,718	12.21%	40,723,040	12.96%
45 - 54	16,961	14.54%	1,875,240	14.70%	44,248,184	14.09%
55 - 64	16,214	13.90%	1,710,321	13.41%	38,596,760	12.29%
65+	19,669	16.86%	2,041,558	16.00%	43,177,963	13.75%
Total	116,676	100%	12,758,729	100%	314,107,083	100%

RACE/ETHNICITY						
Race/Ethnicity	Lycoming County	Race/Ethnicity Distribution				
		Percent of Total Community	Pennsylvania	Percent of Total PA	United States	Percent of United States
White	106,510	91.29%	10,020,439	78.54%	197,159,492	62.77%
Hispanic	1,897	1.63%	784,562	6.15%	53,070,095	16.90%
Black	5,384	4.61%	1,340,926	10.51%	38,460,597	12.24%
Asian and Pacific	711	0.61%	377,017	2.95%	16,029,364	5.10%
All Others	2,174	1.86%	235,785	1.85%	9,387,535	2.99%
Total	116,676	100%	12,758,729	100%	314,107,083	100%

Source: Community Commons (ACS 2010-2014 data sets)

While the relative age of the community population can impact community health needs, so can the ethnicity and race of a population. The population of the community by race and illustrates different categories of race such as, white, black, Asian, other and multiple races. White non-Hispanics make up just over 91% of the community. The community is also comprised of a slightly higher percentage of seniors compared to the state and national percentages.

Exhibit 3 reports the percentage of population living in urban and rural areas. Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban. This table could help to understand why transportation may or may not be considered a need within the community, especially within the rural and outlying populations.

**Exhibit 3
Susquehanna Health System
Rural/Urban Population**

County	Percent Urban	Percent Rural
Lycoming	63.72%	36.28%
PENNSYLVANIA	78.66%	21.34%
UNITED STATES	80.89%	19.11%

Source: Community Commons

Socioeconomic Characteristics of the Community

The socioeconomic characteristics of a geographic area influence the way residents access health care services and perceive the need for health care services within society. The economic status of an area may be assessed by examining multiple variables within the CHNA community. The following exhibits are a compilation of data that includes household per capita income, unemployment rates, poverty, uninsured population and educational attainment for the CHNA community. These standard measures will be used to compare the socioeconomic status of the community to the state of Pennsylvania and the United States.

Income and Employment

Exhibit 4 presents the per capita income for the CHNA community. This includes all reported income from wages and salaries, as well as income from self-employment, interest or dividends, public assistance, retirement and other sources. The per capita income in this exhibit is the average (mean) income computed for every man, woman and child in the specified area. Lycoming County's per capita income is below the state of Pennsylvania and the United States.

**Exhibit 4
Susquehanna Health System
Per Capita Income**

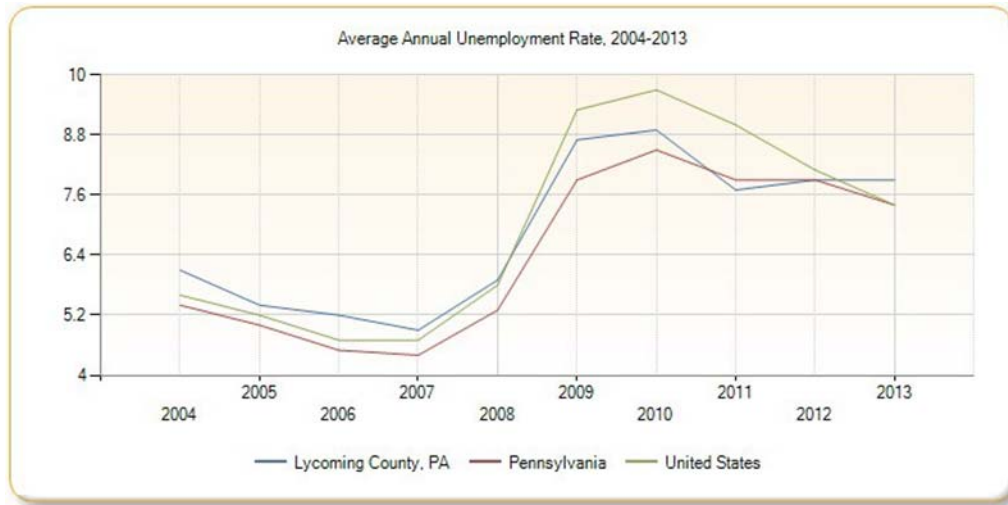
	Total Population	Total Income (\$)	Per Capita Income (\$)
Lycoming County	116,676	\$ 2,745,487,360	\$ 23,530
PENNSYLVANIA	12,758,729	\$ 368,884,285,440	\$ 28,912
UNITED STATES	314,107,072	\$ 8,969,237,037,056	\$ 28,554

Source: Community Commons

Unemployment Rate

Exhibit 5 presents the average annual unemployment rate from 2004 - 2013 for the community defined as the community, as well as the trend for Pennsylvania and the United States. On average, the unemployment rates for Lycoming County were higher than both the state of Pennsylvania and the United States until 2008. Lycoming County's unemployment rate stayed below the national rate until 2012. Since hitting a high rate of 8.8 in 2010, Lycoming County declined down to 7.9 by 2013.

Exhibit 5



Data Source: US Department of Labor, Bureau of Labor Statistics. 2015 - May. Source geography: County

Poverty

Exhibit 6 presents the percentage of total population below 100% Federal Poverty Level (FPL). Poverty is a key driver of health status and is relevant because poverty creates barriers to access, including health services, healthy food choices and other factors that contribute to poor health. Lycoming County's poverty rate is higher than the state but lower than the national poverty rates.

Exhibit 6	Total Population	Population in Poverty	Percent Population in Poverty
Lycoming County, PA	111,109	16,395	14.76%
Pennsylvania	12,346,333	1,667,858	13.51%
United States	306,226,400	47,755,608	15.59%

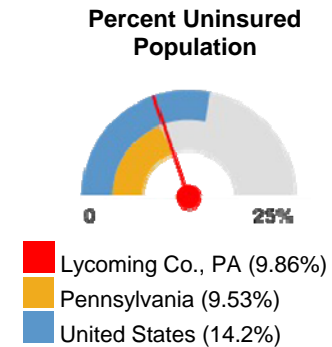
Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract
 Note: Total population for poverty status was determined at the household level.

Uninsured

Exhibit 7 reports the percentage of the total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to health care access, including regular primary care, specialty care and other health services that contribute to poor health status. Just over 11,000 persons are uninsured in the CHNA community.

Exhibit 7	Total Population (For Whom Insurance Status is Determined)	Total Uninsured Population	Percent Uninsured Population
Lycoming County, PA	113,719	11,211	9.86%
Pennsylvania	12,553,967	1,195,810	9.53%
United States	309,082,272	43,878,140	14.2%

Data Source: US Census Bureau, American Community Survey, 2010-14. Source geography: Tract

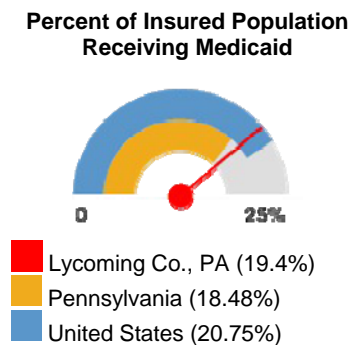


Medicaid

The Medicaid indicator reports the percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This is relevant because it assesses vulnerable populations, which are more likely to have multiple health access, health status and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment. *Exhibit 8* shows Lycoming County ranks unfavorably compared to the United States and favorably against the state of Pennsylvania.

Exhibit 8	Total Population (For Whom Insurance Status is Determined)	Population with Any Health Insurance	Population Receiving Medicaid	Percent of Insured Population Receiving Medicaid
Lycoming County, PA	113,719	102,508	19,883	19.4%
Pennsylvania	12,553,967	11,358,157	2,099,544	18.48%
United States	309,082,272	265,204,128	55,035,660	20.75%

Data Source: US Census Bureau, American Community Survey, 2010-14. Source geography: Tract



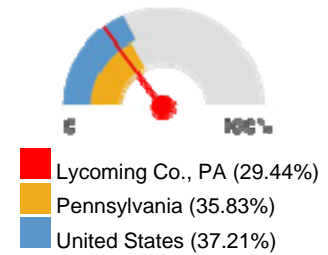
Education

Exhibit 9 presents the population with an Associate’s level degree or higher in Lycoming County versus Pennsylvania and the United States.

