December 2018

West Penn Hospital Community Health Needs Assessment 2018

Conducted by: Tripp Umbach

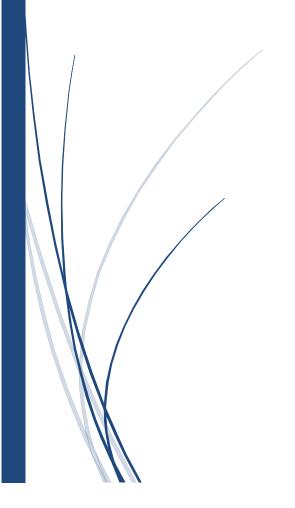


Table of Contents

Contents

Section 1. Executive Summary	3
Introduction	3
Objectives and Methodology	4
Key Prioritized Needs	6
Section 2. Community Definition	7
Section 3. Key Findings of CHNA Process	8
Priority #1: Chronic Conditions	8
Priority #2: Access to Care	12
Priority #3: Behavioral Health	13
Appendix A. Primary Data Summary	16
Appendix B. Secondary Data Analysis Highlights	19
Appendix D. 2015 Implementation Planning Update and Evaluation	31
Appendix C. About Tripp Umbach	38

Section 1. Executive Summary

Introduction

For decades, the hospitals of Allegheny Health Network (AHN) have been providing people with exceptional healthcare to help people live healthy lives and have extended their reach to more people than ever offering a broad spectrum of care and services. AHN boasts eight hospitals: Allegheny General, Allegheny Valley, Canonsburg, Forbes, Jefferson, Saint Vincent, Westfield Memorial and West Penn; and more than 200 primary- and specialty-care practices. They have approximately 2,400 physicians in every clinical specialty, 19,000 employees and 2,000 volunteers. Together, AHN provides world-class medicine to patients in their communities, across the country and around the world.

AHN has proudly received accolades from numerous organizations, including Thomson Reuters, AARP, Healthgrades, and Consumer Reports.



Serving the community since 1848, West Penn Hospital has evolved into a 317 licensed bed hospital with private rooms, with more than 200 physicians and 1,800 staff members. The leadership and staff are dedicated to being an academic medical center with an international reputation for excellence and innovation in patient care, education, and research.

As the first hospital in western Pennsylvania to achieve Magnet Recognition (2006) and the first to achieve Magnet redesignation (2012) from the American Nurses Credentialing Center (ANCC), West Penn Hospital is very proud to be among the 6% of the more than 6,000 hospitals in the U.S. that have achieved this prestigious recognition for excellence in nursing services.

West Penn Hospital's School of Nursing, established in 1892, is one of the first accredited by the National League for Nursing Accreditation Council.

Over the years, West Penn has earned regional and national recognition for excellence in bariatric surgery, bone marrow and cell transplantation, burn care, cardiac care, nursing, women's and infant's care, and more. West Penn Hospital provides patients with access to specialists and cutting-edge medical treatments that are close to home and nationally recognized:

- In 2017, Rated #1 in western Pennsylvania* for medical excellence in major neurosurgery
- Rated in Top 25 percent of hospitals nationally for medical excellence in overall medical care, cancer care and stroke care
- Rated in Top 10 percent nationally for medical excellence in gastrointestinal care

 Rated in Top 20 percent nationally for medical excellence in heart failure treatment and major bowel procedures

In 2018, AHN joined together with Tripp Umbach to conduct a comprehensive community health needs assessment for the West Penn Hospital service area of Allegheny County. The following report documents each project step as well as the key findings.



Objectives and Methodology

With the enactment of the Patient Protection and Affordable Care Act (PPACA) on March 23, 2010, tax-exempt hospitals are required to conduct a community health needs assessment (CHNA) and adopt implementation strategies to actively improve the health of the communities they serve. The findings of the CHNA provide hospitals and with the necessary information to develop and implement strategies that address the specific health needs of their communities. Coordination and management of strategies based upon the outcomes of a CHNA and implementation strategies improves health outcomes of the communities this hospital serves.

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

- 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.

The following report fulfills the CHNA and implementation strategies requirements for tax-exempt hospitals and health systems.

The CHNA process undertaken by AHN, with project management and consultation by Tripp Umbach¹, included input from persons who represent the broad interests of the community served by West Penn Hospital, including those with special knowledge of public health issues and representatives of vulnerable populations served by the hospital.

