2018 PENN HIGHLANDS BROOKVILLE COMMUNITY HEALTH NEEDS ASSESSMENT

The CHNA process undertaken by Penn Highlands Healthcare, with project management and consultation by Tripp Umbach, included input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of public health issues and representatives of vulnerable populations served by the hospital. Conducted by: Tripp Umbach

Table of Contents

ection 1. Executive Summary2
Introduction2
Objectives and Methodology
Key Prioritized Needs5
Conclusions and Recommendations6
ection 2. Community Definition8
ection 3. Key Findings9
Priority #1: Access to Care9
Priority #2: Chronic Conditions15
Priority #3: Substance Abuse20
Appendix A. Primary Data22
Appendix B. Secondary Data Analysis29
Appendix C. About Tripp Umbach

Section 1. Executive Summary

Introduction

Penn Highlands Healthcare provides residents with access to the region's best hospitals, physicians, a nursing home, home care agency and other affiliates who believe that healthcare should be managed by local board members who live and work in the communities they serve.

With the four hospitals of Penn Highlands Healthcare - Penn Highlands Brookville, Penn Highlands Clearfield, Penn Highlands DuBois and Penn Highlands Elk - Penn Highlands strives to provide exceptional quality, safety and service.

Each facility is the largest employer in its hometown and is rooted deeply in both the popular and economic culture of their communities. The vision is to be an integrated health care delivery system that provides premier care with a personal touch, no matter where one lives in the region.



Important Note: In an effort to combat the following health issues in a unified approach, Penn Highlands Healthcare has chosen to identify system-level needs for the entire Penn Highlands service area. However, each hospital will create facility-specific strategies to combat those needs.

Objectives and Methodology

With the enactment of the Patient Protection and Affordable Care Act (PPACA) on March 23, 2010, tax-exempt hospitals require community health needs assessments (CHNA) and implementation strategies to actively improve the health of communities served by health systems. These strategies provide hospitals and health systems with the necessary information to address the specific health needs of their communities. Coordination and management of strategies based upon the outcomes of a CHNA and implementing strategies can improve the impact of hospital community benefits.

To adhere to the requirements imposed by the IRS, tax-exempt hospitals and health systems must:

- 1. Conduct a CHNA every three years.
- 2. Adopt an implementation strategy to meet the community health needs identified through the assessment.
- 3. Report how they are addressing the needs identified in the CHNA.

This report fulfills the IRS requirements on tax-exempt hospitals and health systems.

The CHNA process undertaken by Penn Highlands Healthcare, with project management and consultation by Tripp Umbach, included input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of public health issues and representatives of vulnerable populations served by the hospital.

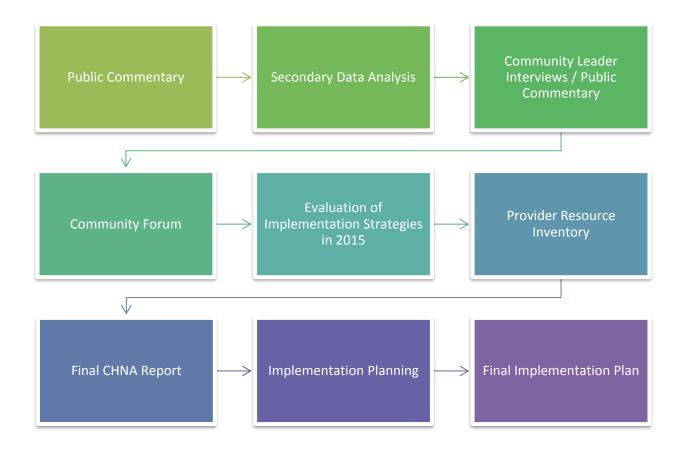
During the process, these individuals reviewed data related to the underserved and vulnerable populations in the service area. Tripp Umbach worked closely with leadership from Penn Highlands Healthcare to oversee and accomplish the assessment with the goal of gaining a better understanding of the health needs of the region. Penn Highlands Healthcare will use CHNA findings to address local health care concerns, as well as to function as a collaborator, working with regional agencies to help address medical solutions to broader socioeconomic and education issues in the service area.

The project component pieces involved to determine the community health needs included:

- Public commentary on the 2015 CHNA and implementation plan (also conducted by Tripp Umbach)
- > Evaluation of implementation strategies in 2015

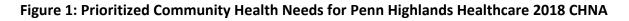
- Secondary data analysis of health status and socioeconomic environmental factors related to health and well-being of residents
- Community leader interviews/public commentary
- Community forum at Penn Highlands DuBois
- > Provider inventory of programs and services related to key prioritized needs

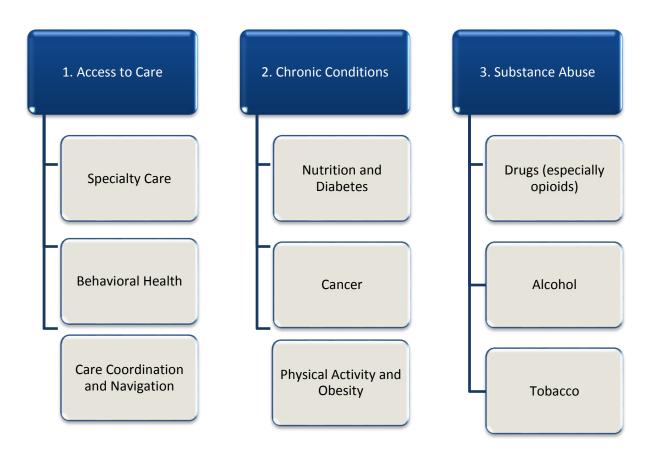
The data collection findings and prioritization of community health needs are detailed in this final CHNA. Additional information regarding each component of the project, and the results, are found in the Appendices section of this report.



Key Prioritized Needs

Tripp Umbach and the internal working group identified three prioritized community needs for the Penn Highlands Healthcare system. The community health needs are based on qualitative and quantitative data, particularly from community forum feedback. Figure 1 (below) details the three prioritized need areas and key factors and considerations of each need.