Exhibit 9	Total Population Age 25	Population Age 25 with Associate’s Degree or Higher	Percent Population Age 25 with Associate’s Degree or Higher
Lycoming County, PA	80,224	23,614	29.44%
Pennsylvania	8,764,740	3,140,051	35.83%
United States	209,056,128	77,786,232	37.21%

Data Source: US Census Bureau, American Community Survey, 2010-14. Source geography: Tract

Percent Population Age 25 With Associate’s Degree or Higher



Education levels obtained by community residents may impact the local economy. Higher levels of education generally lead to higher wages, less unemployment and job stability. These factors may indirectly influence community health. As noted in *Exhibit 9*, the percent of residents within the CHNA community obtaining an Associate’s degree or higher is below the state and national percentages.

Physical Environment of the Community

A community's health is also affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health. This section will touch on a few of the elements that relate to some needs mentioned throughout the report.

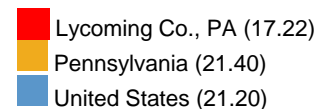
Grocery Store Access

Exhibit 10 reports 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. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

Exhibit 10	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Lycoming County, PA	116,111	20	17.22
Pennsylvania	12,702,379	2,716	21.4
United States	312,732,537	66,286	21.2

Data Source: U.S. Census Bureau, County Business Patterns. Additional data analysis by CARES. 2013. Source geography: County

Grocery Stores, Rate (Per 100,000 Population)



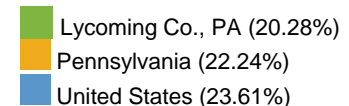
Food Access/Food Deserts

This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery stores. The information in *Exhibit 11* below is relevant because it highlights populations and geographies facing food insecurity.

Exhibit 11	Total Population	Population With Low Food Access	Percent Population With Low Food Access
Lycoming County, PA	116,111	23,547	20.28%
Pennsylvania	12,702,379	2,824,508	22.24%
United States	308,745,538	72,905,540	23.61%

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2010. Source geography: Tract

Percent Population With Low Food Access

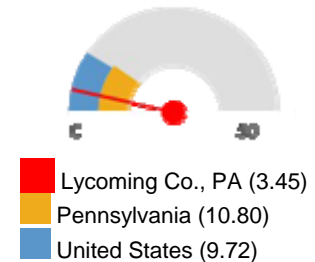


Recreation and Fitness Facility Access

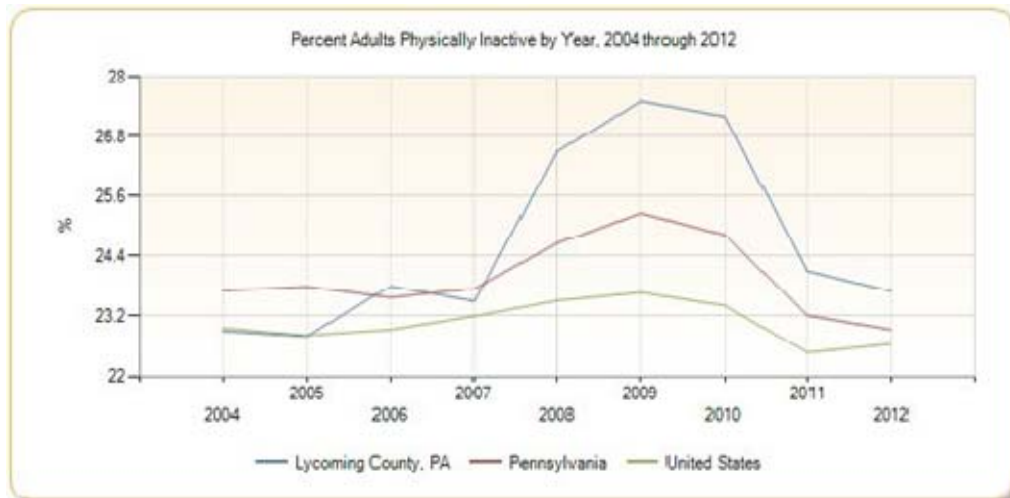
This indicator reports the number per 100,000-population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. It is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors. *Exhibit 12* shows that Lycoming County has fewer fitness establishments available to the residents than Pennsylvania and the United States.

Exhibit 12	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Lycoming County, PA	116,111	4	3.45
Pennsylvania	12,702,379	1,369	10.8
United States	312,732,537	30,393	9.7

Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2013.
Source geography: County

Recreation and Fitness Facilities, Rate (Per 100,000 Population)


The trend graph below (*Exhibit 13*) shows the percentage of adults who are physically inactive by year for the community and compared to Pennsylvania and the United States. Since 2007, the CHNA community has had a higher percentage of adults who are physically inactive compared to both the state of Pennsylvania and the United States. Although the trend has decreased dramatically from 2010 to 2011, the percentage of adults physically inactive within the community is higher than both the state of Pennsylvania and the United States.

Exhibit 13


Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Source geography: County

Clinical Care of the Community

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsured, financial hardship, transportation barriers, cultural competency and coverage limitations affect access.

Rates of morbidity, mortality and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

Access to Primary Care

Exhibit 14 shows the number of primary care physicians per 100,000-population. Doctors classified as “primary care physicians” by the American Medical Association include general family medicine MDs and DOs, general practice MDs and DOs, general internal medicine MDs and general pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Exhibit 14	Total Population, 2012	Primary Care Physicians, 2012	Primary Care Physicians, Rate per 100,000 Pop.
Lycoming County, PA	117,168	78	66.6
Pennsylvania	12,763,536	10,217	80.0
United States	313,914,040	233,862	74.5

Data Source: US Department of Health Human Services, Health Resources and Services Administration, Area Health Resource File. 2012. Source geography: County

Lack of a Consistent Source of Primary Care

Exhibit 15 reports the percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or health care provider. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

Exhibit 15	Survey Population (Adults Age 18)	Total Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor
Lycoming County, PA	92,123	13,532	14.69%
Pennsylvania	9,777,605	1,244,908	12.73%
United States	236,884,668	52,290,932	22.07%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County

Population Living in a Health Professional Shortage Area

This indicator reports the percentage of the population that is living in a geographic area designated as a Health Professional Shortage Area (HPSA), defined as having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues. As *Exhibit 16* below shows, almost 18% of the residents within the CHNA community are living in a health professional shortage area.

Exhibit 16	Total Area Population	Population Living in a HPSA	Percentage of Population Living in a HPSA
Lycoming County, PA	116,111	20,451	17.61%
Pennsylvania	12,702,379	1,072,764	8.45%
United States	308,745,538	105,203,742	34.07%

Data Source: U.S. Department of Health Human Services, Health Resources and Services Administration, Health Professional Shortage Areas. March 2015. Source geography: HPSA

Preventable Hospital Events

Exhibit 17 reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows demonstrating a possible “return on investment” from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

Exhibit 17	Total Medicare Part A Enrollees	Ambulatory Care Sensitive Condition Hospital Discharges	Ambulatory Care Sensitive Condition Discharge Rate
Lycoming County, PA	13,549	578	42.7
Pennsylvania	1,158,720	72,543	62.6
United States	58,209,898	3,448,111	59.2

Data Source: Dartmouth College Institute for Health Policy Clinical Practice, Dartmouth Atlas of Health Care. 2012. Source geography: County

Health Status of the Community

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

Good health can be defined as a state of physical, mental and social well-being, rather than the absence of disease or infirmity. According to *Healthy People 2020*, the national health objectives released by the U.S. Department of Health and Human Services, individual health is closely linked to community health. Community health, which includes both the physical and social environment in which individuals live, work and play, is profoundly affected by the collective behaviors, attitudes and beliefs of everyone who lives in the community. Healthy people are among a community's most essential resources.

Numerous factors have a significant impact on an individual's health status: lifestyle and behavior, human biology, environmental and socioeconomic conditions, as well as access to adequate and appropriate health care and medical services.