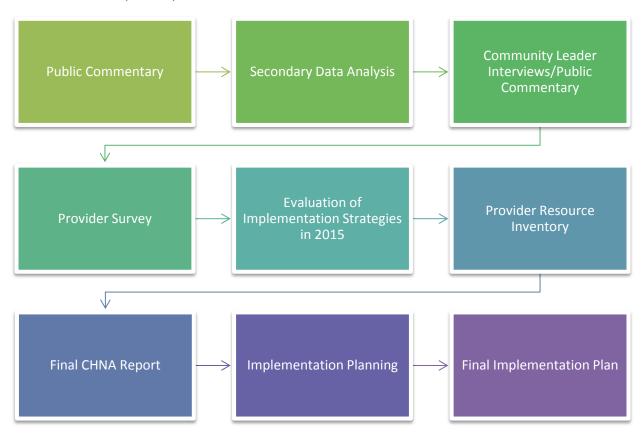
The project components used to determine the community health needs included:

- Public commentary on the 2015 CHNA and Implementation Plan
- Evaluation of Implementation Strategies in 2015
- A survey made available to all AHN providers

¹ See Appendix D for more information on Tripp Umbach

- Secondary data analysis of health status and socioeconomic environmental factors related to health and well-being of residents
- Community leader interviews
- 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 report. Additional information regarding each component of the project, and the results, are found in the Appendices section of this report. The entire secondary data profile for AHN is available upon request.



Tripp Umbach worked closely with leadership from AHN to complete the CHNA with the goal of gaining a better understanding of the health needs of the region. West Penn Hospital will use the findings of the assessment to address local health care concerns and to work collaboratively with regional agencies to address broader socioeconomic and education issues in the service area.

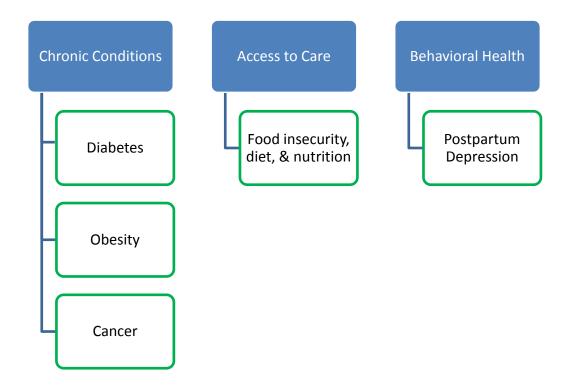
AHN would like to thank all external and internal stakeholders who performed a role in the completion of this CHNA.

Key Prioritized Needs

Tripp Umbach and the West Penn Hospital internal working group identified five prioritized community needs for West Penn Hospital. The community health needs are based on qualitative and quantitative data collected during this CHNA as well as input from facility, healthcare, and community leaders. From the beginning of the project, Allegheny Health Network and Tripp Umbach placed a high value on maximizing input from each of the eight AHN facilities. Each hospital was provided a platform to determine their own health needs and to build consensus from the leadership teams of each facility. Transparency and self-determination in selecting the needs was a priority throughout the CHNA project.

Figure 1 outlines the five prioritized need areas and key factors and considerations of each need.

Figure 1: Prioritized Community Health Needs for West Penn Hospital 2018 CHNA



^{*}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.

Section 2. Community Definition

West Penn Hospital's primary service area, where 80% of their inpatient discharges originated, include the following ZIP codes (excluding ZIP codes for P.O. boxes and offices). Secondary data was collected for Allegheny County, which comprises the entire portion of the West Penn Hospital primary service area.

Figure 2: West Penn Hospital Community ZIP Codes

ZIP Code	City	County
15139	Oakmont	Allegheny
15147	Verona	Allegheny
15201	Pittsburgh	Allegheny
15206	Pittsburgh	Allegheny
15208	Pittsburgh	Allegheny
15213	Pittsburgh	Allegheny
15215	Pittsburgh	Allegheny
15217	Pittsburgh	Allegheny
15218	Pittsburgh	Allegheny
15219	Pittsburgh	Allegheny
15221	Pittsburgh	Allegheny
15222	Pittsburgh	Allegheny
15223	Pittsburgh	Allegheny
15224	Pittsburgh	Allegheny
15232	Pittsburgh	Allegheny
15235	Pittsburgh	Allegheny
15238	Pittsburgh	Allegheny
15260	Pittsburgh	Allegheny

Section 3. Key Findings

#1. Chronic Conditions

Chronic diseases are a major cause of disability and death in Pennsylvania, as well as in the United States. The seven leading causes of deaths are heart disease, cancer, stroke, chronic lower respiratory disease (CLRD), unintentional injury, and Alzheimer's disease and diabetes. According to the Pennsylvania Department of Health, chronic disease accounts for about 70% of all deaths per year in Pennsylvania. With Pennsylvania's aging population and the advances in healthcare that are enabling people to live longer, the cost associated with chronic disease will increase significantly, if there are no changes made. Clinical preventive services, such as routine disease screening and scheduled immunizations, are key to reducing the effects of chronic disease and reducing death. Preventive services both prevent and detect illnesses and diseases in their earlier, more treatable stages, significantly reducing the risk of illness, disability, early death, and medical care costs.