*Note: further information and rationale for the prioritized community health needs can be found in Section 3 of this report. Additional information on data collection can be found in Appendices A and B.

Conclusions and Recommendations

With the completion of the 2018 CHNA, Penn Highlands Healthcare will develop goals and strategies for the CHNA implementation phase. In this phase, the hospital will leverage its strengths, resources and outreach to help best identify ways to address community health needs, thus improving overall health and addressing the critical health issues and well-being of residents. The hospital will work with community leaders and organizations to collaboratively address regional health and socioeconomic issues. The comprehensive CHNA provides insight into the most pressing health needs and service gaps in the study area. The implementation planning phase will develop measures, strategies, and goals as to how Penn Highlands Healthcare will address the identified community health needs.



Penn Highlands Healthcare, partnering with public health agencies, community organizations, and regional partners, understands that the CHNA document is not the last step in the assessment phase, but rather the first step in an ongoing evaluation process.

Communication and continuous planning efforts are vital throughout the next few years. Information regarding the CHNA findings will be important to residents, community groups, leaders and other organizations that seek to better understand the health needs of the communities in the Penn Highlands Healthcare study area and how to best serve their needs.

Tripp Umbach, in partnership with Penn Highlands Healthcare, emphasizes that in order to reach maximum effectiveness, Penn Highlands Healthcare must leverage current and existing partnerships within the region. Solidifying and reinforcing existing relationships and creating new relationships among organizations and agencies in the community is critical in order to address the needs of community residents. Expanding and creating new partnerships with multiple

regional entities is vital to developing community-based strategies to tackle the region's key community health needs.

Implementation strategies should take into consideration the higher need areas that exist in regions that have greater difficulties in obtaining and accessing services. Tripp Umbach recommends the following actions be taken, in close partnership with community organizations, over the next several months.

Recommended Action Steps:

- Communicate the results of the CHNA process to staff, providers, leadership, boards, community stakeholders and the community as a whole.
- Use the inventory of available resources in the community in order to explore further partnerships and collaborations.
- Implement/continue with a community engagement strategy to build upon the resources that already exist in the community, including committed community leaders that have been engaged in the CHNA process.
- > Develop working groups to focus on specific strategies and goals to address the top identified needs in the study area and develop a comprehensive implementation plan.
- Involve key community stakeholders to participate or be involved in providing expert knowledge on ways to strategically address key community health needs.
- Consistently evaluate goals and strategies as they are being implemented in the community to see where and when adjustments need to be made in order to achieve maximum community benefit.

Section 2. Community Definition

The communities served by **Penn Highlands Brookville** include the following zip codes. The **Penn Highlands Brookville** primary service area includes 11 populated zip code areas (excluding zip codes for P.O. boxes and offices) where 80% of the hospital's inpatient discharges originated. For the sake of capturing data most efficiently, secondary data was collected for **Jefferson and Clearfield Counties**, which comprise the largest portion of the **Penn Highlands Brookville** service area in terms of population.

Zip Code	City	County
16240	Mayport	Armstrong
16242	New Bethlehem	Clarion
16214	Clarion	Clarion
16255	Sligo	Clarion
15801	DuBois	Clearfield
16239	Marienville	Forest
15825	Brookville	Jefferson
15860	Sigel	Jefferson
15767	Punxsutawney	Jefferson
15864	Summerville	Jefferson
15829	Corsica	Jefferson

Table 1: Penn Highlands Brookville Hospital Community Zip Codes

Section 3. Key Findings

The health status of a community depends on many factors, including quality of health care, social and economic determinants, individual behaviors, heredity, education and the physical environment. Communities across the U.S. face numerous challenges and issues that negatively affect the overall health status of residents and hinder growth and development. In the **Penn Highlands Brookville** study area, three community health issues and needs were identified:

- 1. Access to Health Care
- 2. Chronic Conditions
- 3. Substance Abuse

Within each of the community health need areas, multiple factors must be considered. Health behaviors, education, and socioeconomic/environmental conditions greatly affect an individual's health status and ability to overcome health issues in the region. It is important for health providers and community-based organizations to understand the regional health issues and be aware of the most needed services and improvements.

Priority #1: Access to Health Care

Access to health care is perhaps the most important segment of the care continuum. The ability for an individual to access health care is key to having a healthy life. Typically, access to care refers to the opportunity (and ease) in which people can obtain health care, but it can also refer to

having or utilizing health care coverage. Disparities in health service access can significantly affect an individual's and a community's quality of life in a negative way. A lack of available health resources, the high cost of services, and being uninsured can serve as some of the top barriers to accessing health care services. Across the U.S., a predicted shortage of as many as 90,000 physicians by 2025 will serve as an access issue.¹



¹ Berstein, Lenny. "U.S. faces 90,000 doctor shortage by 2025, medical association warns." The Washington Post.

While Pennsylvania scores fairly well at access and affordability (15th best in the country), access issues are typically more prominent in rural areas, such as the counties that make up the **Penn Highlands Brookville** service area.² As shown in Figure 2 below, **Clearfield** and **Jefferson Counties** are significantly behind on PCP rates per 100,000 population.³ Disparities in health and health access exist across the geographic regions of the state, with Pennsylvanians living in rural communities more likely to have unmet heath needs and have poor access to health care than those in urban communities. A 2012 report from the Pennsylvania Department of Health found that individuals living in rural communities had higher rates for cancer, obesity, heart disease, and diabetes. According to the same report, children and nonelderly adults living in rural communities were also more likely to be uninsured.⁴

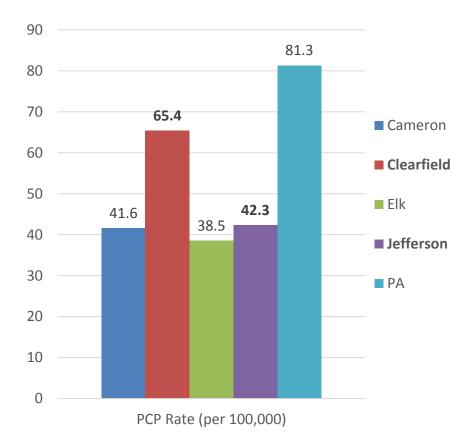


Figure 2: PCP Rate per 100,000 Population

² Health System Data Center. The Commonwealth Fund.