Studies by the American Society of Internal Medicine conclude that up to 70% of an individual's health status is directly attributable to personal lifestyle decisions and attitudes. Persons who do not smoke, drink in moderation (if at all), use automobile seat belts (car seats for infants and small children), maintain a nutritious low-fat, high-fiber diet, reduce excess stress in daily living and exercise regularly have a significantly greater potential of avoiding debilitating diseases, infirmities and premature death.

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

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

Lack of exercise

Cardiovascular disease
Depression

Overstressed

Mental illness
Alcohol/drug abuse
Cardiovascular disease

Health problems should be examined in terms of morbidity as well as mortality. Morbidity is defined as the incidence of illness or injury, and mortality is defined as the incidence of death. Such information provides useful indicators of health status trends and permits an assessment of the impact of changes in health services on a resident population during an established period of time. Community attention and health care resources may then be directed to those areas of greatest impact and concern.

Leading Causes of Death and Health Outcomes

Exhibit 18 reflects the leading causes of death for the community and compares the rates to the state of Pennsylvania and the United States.

Exhibit 18
Susquehanna Health System
Selected Causes of Resident Deaths: Crude Rate

	Lycoming County	Pennsylvania	United States
Cancer	240.00	226.60	185.40
Heart Disease	240.02	248.81	192.95
Lung Disease	72.74	51.10	45.66
Stroke	56.80	52.70	41.40
Unintentional Injury	41.18	47.35	40.05
Motor Vehicle Accident	14.60	10.60	11.00

Source: Community Commons

The table above shows leading causes of death within Lycoming County as compared to the state of Pennsylvania and also to the United States. The crude rate is shown per 100,000 residents. The rates highlighted in yellow represent the county and corresponding leading cause of death that is greater than the state and national rates. As the table indicates, all of the leading causes of death in Lycoming County above are greater than the rate in Pennsylvania and the United States.

Health Outcomes and Factors

Community Health Status Indicators

The Community Health Status Indicators (CHSI) Project of the U.S. Department of Health and Human Services compares many health status and access indicators to both the median rates in the United States and to rates in “peer counties” across the United States. Counties are considered “peers” if they share common characteristics such as population size, poverty rate, average age, and population density.

Lycoming County has designated “peer” counties in states across the nation, including Blair in Pennsylvania and Broome in New York, where indicators are compared. *Exhibit 19* provides a summary comparison of how Lycoming County compares with peer counties on the full set of primary indicators. Peer county values for each indicator were ranked and then divided into quartiles.

Exhibit 19
Lycoming County, Pennsylvania

	Most Favorable Quartile	Middle Two Quartiles	Least Favorable Quartile
Mortality	<ul style="list-style-type: none"> • Cancer Deaths • Male Life Expectancy • Unintentional Injury (including motor vehicle) 	<ul style="list-style-type: none"> • Alzheimer’s disease deaths • Chronic Kidney Disease Deaths • Chronic Lower Respiratory Disease (CLRD) Deaths • Coronary Heart Disease Deaths • Diabetes Deaths • Female Life Expectancy • Stroke Deaths 	<ul style="list-style-type: none"> • Motor Vehicle Deaths
Morbidity	<ul style="list-style-type: none"> • Adult Obesity • Adult Overall Health Status • Preterm Births 	<ul style="list-style-type: none"> • Adult Diabetes • Alzheimer’s Disease/Dementia • Cancer • Gonorrhea • Older Adult Asthma 	<ul style="list-style-type: none"> • HIV • Older Adult Depression • Syphilis
Health Care Access and Quality	<ul style="list-style-type: none"> • Cost Barrier to Care • Older Adult Preventable Hospitalizations 	<ul style="list-style-type: none"> • Primary Care Provider Access • Uninsured 	
Health Behaviors	<ul style="list-style-type: none"> • Teen Births 	<ul style="list-style-type: none"> • Adult Binge Drinking • Adult Female Routine Pap Tests • Adult Smoking 	<ul style="list-style-type: none"> • Adult Physical Inactivity
Social Factors	<ul style="list-style-type: none"> • Poverty • Violent Crime 	<ul style="list-style-type: none"> • Children in Single-Parent Households • High Housing Costs • Inadequate Social Support • On Time High School Graduation • Unemployment 	
Physical Environment	<ul style="list-style-type: none"> • Annual Average PM2.5 Concentration 	<ul style="list-style-type: none"> • Housing Stress • Limited Access to Healthy Food 	<ul style="list-style-type: none"> • Access to Parks • Living Near Highways

Source: Community Health Status Indicators, 2015

The following exhibits show a more detailed view of certain health outcomes and factors. The percentages for Lycoming County and the community as a whole are compared to the state of Pennsylvania and also the United States.

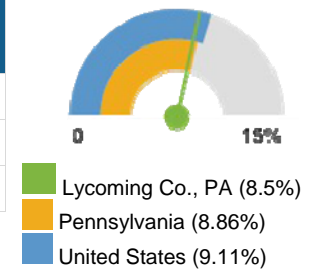
Diabetes (Adult)

Exhibit 20 reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Exhibit 20	Total Population Age 20	Population With Diagnosed Diabetes	Population With Diagnosed Diabetes, Crude Rate	Population With Diagnosed Diabetes, Age-Adjusted Rate
Lycoming County, PA	90,111	8,921	9.9	8.5%
Pennsylvania	9,649,568	984,651	10.2	8.86%
United States	234,058,710	23,059,940	9.85	9.11%

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Source geography: County

Percent Adults With Diagnosed Diabetes (Age-Adjusted)



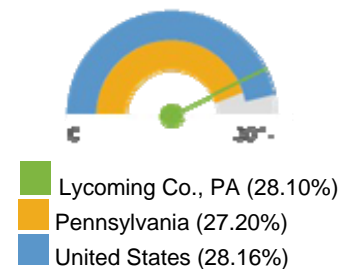
High Blood Pressure (Adult)

Per *Exhibit 21* below, 23,519 or 25.6% of adults aged 18 and older have ever been told by a doctor that they have high blood pressure or hypertension. The community percentage of high blood pressure among adults is lower than the percentage of Pennsylvania and the United States percentage.

Exhibit 21	Total Population (Age 18)	Total Adults With High Blood Pressure	Percent Adults With High Blood Pressure
Lycoming County, PA	91,872	23,519	25.6%
Pennsylvania	9,857,384	2,681,208	27.2%
United States	232,556,016	65,476,522	28.16%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-12. Source geography: County

Percent Adults With High Blood Pressure



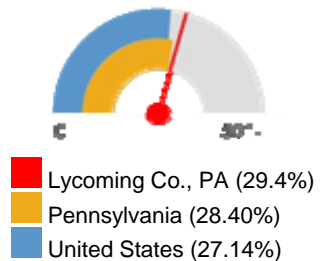
Obesity

Of adults aged 20 and older, 29.4% self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the Community per *Exhibit 22*. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. Lycoming County has a BMI percentage higher than the state and national rates.

Exhibit 22	Total Population Age 20	Adults With BMI > 30.0 (Obese)	Percent Adults With BMI > 30.0 (Obese)
Lycoming County, PA	89,769	26,841	29.4%
Pennsylvania	9,654,554	2,782,229	28.4%
United States	231,417,834	63,336,403	27.1%

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion 2012. Source geography: County

Percent Adults With BMI > 30.0 (Obese)



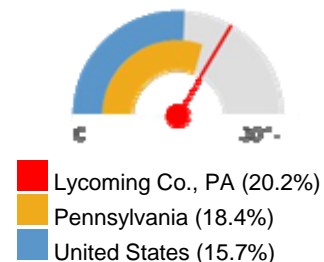
Poor Dental Health

This indicator is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services. *Exhibit 23* shows the total CHNA Community has a greater percentage of adults with poor dental health than that of Pennsylvania and the United States.