Diabetes

In Pennsylvania, 11% of adults 20 years of age and older have been diagnosed with diabetes.²

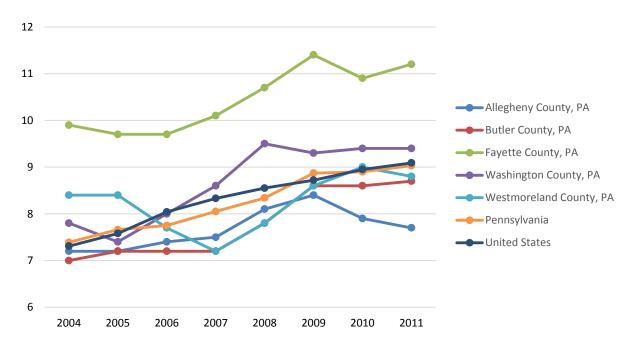


Figure 3: Percent Adults with Diagnosed Diabetes by Year

Source: Community Commons

8

^{2 2017} County Health Rankings

• Key Insight: When providers in the Allegheny Health Network were asked what they perceived as top three risky behaviors/lifestyle choices in their service area, poor eating habits was the number two response with 52% of votes.³

From 20014-2012 at the state level, there was an increase of 1.64% of adults who were diagnosed with diabetes. Allegheny saw a slight decrease in diagnoses towards the end of the study period. It is estimated that one-third of people with diabetes are unaware of their condition because there may be minimal to no symptoms. Screening for diabetes in the early stages is essential and can decrease the risk of developing the complications associated with diabetes. Fortunately, individuals screened for diabetes has increased.

 Key Insight: When Allegheny Health Network providers were asked to list the top three health problems in their service areas, diabetes was the fourth most frequent response, with 35% of providers listing that as a top three concern.⁴

Cancer

In 2015, 1,633,390 new cases of cancer were reported, and 595,919 people died of cancer in the United States. For every 100,000 people, 438 new cancer cases were reported and 159 died of cancer. Cancer is the second leading cause of death in the United States, exceeded only by heart disease. One of every four deaths in the United States is due to cancer.⁵

Figure 4: Cancer Incidence per 100,000

Report Area	Breast Cancer (Female)	Cervical (Female)	Prostate Cancer (Male)	Colon Rectum	Lung and Bronchus
Allegheny County	136.7	6.7	113	41.7	72
Butler	133.3	6.7	131.7	45.1	59.8
Washington	130.3	10.4	105.7	46	67.2
Westmoreland	131.7	7.3	100.2	43.5	69.6
Pennsylvania	129.8	7.6	117.5	43.1	65.4
United States	123.5	7.62	114.8	39.8	61.2

³ See Appendix A

⁴ See Appendix A

⁵ CDC, 2018

In Pennsylvania in 2015, there were 79,335 new cases of cancer. For every 100,000 people, 483 cancer cases were reported. In Pennsylvania, there are projected to be 80,960 estimated new cases in 2018 and 28,620 estimated deaths in 2018 alone. The most common cancer diagnoses in Pennsylvania are breast (female), lung, prostate, and colon.

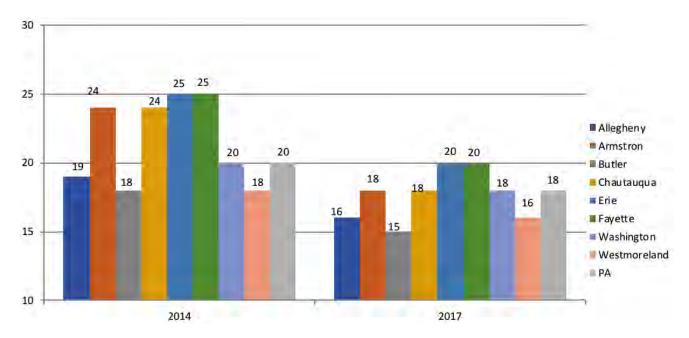


Figure 5: Percent of Adults who Smoke

Source: County Health Rankings, 2017

Between 2010-2014 in Pennsylvania, lung cancer had the highest incidence rate; however, breast cancer and prostate cancer both had the higher incidence rate among each gender. Allegheny county had the highest incidence rate (136.7) in the service area for breast cancer and higher than the state rate (129.8) and the national rate (123.5). Allegheny also had the highest rate for prostate cancer (113).