³ 2017 County Health Rankings.

⁴ The Henry J. Kaiser Family Foundation, The Pennsylvania Health Care Landscape Fact Sheet

As illustrated in Figure 3 below, the **Penn Highlands Brookville** service area is living within a health professional shortage area. Health Professional Shortage Areas (HPSAs) are designated as having shortages of primary care, dental care, or mental health providers and may be geographic (a county or service area), population (e.g., low income or Medicaid eligible) or facilities based (e.g., federally qualified health centers, or state or federal prisons).

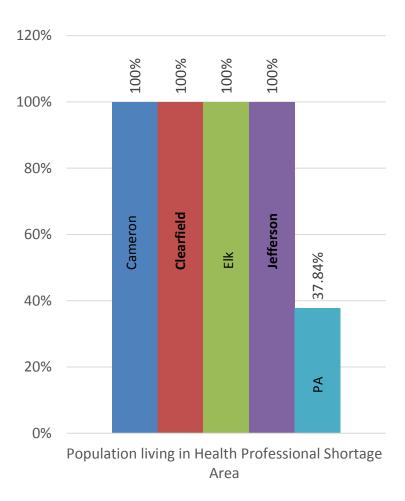


Figure 3: Population Living in a HPSA

Health care access issues exist in the **Penn Highlands Brookville** study area. **Jefferson County** ranks within the bottom 12 (an unfavorable ranking) in the state in terms of clinical care according to the 2017 County Health Rankings report (see Table 2 below). The clinical care category takes into consideration the ease of accessing care and the quality of care once accessed.⁵ While the clinical care ranking takes into account the availability of health services and the quality of those services, it also considers the preventive care measures that patients take to manage their health,

⁵ Access to care is based on the following measures: uninsured, primary care physicians, dentists, and mental health providers. Quality of care is based on the following measures: preventable hospital stays, diabetic monitoring, and mammography screening.

including immunization rates, cancer screening rates, and percentage of the population that receives a yearly dental examination.⁶

Pennsylvania	Clinical Care (ranking out of 60)
Clearfield County	16
Jefferson County	48

Table 2: Clinical Care – County Health Rankings

Access to care was a top health care concern during the 2015 CHNA. To combat this issue, Penn Highlands Brookville opened a Continuity Clinic in 2017 as part of the PHH GME Program to provide additional access to primary care. Further, they received Board approval to construct and renovate a new QCare walk-In clinic in the Brookville market.

Access to Specialty Care (with emphasis on Oncology)

While an overall predicted physician shortage is anticipated by 2025, this especially is true for specialty physicians in the U.S. By 2025, there is predicted to be a shortfall of 28,200 to 63,700 non-primary physicians, including up to 12,300 medical specialists, up to 31,600 surgical specialists, and up to 20,200 other specialists.⁷

Specifically in the **Penn Highlands Brookville** service area, oncologists were observed by stakeholders as lacking in the area. The following data shows that **Penn Highlands Brookville** does fall behind the state average in some cancer screenings. Figures in red are lower than the state average of residents who have received the screening in the last 1-2 years.⁸ Green figures are above the state average.

Pennsylvania	Mammogram in the Past 2 Years	PAP Test	Sigmoidoscopy or Colonoscopy
Cameron County	58.3%	n/a	n/a
Clearfield County	70.5%	75.0%	53.5%
Elk County	68.4%	78.4%	48.6%
Jefferson County	65.1%	76.7%	48.2%
PA	64.8%	78.8%	62.1%

Table 3: Cancer Screenings

⁶ "Digging Deeper – Clinical Care." County Health Rankings. 2016.

⁷ AAMC

⁸ Community Commons 2017

In the **Penn Highlands Brookville** study area, there are lower rates of PAP tests and sigmoidoscopies/colonoscopies in **Clearfield and Jefferson Counties** compared to Pennsylvania's rates.

While interview respondents repeatedly mentioned the need for more cancer specialists in the region, it was noted that Penn Highlands Healthcare was already making strides in these areas.

Access to Behavioral Care (especially for mental health)

Mental health is a growing issue across the U.S. Approximately one in five adults in the U.S. – or 43.8 million residents – experiences mental illness in a given year. 21.5 percent of youth age 13 through 18 experiences a severe mental disorder at some point during their lives.⁹ In many instances, mental illness and substance abuse go hand-in-hand; among the 20.2 million adults in the U.S. with a substance abuse issue, approximately 10.2 million have a co-occurring mental health issue.¹⁰

Consequences of untreated and ineffective mental health issues include:

- Mood disorders, including major depression, dysthymic disorder and bipolar disorder, are the third most common cause of hospitalization in the U.S. for both youth and adults aged 18–44.¹¹
- Individuals living with serious mental illness face an increased risk of having chronic medical conditions.¹²
- Adults in the U.S. living with serious mental illness die on average 25 years earlier than others, largely due to treatable medical conditions.¹³
- More than 90% of children who die by suicide have a mental health condition.¹⁴
- Each day an estimated 18-22 veterans die by suicide.¹⁵

⁹ "Mental Health by the Numbers" National Alliance on Mental Illness. 2016.

¹⁰ "Mental Health by the Numbers" National Alliance on Mental Illness. 2016.

¹¹ Agency for Healthcare Research and Quality, The Department of Health & Human Services. (2009). HCUP Facts and Figures: Statistics on Hospital-based Care in the United States, 2009.

¹² Colton, C.W. & Manderscheid, R.W. (2006). Congruencies in Increased Mortality Rates, Years of Potential Life Lost, and Causes of Death Among Public Mental Health Clients in Eight States. Preventing Chronic Disease: Public Health Research, Practice and Policy.

¹³ National Association of State Mental Health Program Directors Council. (2006). Morbidity and Mortality in People with Serious Mental Illness.

¹⁴ U.S. Department of Health and Human Services. Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institute of Mental Health.