Exhibit 23	Total Population (Age 18)	Total Adults With Poor Dental Health	Percent Adults With Poor Dental Health
Lycoming County, PA	91,655	18,530	20.2%
Pennsylvania	9,857,384	1,814,547	18.4%
United States	235,375,690	36,842,620	15.7%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES 2006-10. Source geography: County

Percent Adults With Poor Dental Health



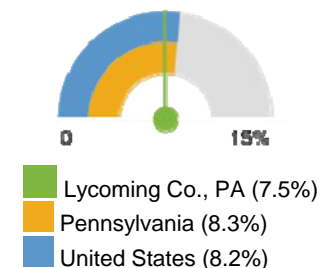
Low Birth Weight

Exhibit 24 reports the percentage of total births that are low birth weight (under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Exhibit 24	Total Live Births	Low Weight Births (Under 2500g)	Low Weight Births, Percent of Total
Lycoming County, PA	9,233	692	7.5%
Pennsylvania	1,031,597	85,623	8.3%
United States	29,300,495	2,402,641	8.2%
HP 2020 Target			<= 7.8%

Data Source: U.S. Department of Health Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER 2006-12. Source geography: County

Percent Low Birth Weight Births



Key Stakeholder and Community Input – Interviews and Survey

Interviewing and surveying key stakeholders (persons with knowledge of or expertise in public health, community members who represent the broad interest of the community or persons representing vulnerable populations) are techniques employed to assess public perceptions of the county’s health status and unmet needs. These techniques are intended to ascertain opinions among individuals likely to be knowledgeable about the community and influential over the opinions of others about health concerns in the community.

Methodology

A total of nine key informant meetings were held in Lycoming County and 55 people answered the key informant surveys. The surveys were gathered through a link on QuestionPro.com or through answering a hand-written survey. Stakeholders were determined based on a) their specialized knowledge or expertise in public health, b) their involvement with underserved and minority populations or c) their affiliation with local government, schools and industry.

All meetings were conducted by Susquehanna Health System personnel. The survey filled out by the key stakeholders were identical to those asked in the meetings. All questions were developed so the key informant could focus their answers on four main points of discussion:

- 1. Has the health and quality of life in Lycoming County improved, stayed the same or declined in the past three years? Based on your answer, why?**
- 2. What are the most critical health and quality of life issues in Lycoming County? What needs to be done to address these issues?**
- 3. What are the barriers to improving health and quality of life in Lycoming County?**
- 4. Where does the community turn to for health resources and overall wellness?**

Interview data was initially recorded in narrative form asking participants a series of twelve questions. Please refer to *Appendix D* for a copy of the interview instrument. This technique does not provide a quantitative analysis of the stakeholders’ opinions but reveals community input for some of the factors affecting the views and sentiments about overall health and quality of life within the community.

Key Stakeholder Profiles

Key stakeholders from the community worked for the following types of organizations and agencies: (see *Appendix D* for a list of stakeholders):

- Susquehanna Health
- Pennsylvania College of Technology
- Penn State Extension
- Larson Design Group
- YWCA of Northeastern PA
- Albright Life Care Services
- Lycoming County Health Improvement Coalition
- Community Services Group
- River Valley Health & Dental Center
- CSIU/WATCH Project
- Boy Scouts of America
- Favors Forward
- STEP Office of Aging
- ARAMARK
- PA Department of Health for Lycoming County
- Family Practice Centers

Key Stakeholder Interview Results

A summary of the four main points discussed with the key informants follows. Quotes are also paraphrased below to reflect some common opinions, as well as strong feelings towards the given question. This section summarizes what the key informants said and discussed within our various meetings without assessing the credibility of their comments.

1. Has the health and quality of life in Lycoming County improved, stayed the same or declined in the past three years? Based on your answer, why?

The key informants were asked their opinion on the health and quality of life within the communities in Lycoming County. Their answer had to be based on whether or not they believed in the past three years if the health and quality of life has improved, stayed the same or declined. They also had to follow up support to their answers.

Almost half of the key informants felt as if the health and quality of life in Lycoming County has improved, while the other felt as though the health and quality of life has declined. There were less key informants that felt as if the health and quality of life stayed the same.

Many key informants were in agreement that the health and quality of life for the middle-class to upper class residents has improved through the downtown revitalization, the river walk expansion, newly renovated YMCA in Williamsport, many local farms and farmers markets and increased sense of wellness in the workplace.

“More cultural, fitness, sports, activities available. Improved infrastructures.”

“The new river walk, more restaurants downtown and the new Y.”

“Good cost of living. Lots of CSAs. Farmers markets. Good medical system and access to medical care. Safe community for the most part. Lots of hiking and biking trails/paths like River Walk & Lycoming Creek Path & Pine Creek, etc.”

However, many key informants stressed much concern for the health and quality of life for the working class and economically disadvantaged.

Lycoming County has a high population of the working to lower-middle class residents. Many of these residents work blue-color jobs where the environment or job duties may be hard on the physical health. By making too much money to be covered by medical assistance, many of these residents struggle to make ends meet for their family’s day to day needs (such as high cost of health food and housing) and high out-of-pocket healthcare costs. These residents put work before their health due to the fact that they cannot afford to take time off of work and appointments during their hours off are not available. This results in forgoing wellness checks and accessing healthcare at a point when they so sick they need an emergency room or urgent care clinic. Being able to eat a nutritious diet comes as an added expense. These residents tend to buy what they can afford, such as prepackaged, discounted groceries of lesser nutritional value which results in health problems such as obesity, diabetes and other chronic health diseases.

“[Healthcare and quality of life] has not improved equally for working class and economically disadvantaged people because of the poor wage structure.”

“I believe it may decline because of the number of individuals who cannot afford the cost of health insurance and the general cost of getting health services. Many fall between the wage limits for health assistance and actually being able to afford health care.”

Residents in Lycoming County who are of the lower and economically disadvantaged class struggle to find decent to any employment due to the lack of experience and/or education. When individuals can't pay for area housing or food because their jobs can't even support rent, it may lead to crimes such as dealing drugs and other illegal means to make money to live. High housing costs has brought on higher homelessness in the area. Many of the local shelters are full on a consistent basis. Many economically disadvantaged residents suffer from mental illness with no knowledge or self-awareness on how to receive proper help. While Lycoming County has some amazing resources to help many of these issues, these residents are unaware of them or do not know where to start looking.

“Increase in substance use, limited affordable housing options for individuals which has resulted in increased homelessness.”

“Lack of funding for community resources, education and proper housing.”

A decline in the health and quality of life that almost all key informants addressed is the battle of opiate addiction that much of the nation is dealing with. This problem ranges of all income levels and is being found at younger ages and especially to those who live with chronic pain. The lack of behavioral health, proper rehabilitation facilities and pain specialists was a cause of concern to many key informants.

“Patients dealing with chronic pain issues are unable to be treated in a timely manner and in some cases pushing them to seek pain control with Heroin and other illegal drugs or live in agony for months and months until they can be seen by a pain management physician.”

2. What are the most critical health and quality of life issues in Lycoming County? What needs to be done to address these issues?

Key informants were asked to provide their opinions on what they felt were the most critical and quality of life issues in Lycoming County. They were also asked what they feel needs to be done to address these issues.

After reviewing all key informant surveys and after discussions with various groups and organizations, the most common critical health and quality of life issues mentioned were the following:

- Drug addiction (opiates specifically)
- Obesity/lifestyle choices
- Mental health
- Affordable healthcare due to insurance costs and high deductibles
- Knowledge of community resources and programs

Suggestions from Key Informants on What Needs To Be Done to Address These Issues:**Drug Addiction:**

- Continue supporting programs such as Project Bald Eagle
- Bring in more outpatient/inpatient rehabilitation centers that have staff/physicians/behavioral health specialized in addiction
- Community level engagement on the fight against opiate abuse; more drug robust education at a younger age
- Better pain management resources for those who suffer chronic pain
- Needle exchange centers to help the spread of diseases such as Hepatitis C

Obesity/Lifestyle Choices:

- Taking time at yearly visits with primary care physicians to discuss overall wellness and living a healthy life (heart disease prevention, smoking cessation, cancer education, exercise, etc.)
- Affordable food costs – programs on how to eat healthy on a fixed budget (partner with local grocery stores, primary care physicians, YMCA, etc.)
- More health and wellness prevention classes starting in education K-12 (better funded breakfast/lunch programs)
- Continued wellness initiatives through insurance plans and in the workplace
- Affordable mental health and nutrition counseling for those who are fit the obese criteria

Mental Health:

- Pediatric mental health
- Addiction specialists (drug, food, etc.)
- Senior/Elderly care – life transitions
- Juvenile offenders
- Veterans

Affordable Healthcare Due To Insurance Costs and High Deductibles:

- Wellness incentives through the workplace to help drive annual screenings and encourage a healthy lifestyle
- Better access to primary care physicians, more time to educated healthy physical and mental wellbeing during annual visits

Knowledge of Community Resources and Programs:

- Strengthen the connection of all community agencies and human services organizations
- Reorganize/structure the use of the community referral/information line – 211
- Promote this connection and information through local health fairs; all organizations come together to structure one large community health and wellness fair each year

3. What are the barriers to improving health and quality of life in Lycoming County?

The key informants were asked what barriers there are in Lycoming County to improving the health and quality of life in our communities. Responses from the key informants included access to affordable healthcare; access to primary care; having a better system set in place for residents to be able to find human services related programs or assistance in regards to healthcare, housing, education assistance, job training, etc.; more education for children within the school districts regarding addiction, self-awareness and worth, healthy lifestyles, and education beyond high school; cost of living and low wage employment; better behavioral health programs for residents of all ages, specifically addiction and youth depression; better options or programs for healthy eating for residents of all income levels; provide more health and wellness fairs and immunization clinics in our rural communities and aging population that have transportation barriers; improper use of prescription narcotics for pain and lack of proper pain management specialists.