 Key Insight: When Allegheny Health Network providers were asked to list the top three health problems in their service areas, cancer was the seventh most frequent response, with 23% of providers listing that as a top three concern.⁸

According to the American Cancer Society, nearly half of all cancer deaths could be avoided if people live healthier lifestyles, quit smoking, and get recommended cancer screenings. For the majority of Americans who do not smoke, the most important ways to reduce cancer risk are to maintain a healthy weight, be physically active on a regular basis, and eat a mostly plant-based

⁶ CDC, 2018

⁷ American Cancer Society, 2018

⁸ See Appendix A

diet that limits saturated fat. The best defense against cancer is finding it early, when it's easiest to treat.⁹

Obesity

The nation has experienced a dramatic increase in obesity. Approximately 1 in 3 adults (34.0%) and 1 in 6 children and adolescents (16.2%) are obese, according to Healthy People 2020.

Obesity-related conditions include heart disease, stroke, and type 2 diabetes, which are among the leading causes of death. In addition to grave health consequences, overweight and obesity significantly increase medical costs and pose a staggering burden on the U.S. medical care delivery system. ¹⁰ Ensuring that all Americans eat a healthful diet, participate in regular physical activity, and achieve and maintain a healthy body weight is critical to improving the health of Americans at every age.

Figure 6: Adult Obesity Percentages and Recreation Facilities per 100,000 Population

	Obese Adults	Physical Inactivity	Access to Exercise Opportunities
Allegheny	26%	23%	95%
Butler	28%	22%	42%
Fayette	36%	34%	67%
Washington	29%	27%	84%
Westmoreland	28%	25%	83%
Pennsylvania	29%	24%	85%

• Key Insight: 37.3% of surveyed AHN providers identified obesity as one of the top three largest health needs in their service area.

Pennsylvania has the 24th highest adult obesity rate in the nation, and the 21st highest obesity rate for youth ages 10 to 17. Pennsylvania's adult obesity rate is currently 31.6%, up from 20.3% in 2000 and from 13.7% in 1990. 11

Allegheny County (27%) is slightly below the state average of adult obesity as compared to the state (29%).

⁹ American Cancer Society, 2018

¹⁰ Healthy People 2020

¹¹ The State of Obesity. Better Policies for a Healthier America.

Regular physical activity, fitness and exercise are critically important for the health and well-being of people of all ages. Research has demonstrated that virtually all individuals can benefit from regular physical activity, whether they participate in vigorous exercise or some type of

moderate health-enhancing physical activity. More than one-third of all adults do not meet recommendations for aerobic physical activity based on the 2008 Physical Activity Guidelines for Americans, and 23 percent report no leisure-time physical activity at all in the preceding month.¹²

Allegheny County has slightly lower percentages of inactive residents (23%) compared to the state (24%).

Access to Exercise Opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity



such as local, state, and national parks or recreational facilities. Individuals who reside within a half mile of a park, or in urban communities reside within one mile of a recreational facility or in rural communities reside within three miles of a recreational facility are considered to have adequate access for opportunities for physical activity.

The role of the built environment is important for encouraging physical activity. Individuals who live closer to sidewalks, parks, and gyms are more likely to exercise. Pennsylvania is rich with natural resources including state parks providing many opportunities for free, family-friendly physical activity. Allegheny County, when compared to neighboring counties, shows the highest rate for access to exercise opportunities at 95%.

#2. Access to Care

Food insecurity, diet, and nutrition

Food insecurity is a growing problem in Western Pennsylvania and Allegheny County, especially among children. Hungry children cannot focus in school and are three times more likely to be suspended from school and two times as likely to repeat a grade & need special education. Nearly three out of every four students enrolled in Pittsburgh Public Schools are facing hunger.¹³

Hunger eventually can lead to tripling one's chances of suffering from poor health, triples the likelihood of obesity among women and doubles one's chances of developing diabetes.

¹² CDC, 2018

¹³ Pittsburgh Food Bank

Hunger hurts can hurt the local economy by causing increased healthcare spending, increased costs to charities, lost productivity, and poor education outcomes that hurt not just the lifetime earnings of those who are hungry but society as a whole. Hunger costs in PA have risen to nearly \$3.25 billion a year.¹⁴

According to County Health Rankings, Allegheny County ranks as the 12th highest county in PA (out of 67) with 14% of its population designated as food insecure.¹⁵

Individuals with low food security frequently rely on highly processed foods and report eating fresh fruits and vegetables only in the first few days after receiving their monthly SNAP benefits. This type of eating pattern, built on lack of access to healthy food and phases of under-



eating and over-eating, makes food insecure and low-income individuals especially vulnerable to obesity. 16

#3. Behavioral Health

Postpartum depression

Maternal depression affects 10% to 20% of mothers within the first year after giving birth and contributes to staggering economic costs. Improving the health of mothers, infants and children is an important public health goal for the region and the United States. A mother's well-being determines the health of the next generation and can help predict future public health challenges for families, communities and the health care system. Various measures are used to identify and treat women who have maternal depression. The results provide them and their families with needed programs, services and treatment.