¹⁵ U.S. Department of Veteran Affairs Mental Health Services Suicide Prevention Program. (2012). Suicide Data Report, 2012

With high rates of mental illness and substance abuse across the nation and in the state of Pennsylvania, it is increasingly important for residents to be able to seek and obtain quality care and treatments in order to manage their conditions. However, many struggling with mental and behavioral health issues are unable to access treatment. 56.5% of adults with mental illness did not receive treatment in the past year, and for those seeking treatment, 20.1% continue to report unmet treatment needs.¹⁶ The rate of behavioral health providers, cost of care, and uninsured levels play a role in a person's ability to receive behavioral health care.

As seen in Table 4, while **Clearfield County** (222.9) is well above the state average for mental health providers per 100,000 population, **Jefferson County** lags well behind, with only 69.4 providers.

Geography	Mental Health Providers per 100,000 Population
Cameron County	n/a
Clearfield County	222.9
Elk County	64.1
Jefferson County	69.4
PA	171.5

Table 4: Mental Health Providers per 100,000 Population

Accessing behavioral health care is pertinent as behavioral health issues can have detrimental effects on the health of individuals and communities. For example, those living with serious mental illness face an increased risk of developing a chronic medical condition. An adult with a serious mental illness dies on average 25 years sooner than someone without a serious mental illness; the deaths typically stem from a treatable chronic condition.¹⁷

In addition, untreated mental health conditions prevent individuals from leading everyday lives. Mental illness may prevent individuals from obtaining an education and having a stable job, both which are important to an individual's well-being, as well as the overall health of a community. Improved access to behavioral health care services for all residents will help those dealing with mental illness and substance abuse to receive the treatment they need.

¹⁶ Mental Health America. 2018.

¹⁷ "Mental Health by the Numbers" National Alliance on Mental Illness. 2016.

Care Coordination and Navigation

Care coordination and navigation, which was identified as a top health need in the 2015 **Penn Highland Brookville** CHNA, continues to be a top concern. It is well understood how difficult it is for residents to know what services are available to manage their health issues in a complex health system. Often times, residents are unaware of the available resources and services in their communities and do not always know where to turn for help. This can be especially true for the low-income and elderly populations, who may not have insurance or the ability to afford out-ofpocket costs for a typical doctor's visit.

Priority #2: Chronic Conditions

Chronic conditions are medical conditions are typically described as long in duration and slow in progression, and usually include the following conditions:

- Alzheimer's
- Heart Failure
- Arthritis
- Hepatitis
- Asthma
- HIV/AIDS
- Atrial Fibrillation
- Hyperlipidemia (High cholesterol)
- Autism Spectrum Disorders
- Hypertension (High blood pressure)

- Cancer
- Ischemic Heart Disease
- Chronic Kidney Disease
- Osteoporosis
- COPD
- Schizophrenia
- Depression
- Stroke
- Diabetes

When speaking with stakeholders and members of the community, it was mentioned often that obesity, diabetes, and cancer were perceived to be the most common chronic conditions in the region.

Obesity and Physical Activity

Obesity is a major issue across the United States affecting all demographics. More than one-third (36.5%) of adults in the U.S. are currently obese, and that number has continues to rise.¹⁸ Data from 2015-2016 show that nearly 1 in 5 school age children and young people (6 to 19 years) in the United States has obesity.¹⁹ Obesity is particularly prevalent across the Southern and

¹⁸ "Adult Obesity Facts." Center for Disease Control and Prevention.

¹⁹ Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of obesity among adults and youth: United States, 2015–2016. NCHS Data Brief.

Appalachian portions of the U.S. Pennsylvania experiences fairly high rates of obesity, as the state had the 25th highest obesity rate in the nation in 2017.²⁰

Geography	Adult Obesity %	Recreation and Fitness Facility Access per 100,000
Cameron County	28%	n/a
Clearfield County	37%	6.12
Elk County	29%	9.39
Jefferson County	32%	4.42
PA	29%	11.07

Table 5: Adult Obesity Percentages and Recreation Facilities per 100,000 Population

As illustrated in Table 5, the entire Penn Highlands Healthcare system shows above average rates of obesity, minus Cameron County.²¹ Further, the entire study area of Penn Highlands Healthcare shows lower than average rates for recreation and fitness facilities.²² Obesity is one of the largest contributing factors of preventable chronic conditions, including diabetes, hypertension, and stroke. Adults who are overweight are more likely to have high blood pressure and high cholesterol, both of which can lead to major health issues such as heart disease and stroke. As obesity rates are on the rise, so are chronic diseases. The toll and the overall health care costs associated with obesity and chronic diseases are staggering. The CDC estimates that health care costs due to obesity and the chronic diseases that stem from obesity are estimated to be anywhere between \$147 billion to \$210 billion per year.²³

Pennsylvania has the 25th highest adult obesity rate in the nation, according to *The State of Obesity: Better Policies for a Healthier America*. Pennsylvania's adult obesity rate is currently 30.3%, up from 20.3% in 2000 and from 13.7% in 1990.²⁴

While Penn Highlands scores poorly for access to recreation and fitness facilities, it should be noted that the study area does score very well for the ranking of Physical Environment within the 2017 County Health Rankings. Specifically, **Clearfield and Jefferson Counties** rank 15th and 23rd, respectively, out of 60 counties in Pennsylvania. Physical environment includes components such as air and water quality, housing and transportation, and available green space.

²⁰ The State of Obesity http://stateofobesity.org

²¹ County Health Rankings 2017

²² County Health Rankings 2017

²³ "The Healthcare Costs of Obesity." The State of Obesity.

²⁴ The State of Obesity, Pennsylvania, https://stateofobesity.org/states/pa

In addition to a healthy diet, physical activity and fitness also is important to leading a healthy lifestyle and preventing obesity and chronic disease. Physical inactivity is responsible for one in 10 deaths among U.S. adults.²⁵

Interview respondents felt that the lack of gyms in the area, cost of gym membership, and the rising cost of team sports, are among the reasons why individuals (both young and old) are not exercising as much as they need to.