“Health Fairs and immunization clinics in rural communities- if Susquehanna Health were to do this, rural communities would respond. Community Health Workers (different than Nurse Navigators) who understand rural community needs because they are from the community and know the people.”

“I think that lack of knowledge is a barrier for example, not knowing the proper foods to eat to maintain a healthy diet. Also financial situation is a huge barrier. Many patients do not have the funds to take care of themselves with buying adequate healthy foods and purchasing their medications.”

“If medical offices were to have more early morning, evening or weekend hours, I think patients would feel more accommodated and empowered to keep their health monitored.”

4. Where does the community turn to for health resources and overall wellness?

Key informants were asked to provide their opinion as to where the community turns to for health resources and overall wellness. Most of the key informant stated that most residents turn to the local hospital system or their primary care physician for health resources and overall wellness. The key informants also identified that many residents turn to the internet for any health or wellness need, as well as family/friends, emergency room, urgent care, social worker or YMCA/YWCA.

“Most wait until they are sick and go to ER.”

“Susquehanna Health, YMCA, Susquehanna Community Health and Dental Center.”

Key Findings

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

Barriers that exist to improve the health and quality of life:

- Affordable healthcare, specifically for working class, economically disadvantaged elderly
 - High deductibles
 - High medication costs
 - High co-pays
- Access to mental health services
- Lack of knowledge towards community resources
- Lack of stronger education at a younger age about healthy lifestyle and health insurance
- Adequate employment to support housing, healthy living, healthcare
- Access to primary care/local specialists

Most critical health and quality of life issues:

- Drug addiction (opiates specifically)
- Obesity/lifestyle choices
- Mental health
- Affordable healthcare due to insurance costs and high deductibles
- Knowledge of community resources and programs

Health Issues of Vulnerable Populations

According to Dignity Health's Community Need Index (see Appendices), the Health System's community has a low level of need. The CNI score is an average of five different barrier scores that measure socioeconomic indicators of each community (income, cultural, education, insurance and housing). The zip code that has the highest need in the community with a CNI of 3.4 is 17701 (Williamsport). Zip code 17740 (Jersey Shore) follows with a CNI of 2.8 and zip codes 17723 (Cammal) and 17737 (Hughesville) each received a CNI of 2.6. The average CNI score for Lycoming County is 2.4.

Certain key stakeholders were selected due to their positions working with low-income and uninsured populations. Several key stakeholders were selected due to their work with minority populations. Based on information obtained through key stakeholder interviews, the following populations are considered to be vulnerable or underserved in the community and the identified needs are listed:

Vulnerable or Underserved Population:

- "Working Class"
- Economically disadvantaged
- Children that come from this population

Identified Needs:

- Better guidance to services/programs available
- Mental health services for broken families, families dealing with addiction, abuse, neglect, etc.
- Addiction services
- Education on the importance of everyday wellness and guidance through the healthcare system

Information Gaps

This assessment was designed to provide a comprehensive and broad picture of the health in the overall community served by the Health System; however, there may be a number of medical conditions that are not specifically addressed in this report due to various factors, including but not limited to, publically available information or limited community input.

In addition, certain population groups might not be identifiable or might not be represented in numbers sufficient for independent analysis. Examples include homeless, institutionalized persons, undocumented residents and members of certain ethnic groups who do not speak English or Spanish. Efforts were made to obtain input from these specific populations through key stakeholder interviews.

Prioritization of Identified Health Needs

Priority setting is a required step in the community benefit planning process. The IRS regulations indicate that the CHNA must provide a prioritized description of the community health needs identified through the CHNA and include a description of the process and criteria used in prioritizing the health needs.

Using findings obtained through the collection of primary and secondary data, the Health System completed an analysis of these inputs (see *Appendices*) to identify community health needs. The following data was analyzed to identify health needs for the community:

Leading Causes of Death

Leading causes of death for the community and the death rates for the leading causes of death for each county within the Health System's CHNA community were compared to U.S. adjusted death rates. Causes of death in which the county rate compared unfavorably to the U.S. adjusted death rate resulted in a health need for the Health System CHNA community.

Health Outcomes and Factors

The indicators falling within the least favorable quartile from the Community Health Status Indicators (CHSI) resulted in an identified health need.

Primary Data

Health needs identified through key informant interviews were included as health needs. Needs for vulnerable populations were separately reported on the analysis in order to facilitate the prioritization process.

Health Needs of Vulnerable Populations

Health needs of vulnerable populations were included for ranking purposes.

To facilitate prioritization of identified health needs, a ranking process was used. Health needs were ranked based on the following five factors. Each factor received a score between 0 and 5.

- 1) **How many people are affected by the issue or size of the issue?** For this factor, ratings were based on the percentage of the community who are impacted by the identified need. The following scale was utilized: >25% of the community= 5; >15% and <25%=4; >10% and <15%=3; >5% and <10%=2 and <5%=1.
- 2) **What are the consequences of not addressing this problem?** Identified health needs which have a high death rate or have a high impact on chronic diseases received a higher rating.
- 3) **The impact of the problem on vulnerable populations.** Needs identified which pertained to vulnerable populations were rated for this factor.
- 4) **How important the problem is to the community.** Needs identified through community interviews and/or focus groups were rated for this factor.
- 5) **Prevalence of common themes.** The rating for this factor was determined by how many sources of data (leading causes of death, health outcomes and factors and primary data) identified the need.
- 6) **Alignment with Health System Strategic Plan.** The rating for this factor was determined by whether or not the need fits within the Hospital's strategic plan. If so, a rating of five was given to the need, otherwise a zero was listed.

Each need was ranked based on the six prioritization metrics. As a result, the following summary list of needs was identified:

**Exhibit 25
Susquehanna Health System
Prioritization of Health Needs**

	How Many People Are Affected by the Issue?	What Are the Consequences of Not Addressing This Problem?	What is the Impact on Vulnerable Populations?	How Important is it to the Community?	How Many Sources Identified the Need?	How Does the Need Align With Hospital Strategic Plan?	Total Score *
Substance Abuse	5	5	5	5	5	5	30
Lack of Mental Health Services	5	5	5	5	5	5	30
Heart Disease	5	5	5	4	4	5	28
Financial Barriers/Poverty/Low Socioeconomic	4	5	4	4	5	5	27
Cancer	5	5	5	3	4	5	27
Lack of Preventative Care	4	4	5	4	4	5	26
Lack of Health Knowledge/Education	3	4	5	4	4	5	25
Obesity	5	5	5	5	5	0	25
Lack of Primary Care Physicians	4	4	4	4	4	5	25
Uninsured/Limited Insurance	3	4	4	4	4	5	24
Lung Disease	4	4	4	3	3	5	23
Violent Crime Rate	4	4	4	5	5	0	22
Poor Nutrition/Limited Access to Healthy Food Options	4	4	5	4	4	0	21
Stroke	4	4	4	2	2	5	21
24/7 Access to Non-Urgent Care	2	2	4	2	2	5	17
Physical Inactivity	3	3	4	3	4	0	17
Adult Smoking/Tobacco Use	3	4	4	2	3	0	16
Children in Poverty	4	3	4	3	2	0	16
Excessive Drinking/Motor Vehicle Accident	4	4	3	3	2	0	16
Transportation in Rural Areas	2	3	2	2	1	5	15
Unintentional Injury	3	4	4	2	2	0	15
Children in Single-Parent Households	4	3	4	2	1	0	14
Sexually Transmitted Infections	3	3	4	2	2	0	14
Suicide	3	3	4	2	1	0	13
Teen Birth Rate	3	2	4	2	2	0	13