Post-partum depression is a priority for AHN and West Penn Hospital has taken the lead in offering services to tackle this issue. During outpatient treatment, AHN's women's behavioral health professionals lead sessions that include:

- Cognitive behavioral therapy (CBT): CBT emphasizes the link between thoughts and feelings. It involves identifying patterns of negative thinking and developing more helpful patterns.
- Interpersonal therapy (IPT): This therapy focuses on the link between one's mood and interpersonal relationships. IPT therapists help the patient understand how their mood can impact their relationships.

¹⁴ Just Harvest: A Center for Action Against Hunger

¹⁵ County Health Rankings, 2018

¹⁶ Pittsburgh Food Bank

- Dialectical behavior therapy: This type of therapy helps a patient learn new emotional regulation techniques to manage painful emotions and decrease conflict in relationships.
- Group therapy: The patient can share their experiences and brainstorm solutions with other moms.
- Medication management: A patient will have ongoing, regular access to a perinatal psychiatrist who can prescribe and manage medications.

Risk factors most commonly associated with maternal depression include race/ethnicity, younger age, and socioeconomic status, current or previous history of depression in parent and/or primary caregiver, change in hormones, history of mood disorders, substance abuse problems, maternal depression from a previous pregnancy and life stressors, which include access to health care, employment and education. A child born to a mother who suffers from postpartum depression is also more likely to experience worse long-term behavioral health problems.¹⁷

Conclusions and Recommendations

With the completion of the 2018 CHNA, West Penn Hospital 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 West Penn Hospital will address the identified community health needs.



West Penn Hospital, 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. The CHNA is a tool that the hospital can use to guide programming and product development to ensure that resources are being used effectively to address health needs as identified by the community.

-

¹⁷ Highmark Foundation

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 to explore further partnerships and collaborations.
- ➤ Identify content experts within the health system to champion existing hospital initiatives and resources and to conduct ongoing evaluation.
- Involve key community stakeholders to participate or be involved in providing expert knowledge on ways to strategically address key community health needs.
- > 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.
- ➤ 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.
- 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 and improved health outcomes.

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 AHN study area and how to best serve these needs.

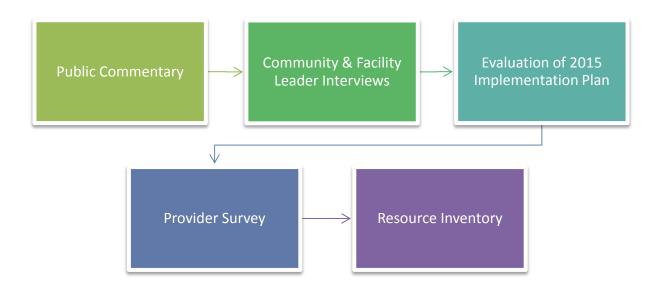
Tripp Umbach, in partnership with AHN, emphasizes that in order to meet the goals and objectives set for in the implementation strategies, West Penn Hospital must leverage existing partnerships within the region as well as develop new relationships among organizations and agencies in the community. Collaboration effectively utilizes community resources by reducing redundancy of services and increasing capacity for service delivery.

Appendix A: Primary Data Summary

Primary Data Collection

A comprehensive community-wide CHNA process was completed for West Penn Hospital. 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, community leader interviews, a resource inventory, and a provider survey.

A review of all collected primary and secondary data by project leadership and the project Steering Committee input session led to the identification and prioritization of community health needs. Each facility was given three opportunities to identify and select the health care needs that were most prevalent in their service area. West Penn Hospital 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.



Community/Facility Leader Interviews and Public Commentary

As part of the CHNA process, telephone interviews were completed with community stakeholders in the primary service area to better understand the changing community health environment. During the phone interviews, feedback on the previous CHNA was solicited to evaluate the progress over the prior three years and to improve analysis and reporting for the current CHNA process. Community stakeholder interviews were conducted between the months of June 2018 and September of 2018.