Nutrition and Diabetes

Poor nutrition is a top reason for obesity rates in the region. Community leaders interviewed for the CHNA cite that poor nutrition and unhealthy diets consisting of fried and processed foods are contributing factors. A balanced diet consisting of fruit and vegetables is important for having good nutrition.

While nutritious food consumption can help prevent obesity and chronic conditions, socioeconomic and environmental factors serve as barriers to an individual's ability to lead a healthier lifestyle. During the community forum and interviews, community leaders revealed that healthy food options are not always available in the study area; they expressed the need for more supermarkets and healthy food



options for residents. In addition, poor public transportation makes it difficult for residents to travel to access grocery stores that sell healthy food options.

Income levels also play a role in a person's ability to afford fresh fruits and vegetables. Residents struggling to make a living are not able to make healthy eating a priority. Fresh fruits and vegetables can be expensive; residents with lower incomes turn to cheaper processed foods to feed their families. With all four counties in the Penn Highlands Health region earning about \$20,000 less than the average Pennsylvanian, access and ability to purchasing healthy foods may be limited (see Figure 5 in Appendix B).²⁶

²⁵ Danaei G, Ding EL, Mozaffarian D, et al. The Preventable Causes of Death in the United States: Comparative Risk Assessment of Dietary, Lifestyle, and Metabolic Risk Factors.

²⁶ 2012-2016 American Community Survey

Nutrition and wellness were identified as community health issues in the 2015 CHNA. Currently, Penn Highlands Brookville and Penn Highlands Healthcare have provided hospital inpatients with diet education when applicable and featured monthly "Super Foods" on displayed in the cafeteria to promote healthy eating within Penn Highlands facilities.

Cancer

It is no secret that cancer is a local, national, and worldwide chronic disease that has affected millions of people. Consider the scope of cancer on a national level:²⁷

- In 2018, an estimated 1,735,350 new cases of cancer will be diagnosed in the United States and 609,640 people will die from the disease.
- The most common cancers (listed in descending order according to estimated new cases in 2018) are breast cancer, lung and bronchus cancer, prostate cancer, colon and rectum cancer, melanoma of the skin, bladder cancer, non-Hodgkin lymphoma, kidney and renal pelvis cancer, endometrial cancer, leukemia, pancreatic cancer, thyroid cancer, and liver cancer.
- The number of new cases of cancer (cancer incidence) is 439.2 per 100,000 men and women per year (based on 2011–2015 cases).
- Cancer mortality is higher among men than women (196.8 per 100,000 men and 139.6 per 100,000 women).
- When comparing groups based on race/ethnicity and sex, cancer mortality is highest in African American men (239.9 per 100,000) and lowest in Asian/Pacific Islander women (88.3 per 100,000).
- Approximately 38.4% of men and women will be diagnosed with cancer at some point during their lifetimes (based on 2013–2015 data).

In Pennsylvania, there are projected to be 80,960 estimated new cases in 2018 and 28,620 estimated deaths in 2018 alone.²⁸ The most common cancer diagnoses in Pennsylvania are breast (female), lung, prostate, and colon.²⁹

Locally, in the Penn Highlands Healthcare service area, there are higher rates of these cancers.

²⁷ Cancer.gov

²⁸ American Cancer Society

²⁹ American Cancer Society

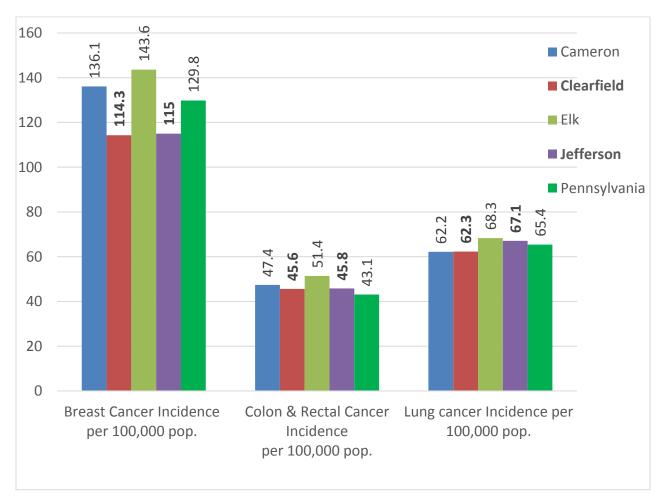


Figure 4: Cancer Screenings in Region

As observed in Figure 4 above, the Penn Highlands Healthcare service area sees higher levels of cancer rates in some counties for breast, colon and rectal, and lung compared to the state average³⁰.

Specifically, for the **Penn Highlands Brookville** service area, the data shows a higher rate in **Clearfield County** for colon and rectal cancer compared to the state. In **Jefferson County**, there are higher rates for colon and rectal cancer and lung cancer compared to the state.

Interviewees felt that cancer is an issue that goes beyond Penn Highlands but deserves special attention. Many respondents believed that cancer rates were only climbing and that **Penn Highlands Brookville** must work to help the local population who have been diagnosed.

³⁰ Community Commons

Priority #3: Substance Abuse

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol, tobacco, and illicit drugs. Substance abuse also does not discriminate – all genders, races, religions and both the rich and poor are susceptible to substance abuse. Repeated use of these substances use can lead to dependence syndrome - a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated substance use and that typically include a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state.

Policies which influence the levels and patterns of substance use and related harm can significantly reduce the public health problems attributable to substance use, and interventions at the health care system level can work towards the restoration of health in affected individuals.³¹

When speaking with members of the **Penn Highlands Brookville** community, many were concerned about three particular substances – drugs (especially opioids), alcohol, and tobacco.