*Highest potential score = 30

Management's Prioritization Process

For the health needs prioritization process, the Health System engaged a hospital leadership team to review the most significant health needs reported the prior CHNA, as well as in *Exhibit 25*, using the following criteria:

- ✓ Current area of hospital focus
- ✓ Established relationships with community partners to address the health need
- ✓ Organizational capacity and existing infrastructure to address the health need

Based on the criteria outlined above, the leadership team ranked each of the health needs. As a result of the priority setting process, the identified priority areas that will be addressed through the Health System's Implementation Strategy for fiscal years 2017 through 2019 will be:

- Substance abuse
- Lack of mental health services
- Heart disease
- Financial barriers/Poverty/Low Socioeconomic
- Cancer
- Lack of preventative care
- Lack of health knowledge/Education
- Obesity
- Lack of primary care physicians

The Health System's next steps include developing an implementation strategy to address these priority areas.

Resources Available to Address Significant Health Needs

Health Care Resources

The availability of health care resources is a critical component to the health of a county’s residents and a measure of the soundness of the area’s health care delivery system. An adequate number of health care facilities and health care providers are vital for sustaining a community’s health status. Fewer health care facilities and health care providers can impact the timely delivery of services. A limited supply of health resources, especially providers, results in the limited capacity of the health care delivery system to absorb charity and indigent care as there are fewer providers upon which to distribute the burden of indigent care.

Hospitals

The Health System has 226 acute beds at Williamsport Regional Medical Center and 25 acute beds at Muncy Valley Hospital and has three of the four hospital facilities located within the CHNA community. Residents of the community also take advantage of services provided by hospitals in neighboring counties, as well as services offered by other facilities and providers.

Exhibit 26 summarizes hospitals available to the residents of Lycoming County. The facilities with an asterisk (*) next to their name in the table below are not located in the CHNA community; however, they represent hospital facilities that are within 25 miles of Williamsport, Pennsylvania.

Exhibit 26
Susquehanna Health System
Summary of Area Hospitals and Health Centers

Hospital	Address	County
Jersey Shore Hospital	1020 Thompson Street, Jersey Shore, PA 17740	Lycoming
* Evangelical Community Hospital	One Hospital Drive, Lewisburg, PA 17837	Union
* Lock Haven Hospital	24 Cree Drive, Lock Haven, PA 17745	Clinton

Source: US Hospital Finder

Other Health Care Facilities

Short-term acute care hospital services are not the only health services available to members of the Health System’s community. Because there are no community health centers and rural health clinics within Lycoming County, *Exhibit 27* provides a listing of community health centers and rural health clinics in the surrounding counties.

Exhibit 27
Susquehanna Health System
Summary of Other Health Care Facilities

Facility	Facility Type	Address	County
River Valley Health & Dental Center	Federally Qualified Health Center	471 Hepburn Street, Williamsport, PA 17701	Lycoming
PA Department of Health	Helath Department	1000 Commerce Park Dr., Ste. 109, Williamsport, PA 17701	Lycoming

Source: CMS.gov, Health Resources & Services Administration (HRSA)

APPENDICES

APPENDIX A
ANALYSIS OF DATA

**Susquehanna Health
Analysis of CHNA Data**

Analysis of Health Status - Leading Causes of Death

	(A)		County Rate	(B)	If (B)>(A), then "Health Need"
	U.S. Crude Death Rates	10% of U.S. Crude Death Rate		County Rate Less U.S. Adjusted	
Lycoming County:					
Cancer	185.40	18.54	240.00	54.60	Health Need
Heart Disease	192.95	19.30	240.02	47.07	Health Need
Lung Disease	45.66	4.57	72.74	27.08	Health Need
Stroke	41.40	4.14	56.80	15.40	Health Need
Unintentional Injury	40.05	4.01	41.18	1.13	0
Motor Vehicle Accident	11.00	1.10	14.60	3.60	Health Need

*** The crude rate is shown per 100,000 residents. Please refer to Exhibit 18 for more information.

Analysis of Health Outcomes and Factors - Community Health Status Indicators



Least Favorable:

- Motor Vehicle Deaths
- Sexually Transmitted Diseases (HIV, Syphilis)
- Older Adult Depression
- Adult Physical Inactivity
- Access to Parks
- Living Near Highways

Analysis of Primary Data - Key Stakeholder Meetings & Survey

Drug addiction (opiates specifically)
Obesity/Lifestyle Choices
Mental health (lack of access)
Affordable healthcare due to insurance costs and high deductibles
Improve Connection to Community Resources and Programs

***Issues of Uninsured Persons, Low-Income Persons
and Minority/Vulnerable Populations*****Vulnerable or Underserved Population:**

- “Working Class”
- Economically disadvantaged
- Children that come from this population

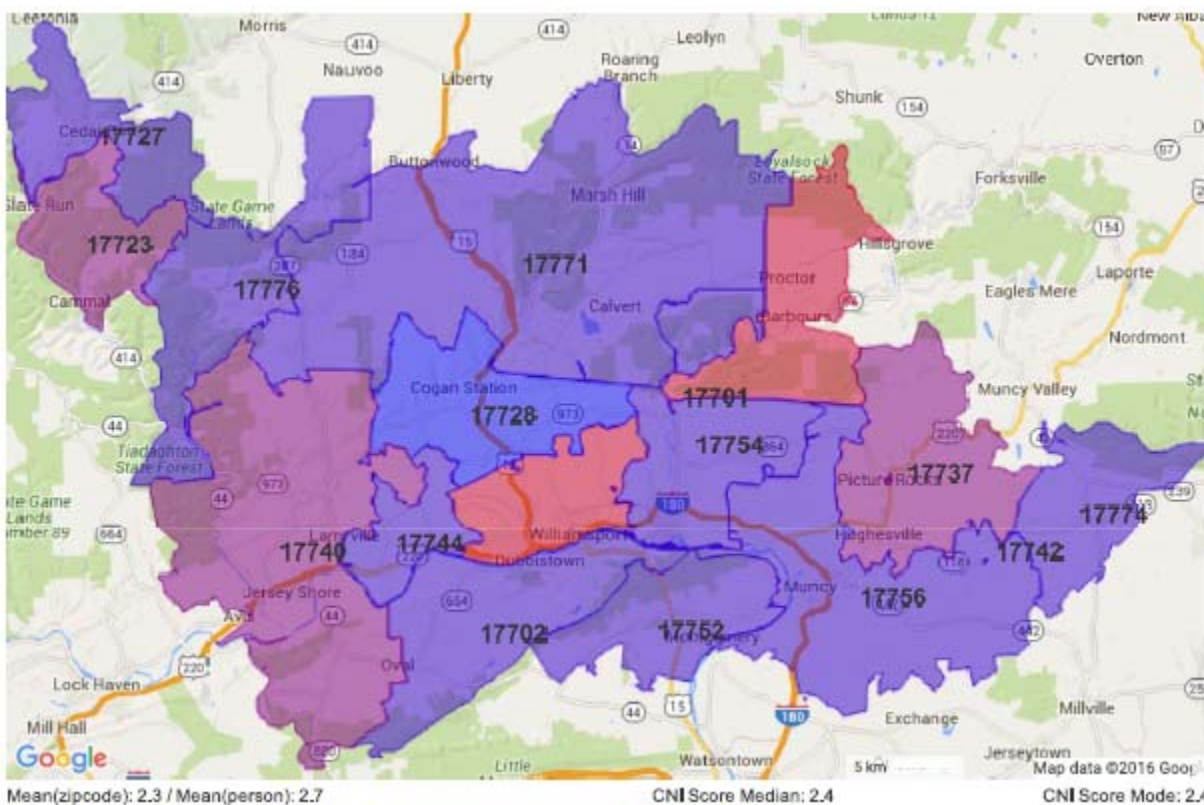
Identified Needs:

- Better guidance to services/programs available
- Mental health services for broken families, families dealing with addiction, abuse, neglect, etc.
- Addiction services
- Education on the importance of everyday wellness and guidance through the healthcare system

APPENDIX B
SOURCES

DATA TYPE	SOURCE	YEAR(S)
Discharges by Zip Code	Hospital	FY 2015
Population Estimates	The Nielson Company	2010-2014
Demographics -Race/Ethnicity	Community Commons via American Community Survey http://www.communitycommons.org/	2010-2014
Demographics - Income	Community Commons via American Community Survey http://www.communitycommons.org/	2010-2014
Unemployment	Community Commons via US Department of Labor http://www.communitycommons.org/	2015
Poverty	Community Commons via US Census Bureau, Small Areas Estimates Branch http://www.census.gov	2010-2014
Uninsured Status	Community Commons via US Census Bureau, Small area Health Insurance Estimates http://www.communitycommons.org/	2010-2014
Medicaid	Community Commons via American Community Survey http://www.communitycommons.org/	2010-2014
Education	Community Commons via American Community Survey http://www.communitycommons.org/	2010-2014
Physical Environment - Grocery Store Access	Community Commons via US Census Bureau, County Business Patterns http://www.communitycommons.org/	2013
Physical Environment - Food Access/Food Deserts	Community Commons via US Department of Agriculture http://www.communitycommons.org/	2010
Physical Environment - Recreation and Fitness Facilities	Community Commons via US Census Bureau, County Business Patterns http://www.communitycommons.org/	2013
Physical Environment - Physically Inactive	Community Commons via US Centers for Disease control and Prevention http://www.communitycommons.org/	2012
Clinical Care - Access to Primary Care	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2012
Clinical Care - Lack of a Consistent Source of Primary Care	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2011 - 2012
Clinical Care - Population Living in a Health Professional Shortage Area	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2015
Clinical Care - Preventable Hospital Events	Community Commons via Dartmouth College Institute for Health Policy & Clinical Practice http://www.communitycommons.org/	2012
Leading Causes of Death	Community Commons via CDC national Vital Statistics System http://www.communitycommons.org/	2007 - 2011
Health Outcomes and Factors	County Health Rankings http://www.countyhealthrankings.org/ & Community Commons http://www.communitycommons.org/	2015 & 2006 - 2012
Health Care Resources	Community Commons, CMS.gov, HRSA	
Health Outcomes and Factors	Community Health Status Indicator via CDC http://wwwn.cdc.gov/CommunityHealth/home	2015

APPENDIX C
DIGNITY HEALTH COMMUNITY NEED INDEX
(CNI) REPORT



Zip Code	CNI Score	Population	City	County	State
17701	3.4	44663	Williamsport	Lycoming	Pennsylvania
17702	2.4	10584	Williamsport	Lycoming	Pennsylvania
17723	2.6	132	Cammal	Lycoming	Pennsylvania
17727	2.4	49	Cedar Run	Lycoming	Pennsylvania
17728	1.6	5028	Cogan Station	Lycoming	Pennsylvania
17737	2.6	6793	Hughesville	Lycoming	Pennsylvania
17740	2.8	13035	Jersey Shore	Lycoming	Pennsylvania
17742	1.8	80	Lairdsville	Lycoming	Pennsylvania
17744	2.4	3050	Linden	Lycoming	Pennsylvania
17752	2.2	4583	Montgomery	Lycoming	Pennsylvania
17754	2	12135	Montoursville	Lycoming	Pennsylvania
17756	2.4	12752	Muncy	Lycoming	Pennsylvania
17771	1.8	2934	Trout Run	Lycoming	Pennsylvania
17774	2.4	1291	Unityville	Lycoming	Pennsylvania
17776	2.4	268	Waterville	Lycoming	Pennsylvania

<http://cni.chw-interactive.org>

APPENDIX D
KEY STAKEHOLDER INTERVIEW & SURVEY PROTOCOL
& ACKNOWLEDGEMENTS



Community Health Needs Assessment – Key Informant Interview

Susquehanna Health is gathering local data as part of a plan to improve health and quality of life in Lycoming County. Community input is essential to this process. You have been selected for a key informant interview because of your knowledge, insight and familiarity within the community. The themes that emerge from these interviews will be summarized and made available to the public, however all interviews and questionnaires completed will be kept strictly confidential.

This interview may also be completed online by going to <http://improvinghealth.questionpro.com>.

Date: _____

Name: _____

Agency/Organization: _____

Number of years living in Lycoming County: _____

Email address: _____

1. In general, how would you rate health and quality of life in Lycoming County?
2. In your opinion, has health and quality of life in Lycoming County improved, stayed the same or declined over the past few years?



5. What barrier(s), if any, exist to improving health and quality of life in Lycoming County?

a. If you identified a barrier(s), what possible solutions would help break these barriers and improve the health and quality of life?

6. Do you have any thoughts on environment issues which may impact the community?



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

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

9. In your opinion, where does the community turn to for health resources and overall wellness?



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

11. Do you feel there is timely access to quality healthcare for all groups of people within Lycoming County?

12. Is there someone (who) you would recommend as a "key informant" for this assessment? If yes, please provide their name and email address.

Key Stakeholders

The following were the dates and group/organization where key informant meetings were held:

Location	Date	County
CARHA	3/9/16	Lycoming
SH Marketing & PR Committee	3/16/16	Lycoming
SH Key Informant	3/22/16	Lycoming
LCHIC	3/24/16	Lycoming
Muncy Skilled Nursing Staff	4/11/16	Lycoming
PA Dept of Health	4/18/16	Lycoming
West Branch Drug and Alcohol	4/25/16	Lycoming
Cancer Committee	4/27/16	Lycoming
United Way	4/29/16	Lycoming

Thank you to the following individuals who participated in our community input process:

Chelsea Worstall – Susquehanna Health
 Elizabeth Anderson – Susquehanna Health
 Tim Heilmann – Susquehanna Health
 Davie Jane Gilmour – Pennsylvania College of Technology
 Barbara Davenport – Penn State Extension
 Keith Kuzio – Larson Design Group
 Camille Hinojosa – Susquehanna Health
 Diane Glenwright – YWCA, Northcentral PA
 Bradly Miller – Susquehanna Health, Family Medicine Residency
 Sue King – Susquehanna Health, Family Medicine Residency
 Anne Holliday – Susquehanna Health, Skilled Nursing & Rehabilitation
 John Boll – Susquehanna Health, Family Medicine Residency
 S.Teresa Ann Jacobs – Susquehanna Health
 Pat McGee – Susquehanna Health, Home Care & Hospice
 Lynnda Steimling, Susquehanna Health
 Sherry Watts – Susquehanna Health
 Shaun Smith – Albright Care Services
 Barbara Hemmendinger – Lycoming County Health Improvement Coalition
 Aimee Tsikitas – Community Services Group
 Shannon Knight – CSG
 Luam Pham – Susquehanna Health
 Sharon Magyar – Albright Life
 Tracie Witter – Susquehanna Health
 Bonnie Esposito – Susquehanna Health
 Ivy Eldred – Community Services Group

Jenna Lorson – Susquehanna Health
Sara Churba – River Valley Health & Dental Center
Gaye Jenkins – CSIU/WATCH Project
Richard Morse – Boy Scouts of America
Angela Burfield – STEP Early Head Start
Barbara Irvin – Favors Forward
Laurie Welch – Penn State Extension
Jean Marie Sullivan – STEP Office of Aging
John Magyar II – Lycoming County Health Improvement Coalition
Julie Raup – ARAMARK
Tim Mahoney – Volunteer – LCHIC, NAMI & Food Pantry
S. Christina Marie Cables – River Valley Health and Dental Center
Charles Kiessling – Lycoming County Coroner
Katie Cronrath - ARAMARK
Tammy Mumma – ARAMARK
Barbara Green – Lycoming County PA Dept of Health
Kristen Campbell – Larson Design Group
Julie Barner – Susquehanna Health
Robin Dawson – Susquehanna Health
Heather Stafford – Susquehanna Health
Lori Beucler – Susquehanna Health
Rev. John Charnock – Susquehanna Health
Stacy Knipe – Susquehanna Health
Brenda Terry Manchester – Susquehanna Health
Alexander Nesbitt, MD – Susquehanna Health
Gabriella Potiesky – ARAMARK
Susan Duchman – Susquehanna Health
Annette Dieugenio – Susquehanna Health
Jim Radka, MD – FPC
Susan Branton – Susquehanna Health

Community Health Implementation Strategy 2017-2019



*Divine Providence Hospital
Muncy Valley Hospital
Williamsport Regional Medical Center*

Introduction

Susquehanna Health is a four-hospital integrated health system in northcentral Pennsylvania with a total of 332 licensed acute and 259 long-term care beds, along with two skilled nursing units, home care division, physician services and ambulance service. The system's emergency departments have a total of some 79,000 visits each year and its maternity units welcome 1,500 babies annually.