Community stakeholders identified for interviews encompassed a wide variety of professional backgrounds including:

- 1) public health expertise
- professionals with access to community health related data
- 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 the project Steering Committee to identify community leaders from various sectors who are engaged in the community and have a knowledge of the community needs. 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. 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 them.

In addition, Tripp Umbach interviewed the President/CEO of each facility. These interviews ensured that the spectrum of interviewees included everyone from members of the community to the individuals who operate the facility on a daily basis. From the onset of the project, AHN made it a priority to be transparent in the identification of the needs for each facility.

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

During the interviews, interviewees were asked to name the top three health concerns in their service area. Below are the top five health needs mentioned most often for all CHNA interviews, totaled from all eight facilities:

- 1. Mental health (mentioned in 71% of interviews)
- 2. Substance abuse (mentioned in 64% of interviews)
- 3. Access to care (mentioned in 61% of interviews)
- 4. Chronic conditions (mentioned in 58% of interviews)
- 5. Cost of care (mentioned in 57% of interviews)

Evaluation of 2015 Implementation Planning Strategies

In the 2015 West Penn Hospital CHNA, behavioral health, cancer, chronic disease, and maternal & child health were identified as top community health needs and implementation planning focus areas. West Penn Hospital leadership developed goals and strategies to address each identified concern.

In this 2018 CHNA process, Tripp Umbach provided West Penn Hospital Steering Committee members and leadership with an implementation planning evaluation platform to track the progress of each goal and strategy. Appendix C consists of an updated summary of goals, objectives, and strategies employed by West Penn Hospital to address the needs from the 2015 CHNA.

Provider Survey

Tripp Umbach employed a health provider survey methodology to gather feedback from providers within Allegheny Health Network. The purpose of the provider health survey was to collect providers' insights on the health status of the patient community they serve including priorities, barriers, and trends. Providers were also asked questions that pertain to the care and services they provider in order to meet these needs. Each hospital within AHN sent emails to their health providers requesting survey participation. A survey link was also posted in an internal newsletter to increase response rates. The survey data collection period ran on Survey Monkey from April through June 2018. In total, a sample size of 163 surveys across all AHN facilities were collected.

The survey included 24 questions in total and the questions below offer a summary of the most important questions:

Q. What do you perceive to be the biggest barrier(s) for people not receiving care? (Check all that apply)

A. Top five results

- 1. Out of pocket costs/high deductibles, 103 responses (75.18%)
- 2. No insurance coverage, 83 responses (60.58%)
- 3. No transportation, 77 responses (56.20%)
- 4. Not being able to navigate the health care system, 66 responses (48.18%)
- 5. Lack of mental health facilities, 53 responses (38.69%)

Q. From the following list below, what do you think are the three largest "health problems" in the community you serve?

A. Top ten results

- 1. Substance Abuse, 59 responses (44.03%)
- 2. Aging problems (arthritis, hearing/vision loss, etc.), 56 responses (41.79%)
- 3. Obesity, 50 responses (37.31%)
- 4. Diabetes, 48 responses (35.82%)
- 5. Heart disease and stroke, 45 responses (33.58%)
- 6. Mental health problems, 43 responses (32.09%)
- 7. Cancers, 32 responses (23.88%)
- 8. High blood pressure, 25 responses (19.40%)
- 9. Respiratory/lung disease, 17 responses (12.69%)
- 10. Fire-arm related injuries, 5 responses (3.73%)

Q. From the following list below, what do you think are the three most pressing "risky behaviors" in the community you serve?

A. Top five results

- 1. Drug abuse, 75 responses (55.97%)
- 2. Poor eating habits, 71 responses (52.99%)
- 3. Substance abuse, 67 responses (50.00%)
- 4. Lack of exercise, 61 responses (45.52%)
- 5. Alcohol abuse, 56 responses (41.79%)

Q. What types of improvements would you like to see in the current health system? (Check all that apply)

A. Top five results

- 1. Affordable health care, 91 responses (67.91%)
- 2. Access to mental health care, 80 responses (59.70%)
- 3. Affordable medication, 80 responses (59.70%)
- 4. Coordination of care, 57 responses (42.54%)
- 5. Timely access to primary care, 46 responses (43.33%)

Q. In your opinion, what are the reasons why your overall patient population may be noncompliant to treatment/medication plans?

A. Top five results

- 1. High costs of health care or medications, 104 responses (78.79%)
- 2. Difficulty "getting around" (transportation challenges or personal mobility challenges), 72 responses (54.55%)
- 3. Personal reasons (no specific reason/schedule/forgetfulness), 65 responses (49.24%)
- 4. Lack of insurance coverage, 59 responses (44.70%)
- 5. Lack of understanding of their treatment plan (excluding language barriers), 55 responses (41.67%)

Provider Resource Inventory

An inventory of programs and services available in the West Penn Hospital service area/AHN region was developed by Tripp Umbach. The provider inventory highlights available programs and services within West Penn Hospital'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.