Drugs (with emphasis on opioids)

Every day, more than 115 people in the United States die after overdosing on opioids. The misuse of and addiction to opioids—including prescription pain relievers, heroin, and synthetic opioids such as fentanyl—is a serious national crisis that affects public health as well as social and economic welfare. The Centers for Disease Control and Prevention estimates that the total "economic burden" of prescription opioid misuse alone in the United States is \$78.5 billion a year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement.³²

In 2016, there were 2,235 opioid-related overdose deaths--- in Pennsylvania a rate of 18.5 deaths per 100,000 persons—compared to the national rate of 13.3 deaths per 100,000 persons. Since 2010, opioid-related overdose deaths have increased in all categories. Heroin overdose deaths have increased from 131 to 926; synthetic opioid overdose deaths have increased from 411 to 729 deaths.³³

In the study area, the opioid epidemic was a health issue that was discussed very frequently – many residents were concerned about the perceived growing levels of opioid abuse in the Penn

³¹ World Health Organization

³² National Institute on Drug Abuse

³³ National Institute on Drug Abuse, Pennsylvania Opioid Summary

Highlands Healthcare service area. Communities which are both rural and economically depressed are typically very susceptible to opioid abuse.

Alcohol and Tobacco Use

Another lingering community health issue that was discussed during the last CHNA was prevalent alcohol and tobacco use. Stakeholders often discussed during interviews that alcohol and tobacco use are "generational" issues that passed down from adults to their children. Many said that dependence and abuse are engrained in the culture of **Penn Highlands Brookville** and that it will take years – if not decades – of education to change the habits of residents.

Geography	Liquor Store Access per 100,000 population	Alcohol Consumption (%)	Tobacco Usage (current smokers, %)
Cameron County	19.6	n/a	44.6%
Clearfield County	20.8	18.9%	21.1%
Elk County	34.4	27.2%	35.5%
Jefferson County	26.5	24.3%	28.8%
PA	14.3	18.7%	20.8%

Table 6: Alcohol and Tobacco Access Consumption

As illustrated in Table 6, the entire Penn Highlands Healthcare service area, including **Clearfield and Jefferson Counties**, show higher rates in all major alcohol and tobacco measures compared to the state. This data shows that interviewees are correct in their perception that residents of the region are consuming alcohol and tobacco at a higher rate than the Pennsylvania averages.

Penn Highlands recognizes the longstanding battle against alcohol and tobacco use in the region. Currently, Penn Highlands Brookville has incorporated a smoking cessation facilitator at the facility and externally conducts outreach at events such as the YMCA health fair, Brookville High School Pink Night, Laurelbrooke Landing and PHH health fair locally to help curb these abuses.

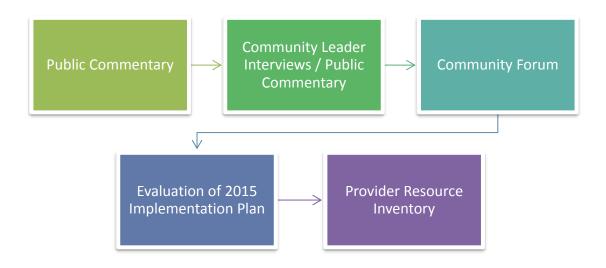
Appendix A: Primary Data

Primary Data Collection

A comprehensive community-wide CHNA process was completed for **Penn Highlands Brookville**, which is part of the Penn Highlands Healthcare system. The CHNA process brought together hospital leadership and key community leaders from health and human service agencies, government, and educational institutions to evaluate the needs of the community. This assessment included primary collection that incorporated public commentary surveys, community leader interviews, provider resource inventory, and a community forum.

An in-depth review of all collected primary and secondary data at the community forum public input session led to the identification and prioritization of community health needs. **Penn Highlands Brookville** will examine and develop strategic actions through an implementation phase that will highlight, discuss and identify ways the hospital will work to address the needs of the communities it serves.

Tripp Umbach directed, managed, and worked closely with leadership from **Penn Highlands Brookville** and Penn Highlands Healthcare to collect, analyze, review, and discuss the results of the CHNA. The flow chart below outlines the process of each project component in the CHNA.



Community Leader Interviews/Public Commentary

As part of the CHNA process, telephone interviews were completed with community stakeholders in the service area to better understand the changing community health environment, as well as to receive feedback from the previous CHNA to improve analysis and reporting for this assessment round. Community stakeholder interviews were conducted during the months of January 2018 and March of 2018.

Community stakeholders targeted for interviews encompassed a wide variety of professional backgrounds including: 1) public health expertise; 2) professionals with access to community health related data; and 3) representatives of underserved populations. The interviews offered community stakeholders an opportunity to provide feedback on the needs of the community, secondary data resources, and other information relevant to the study.

Tripp Umbach worked closely with Penn Highlands Healthcare to identify community leaders important to the community needs process. A Tripp Umbach consultant conducted each interview. Each community stakeholder was asked the same set of questions, as developed by Tripp Umbach and reviewed by project leadership at Penn Highlands Brookville. The interviews provided a platform for stakeholders to identify health issues and concerns affecting residents in the service area, as well as ways to address those concerns.

The qualitative data collected from community stakeholders are the opinions, perceptions and insights of those who were interviewed as part of the CHNA process.

Below is a list of organizations and roles that provided feedback for community interviews/public commentary for Penn Highlands Healthcare:

- Penn Highlands Brookville Penn Highlands Clearfield Penn Highlands DuBois Penn Highlands Elk Penn Highlands CT Technologist WRC Executive Director Brookville Elementary Regional Social Workers Penn Highlands Physical Therapist Executive Director of Housing Authority
- Clearfield Area Agency on Aging Penn Highlands Diabetes Education DuBois Vet Center Amserv-DuSan Ambulance Penn Highlands CNO Penn Highlands PHCN Penn Highlands Qcare Food Bank NCRP/Transportation

Provider Resource Inventory

An inventory of programs and services available in the region was developed by Tripp Umbach. The provider inventory highlights available programs and services within Penn Highland's primary service area. The inventory identifies the range of organizations and agencies in the community that are serving the various target populations within each of the priority needs. The inventory provides program descriptions and collects information about the potential for coordinating community activities and creating linkages among agencies.

An interactive link of the provider resource inventory will be made available on Penn Highland Healthcare's website.

Evaluation of 2015 Implementation Planning Strategies

Steering Committee members for the 2018 Penn Highlands CHNA who have worked over the last three years to develop and implement strategies for addressing health needs and issues in the study area evaluated the effectiveness of the strategies created in terms of meeting goals and combatting health problems in the community. In the 2015 CHNA Access to Care and Nutrition and Wellness were identified as top community health needs and implementation planning focus areas. Penn Highlands Healthcare leadership developed goals and strategies for each identified concern.