The hospitals included in this report are:

- Divine Providence Hospital
- Muncy Valley Hospital
- Williamsport Regional Medical Center

Susquehanna Health is made up of the three hospitals listed above, plus Soldiers + Sailors Memorial Hospital in Wellsboro, Pennsylvania. While Susquehanna Health is relatively young, the hospitals that form the foundation of the healthcare system are very much a part of the area's rich history, and have a long-standing tradition of providing care to generations of area families.

Identifying Health Needs

A community health needs assessment was conducted from February 2016 to June 2016. Community input was provided through five key stakeholder meetings and a community health survey, including representatives from:

- ✓ Local school system and University
- ✓ Local and county government
- ✓ Public health agencies
- ✓ Medical providers

Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties. The health status of the community was then reviewed. Information on the leading causes of death and morbidity information was analyzed in conjunction with health outcomes and factors reported for the community by Community Health Status Indicators and other third parties.

This data was analyzed and reviewed to identify health issues of uninsured persons, low-income persons and minority groups, and the community as a whole. As a result of the analysis described above, the following health needs were identified as the most significant health needs for the community:

- Substance abuse
- Lack of mental health services
- Heart disease

- Financial barriers/Poverty/Low Socioeconomic
- Cancer
- Lack of preventative care
- Lack of health knowledge/Education
- Obesity
- Lack of primary care physicians

The identified health needs were reviewed by hospital management and priority areas, included in the table below, were determined based on their assessment of the qualitative and quantitative data. Identified needs were prioritized based on the following criteria:

- 1) How many people are affected by the issue or size of the issue?
- 2) What are the consequences of not addressing this problem?
- 3) The impact of the problem on vulnerable populations.
- 4) How important the problem is to the community.
- 5) Prevalence of common themes.
- 6) Alignment with Hospital strategic plan.

Susquehanna Health System Priority	Corresponding Identified Health Need
Improve access to primary/specialty services and programs available within Lycoming County	<ul style="list-style-type: none"> • Lack of primary care physicians • Lack of health knowledge/education • Lack of mental health services • Lack of preventative care
Continue to partner in the fight against opiate addiction and support local services/task force	<ul style="list-style-type: none"> • Substance abuse • Lack of mental health services • Lack of health knowledge/education
Collaborate with community organizations on health and wellness initiatives, such as routine wellness check-ups and cancer screenings.	<ul style="list-style-type: none"> • Heart disease • Cancer • Lack of preventative care • Obesity
Support mental health services	<ul style="list-style-type: none"> • Lack of mental health services • Lack of health knowledge/education • Lack of primary care physicians
Support transportation options to healthcare for rural areas	<ul style="list-style-type: none"> • Financial barriers/poverty/low socioeconomic • Lack of health knowledge/education • Lack of preventative care

PRIORITY 1: Improve access to primary/specialty services and programs available within Lycoming County.

Goal 1: Implement longer office hours, walk-in access and 24/7 access to nurse triage and ability to make an appointment in primary care

- Strategies:**
- A.** Improve access in Susquehanna family medicine offices with longer office hour and hours available on Saturday
 - B.** Provide walk-in access for minor illness and injury now available for all family medicine offices and pediatric offices for current and new patients
 - C.** Promote that all of SHMG primary care has access to 24/7 nurse triage and ability to make appointments
 - D.** Continue extended hours availability to all primary care patients, with appointments on Sunday

Goal 2: Improve access in to specialty service lines (i.e. Cancer, Heart, Ortho, GI...)

- Strategies:**
- A.** Exceed call center benchmarks for call answering and appointment scheduling
 - B.** Establishing monthly tracking reports and action plan
 - C.** Explore telehealth consult centers for access to services not available locally, but the ability to have “office visits” from Lycoming County

Goal 3: Working with various organizations to establish a more robust way to connect the community to services within the county and wellness fairs available

- Strategies:**
- A.** Collaborate with United Way to see how we can improve the use of 211
 - B.** Collaborate with ConnectWilliamsport to improve ways we can communicate health and wellness initiatives available throughout Lycoming County
 - C.** Work with all community organization to develop comprehensive, real-time database of all services.

PRIORITY 2: Continue to partner in the fight against opiate addiction and support local services/task force

Goal 1: Authorize Implementation of Prescription Drug Monitoring Program system wide

- Strategies:**
- A. Implement emergency department prescribing policy at all Susquehanna emergency department
 - B. Implement best practice of primary care provider to be the sole prescriber of all pain medication
 - C. Continue to hold Opioid Summits to keep all organizations involved in the opioid crisis on the same page and keep an open dialog
 - D. Educate the public on the importance of disposing of medications properly

Goal 2: Access to Certified Recovery Specialists for all Susquehanna Emergency Departments

- Strategies:**
- A. Be able to capture an individual right after overdose to help them get to the right resources immediately after an overdose occurs
 - B. Work with other organizations to be able to contract a certified recovery specialist and have available for the health system 24/7

Goal 3: Collaborate with organizations to help educate the community

- Strategies:**
- A. Participate in Red Ribbon Week at all local school districts
 - B. Work with the PA Department of Health on educating school nurses and businesses on the importance of carrying Naloxone
 - C. Support organizations in any education efforts towards the fight against opioid abuse

PRIORITY 3: Collaborate with community organizations on health and wellness initiatives, such as routine wellness check-ups and cancer screenings.

Goal 1: Promote routine cancer screenings for breast, colon and cervical cancer.

- Strategies:**
- A. Mailed to people most at risk for cancer who are up for screening or who have neglected to be screened for colorectal, lung and breast. Based on national screening recommendations, based on age, gender, etc.

Goal 2: Susquehanna signed the 80% by 2018 initiative to have 80% of individuals ages 50 or older screened for colon cancer in Lycoming County

- Strategies:**
- A. Collaborate with Susquehanna Cancer Center, Digestive Disease Center, Primary Care and Employee Health
 - B. Begin as a system wide initiative, then a public initiative
 - C. Hold various events promoting colon cancer awareness using the inflatable colon, for a more interactive approach to colon cancer

Goal 3: Continue to partner with River Valley Regional YMCA to support health and wellness programs for both children and adults

- Strategies:**
- A. Start at the elementary level building self-esteem programs, healthy life-style
 - B. Continue implementing programs similar to the Cancer Survivorship Program

Goal 3: Continue to grow and expand Spirit of Women program

- Strategies:**
- A. Grow program through increased membership within Lycoming County – promotes health and wellness for women, children and men

PRIORITY 4: Support mental health services

Goal 1: Have licensed clinical social workers available at all primary care offices

- Strategies:**
- A. Pilot program, expand to other sites
 - B. Promote availability of LCSW in practices

Goal 2: Ease access into behavioral health specialists

- Strategies:**
- A. Increase pediatric behavioral health
 - B. Support recruitment to bring specialists in to Lycoming County

PRIORITY 5: Support transportation options to healthcare for rural areas

Goal 1: Establish a stronger connection to STEP

- Strategies:**
- A. Helping promote their services to help the elder population get to their healthcare appointments
 - B. Promote and educate others about our Ambulatory Care services

Goal 2: Bring wellness clinics to rural areas

- Strategies:** A. Work with River Valley Health & Dental on establishing a program to take wellness checks/clinics to rural areas

Next Steps

This Implementation Plan will be rolled out over the next three years, from FY 2017 through the end of FY 2019. The Hospital will work with community partners and health issue experts on the following for each of the approaches to addressing the identified health needs:

- Develop work plans to support effective implementation
- Create mechanisms to monitor and measure outcomes
- Provide on-going status and results of these efforts to improve community health

Susquehanna Health System is committed to conducting another health needs assessment within three years.