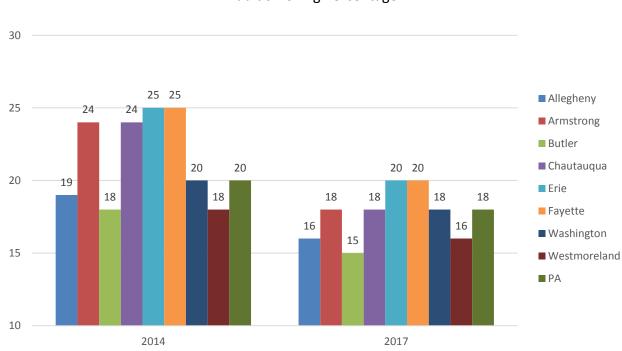
A link to the provider resource inventory will be made available on Allegheny Health Network's website.

Appendix B: Secondary Data Summary

Tripp Umbach collected and analyzed secondary data from multiple sources that include the following subjects and health areas: County Health Rankings, Pennsylvania County Health Statistics, Alcohol, Drug Use, and Tobacco Statistics, Mental and Behavioral Health, Homeless Population Data, Rural Health, and School Health Statistics.

This secondary data summary 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 was benchmarked against state trends. The secondary data profile includes an overview of health and social conditions in the region, broken down by County or County cluster. Secondary data was used to provide important information, insight, and knowledge into a broad range of health and social issues for the CHNA

This section is intended to provide anecdotal, contextual support for the identified health needs of Allegheny Health Network. The entire secondary data profile for Allegheny Health Network is available upon request.

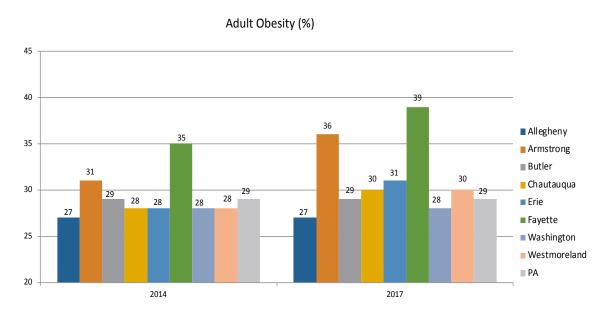


Adult Smoking Percentage

Source: 2017 County Health Rankings

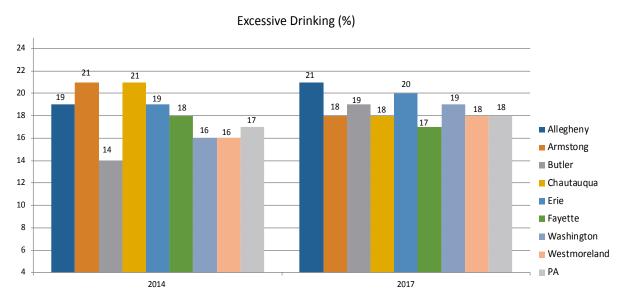
Key Insight: All counties saw a reduction in adult smoking percentage from 2014 to 2017.

• Key Insight: In 2017, Erie and Fayette Counties record an adult smoking percentage above the state average.



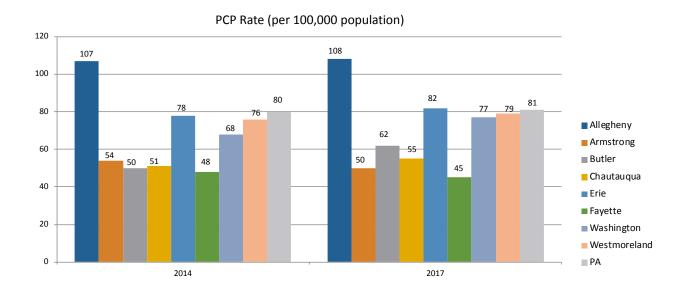
Source: 2017 County Health Rankings

- Key Insight: The rate of adult obesity either increased or remained the same in all counties
 of the study area.
- Key Insight: Armstrong, Chautauqua, Erie, Fayette, and Westmoreland Counties all register adult obesity rates above the state average.