Tripp Umbach provided hospital leadership with an implementation planning evaluation matrix to provide feedback on evaluation strategies, including rating strategy effectiveness in terms of meeting goals and metrics on a scale of one to five.³⁴ The table below reflects input from hospital leadership on the various strategies and goals for each health issue, the metrics to determine strategy effectiveness, and a rating scale of how well hospital leadership thinks each strategy has performed.

<u>Penn Highlands</u> <u>Brookville</u> Objective	Annual Activity/ Strategy	Evaluation Methods/ Metrics	Partners and Committed Resources	*Status (Rating scale 1-5)	*Comments/Rationale for Ranking
Need #1: Greater Access 1. Open two clinics in the	Year 1: Conduct Pro Formas for the two clinics.	Year 1: Measuring the activity of the first year and the	Partner: Penn Highlands Healthcare	3	In 2017, Penn Highlands Healthcare (PHH) opened a Continuity Clinic as part of the PHH GME Program to provide

Table 7: Evaluation of Implementation Strategies

³⁴ A score of one (1) indicates a poor rating (did not fulfill goals and measures). A score of five (5) indicates an excellent rating (fulfill goals and measures to a high degree).

Brookville	Year 2: Recruit	completion of	Committed		additional access to
service area.		completion of			primary care.
Service area.	providers and	the first Pro	Resources:		prinary care.
	staff.	Forma.	Practice		In 2017, PHH received
			management,		Board approval to
	Year 3:	Year 2:	Physician		construct/renovate new
	Establish	Measuring	recruiters and		QCare Walk-In Clinic in
	locations for	the activity of	human		the Brookville Market.
	the 2 clinics.	the second	resources, the		
		year and the	COO,		
		completion of	marketing		
		the newly	materials		
		recruited			
		staff.			
		Year 3:			
		Measuring			
		the progress			
		of locating the			
		two clinic			
		locations.		2	
Need #2: Nutrition	Year 1: Review	Year 1:	Partners:	3	Inpatients are provided with diet education
& Wellness	current	Document the	Senior centers,		when applicable by
Services	materials to	completion of	extension		RD/DTR.
	ensure leaders	review of	offices, Area		
1. Provide	follow	materials by	Agency on		Tables featuring monthly
education and	evidence based	leaders.	Aging, Spirit of		"Super Foods" are
resources to inpatient and	guidelines.		Women		displayed in the cafeteria
outpatient		Year 2:			to promote healthy
discharges.	Year 2: Revise	Document the	Committed		eating.
	and develop	materials and	Resources:		
	patient	education	Staff time		Senior Health Day: RD
	materials and	staff.	Starrtific		taught about low sodium
	education				and high fiber at the
	staff.	Year 3:			Heritage House Senior
		Document			Center
	Year 3:	review and			January 2015-August
	Ongoing	analysis of			2015: LDCT Navigator
	analysis of	efforts.			visited PCPs and
	efforts.				providers in the PHB
	enorts.				service area to educate
					and inform them about
					the LDCT program. Fliers
					were distributed and
					laminated posters for
					offices.

					2015 and 2016: offered smoking cessation and LDCT at YMCA health fair, Brookville High School Pink Night, Laurelbrooke Landing and PHH health fair 2017: Smoking cessation facilitator was trained and began offering smoking cessation at Penn Highlands Brookville
	Year 1: Review	Year 1: Mark	Partners:	3	
& Wellness	current	the	Senior centers,		
Services	materials to	completion of	extension		
	ensure leaders	review of	offices, Area		
2. Provide education and	follow evidence based	materials by leaders.	Agency on		
resources to		leaders.	Aging, Spirit of Women		
clinical setting.	guideline.	Year 2:	women		
	Year 2: Revise	Document the			
	and develop	materials and	Committed		
	patient	education	Resources:		
	materials and	staff and	Staff time		
	education	formulate a			
	staff.	database.			
		Year 3:			
	Year 3:	Review and			
	Ongoing	analysis of			
	review and	efforts			
	analysis of				
	efforts.				
	Year 1: Identify	Year 1:	Partners:	2	
& Wellness	current	Formulating a	Senior centers,		
Services	measures and	database of	extension		
	necessary	current and	offices, Area		
3. Perform risk assessment	additional	future	Agency on		
assessment	measures	measures.	Aging, Spirit of Women		
	Year 2: Build	Year 2:	women		
	the program.	Quantifying			

	Year 3: Review	progression of	Committed		
	and assess the	developed	Resources:		
	effectiveness.	program	Staff time		
		Year 3:			
		Document the			
		review the			
		effectiveness			
		of the efforts.			
Need #2: Nutrition	Year 1: Identify	Year 1: Create	Partners:	3	
& Wellness	topics and	a database of	Senior centers,		
Services	review current	programs.	extension		
	programs.		offices, Area		
4. Community		Year 2:	Agency on		
Education	Year 2: Revise	Document	Aging, Spirit of		
	and implement	revisions the	Women		
	programs.	programs			
			Committed		
	Year 3: Review	Year 3:	Resources:		
	and assess the	Document the	Staff time		
	effectiveness.	review and	otan time		
		analysis of			
		efforts.			

Community Forum

A regional community planning forum was held on April 18, 2018 at Penn Highlands DuBois. The community planning forum involved 42 community leaders representing various community organizations, health and human services agencies, health institutions, and additional community agencies, Community participants were invited by members of Penn Highlands Healthcare to attend the forum facilitated by Tripp Umbach.

Tripp Umbach presented the results from secondary data analysis, community leader interviews, and public commentary and used these findings to engage community participants in a group discussion. Participants broke into groups to determine and identify issues that are most prevalent and widespread in their respective hospital communities. Finally, the breakout groups were charged with creating ways to resolve their community's identified problems through innovative solutions in order to form a healthier community.

The following list identifies prioritized community health needs based upon input collected from Penn Highlands Healthcare forum participants. These results are a culmination of the data presented by Tripp Umbach and attendees' perceptions experiences within the region.

Prioritized Key Community Needs:

- 1. Access to Care
- 2. Chronic Conditions
- 3. Substance Abuse

Upon the collection and review of all primary and secondary data, community forum public input, and discussions with the CHNA working group and project leadership, three prioritized community health needs came to the forefront. Included in each community health need priority are additional factors and challenges that account for the health needs.

Implementation Planning

With the completion of the community health needs assessment, an implementation phase will begin with the onset of implementation planning sessions facilitated by Tripp Umbach. The planning sessions that will engage hospital in the community health implementation planning process, allowing for the development of attainable strategies and goals that address health needs and concerns. The planning process will ultimately result in the development of an implementation plan that will meet system and IRS standards.

Appendix B: Secondary Data Analysis

Tripp Umbach collected and analyzed secondary data from multiple sources, including Truven Health Analytics, U.S. Census Bureau, Community Commons, County Health Rankings, World Health Organization, National Institute on Drug Abuse, American Cancer Society, Center for Disease Control and Prevention, National Alliance on Mental Illness, among other.

The secondary data profile includes information from multiple health, social and demographics sources. Tripp Umbach used secondary data sources to compile information related to disease prevalence, socioeconomic factors and health behaviors. Where applicable, data were benchmarked against state and state trends. The secondary data profile includes an overview of health and social conditions in the region. Secondary data were used to provide important information, insight, and knowledge into a broad range of health and social issues.

With regards to the secondary data, Tripp Umbach analyzed the secondary at both a system level (encompassing Cameron, Clearfield, Elk, and Jefferson Counties) as well as county level which are specific to each of the four Penn Highlands hospitals. In 2016, 11 ZIP code areas were analyzed for **Penn Highlands Brookville**. The 11 ZIP codes represent the community served by **Penn Highlands Brookville** as the hospital's primary service area, or where approximately 80 percent of the hospital's inpatient population resides. **Clearfield and Jefferson Counties** were the focus of the secondary data collection because the comprise the largest portion of the service area population.

In Table 8 below, the data shows a slight decline in population in **Clearfield and Jefferson Counties**. Notably, **Elk County** saw the largest decrease, with a drop of nearly 700 residents. Conversely, Pennsylvania saw an increase in population during that time.

Population and Demographics

	2009-2013				2012-2016		
	Total Population	% male	% female	Total Population	% male	% female	
Cameron	5,000	49.5%	50.5%	4,807	50.6%	49.4%	
Clearfield	81,536	51.6%	48.4%	81,170	52.1%	47.9%	
Elk	31,799	49.7%	50.3%	31,111	50%	50.1%	

Table 8: Penn Highlands Healthcare Population Snapshot

Jefferson	45,015	49.5%	50.5%	44,575	49.7%	50.3%
PA	12,731,381	48.8%	51.2%	12,783,977	48.9%	51.1%

As shown in Figure 5 below, Elk County reports the highest average annual household income (\$59,070) as compared with the other counties in the region. Cameron County reports the lowest average annual household income (\$53,499) for the study region. **All four counties** in the region report lower average household incomes as compared with the state of Pennsylvania (\$75,235).

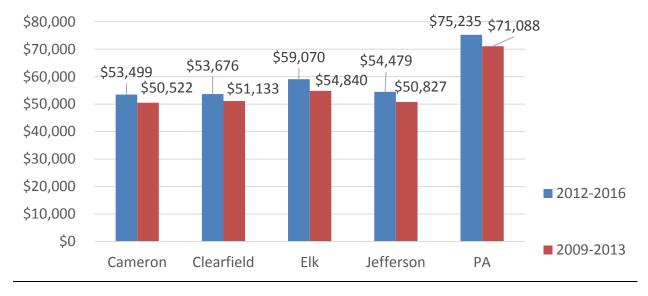


Figure 5: Average Household Income

All four of the study area counties report higher rates of elderly residents (aged 65+) as compared with the state (Figure 6).

18.9% of the **Clearfield County** population is aged 65 and older; 15.3% are aged 14 and younger. **Jefferson County** reports the highest ratio of residents aged 0-14 (17.3%); this is equal to that of the state.

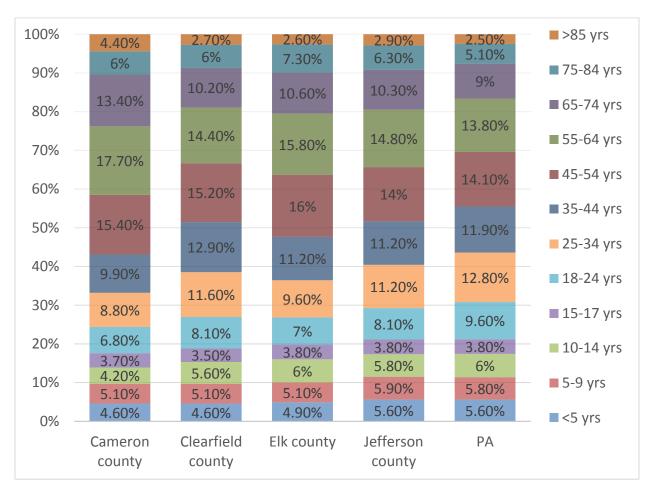


Figure 6: Age Distribution (5-year estimate, 2012-2016)

Appendix C: About Tripp Umbach

Penn Highlands Healthcare contracted with Tripp Umbach, a private health care consulting firm headquartered in Pittsburgh, Pennsylvania to complete a community health needs assessment (CHNA). Tripp Umbach has worked with more than 200 communities in all 50 states.

From community needs assessment protocols to fulfilling the new Patient Protection and Affordable Care Act (PPACA) IRS 990 requirements, Tripp Umbach has turned needs assessments into practical action plans with sound implementation strategies, evaluation processes and funding recommendations for hundreds of communities. Tripp Umbach has helped more than 75 hospitals meet their IRS 990 requirements.

Changes introduced as a result of the PPACA have placed an increased level of importance on population health and well-being and on collaborative efforts between providers, public health agencies and community organizations to improve the overall health of communities.