Source: 2017 County Health Rankings

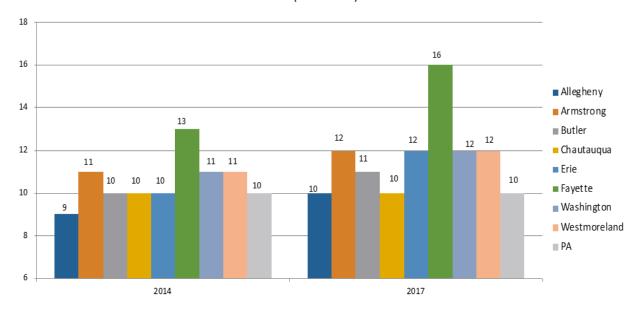
- Key Insight: Butler County saw the largest decrease in excessive drinking from 2014 to 2017.
- Key Insight: In 2017, Allegheny, Butler, Erie, and Washington Counties all registered excessive drinking rates higher than the state average.



Source: 2017 County Health Rankings

- Key Insight: The rate Of PCP per 100,000 increased in all counties except for Armstrong and Fayette, which declined.
- Key Insight: In 2017, Armstrong, Butler, Chautauqua, Fayette, Washington, and Westmoreland Counties record lower PCP rates compared to the state average.

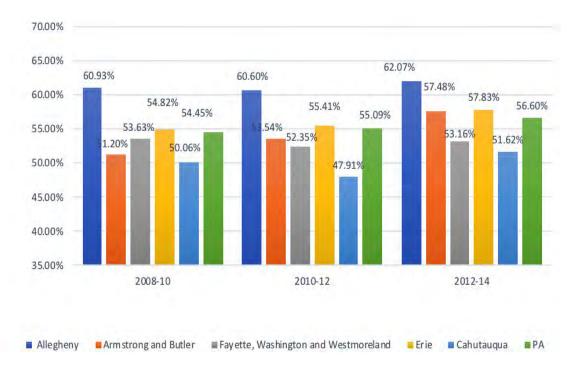
Diabetes (% Diabetic)



Source: 2017 County Health Rankings

- Key Insight: The percentage of diabetic adults increased in Allegheny, Armstrong, Butler, Erie, Fayette, Washington, and Westmoreland Counties from 2014-2017.
- Key Insight: All counties in the study area register equal or higher diabetic adults in comparison to the state average.

Alcohol Use in the Past Month (Aged 12 +)

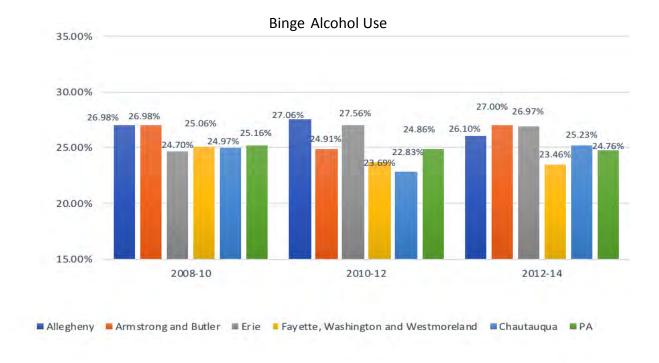


Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- Key Insight: Armstrong/ Butler¹⁸, Allegheny and Erie counties both report a higher percent of Alcohol Use when compared to the state during the most recent 2012-2014 study period.
- Key Insight: Most counties registered relatively equal or slightly higher rates of alcohol usage during the last month during the study period.

23

 $^{^{\}rm 18}$ Armstrong and Butler Counties are grouped together due to their geographic proximity for display purposes.



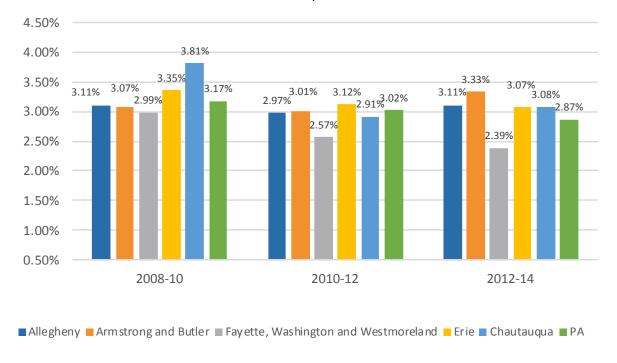
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- Key Insight: Allegheny, Armstrong/Butler and Erie County all reported a higher rate of Binge Alcohol Use than the state (26.10%, 27.00% and 26.97% respectively) during the 2012-2014 study period.
- Key Insight: Fayette, Washington, & Westmoreland County¹⁹ saw the largest decrease in Binge Alcohol Use throughout the study period.

24

 $^{^{19}}$ Fayette, Washington, and Westmoreland Counties were grouped together due to their geographic proximity for display purposes.

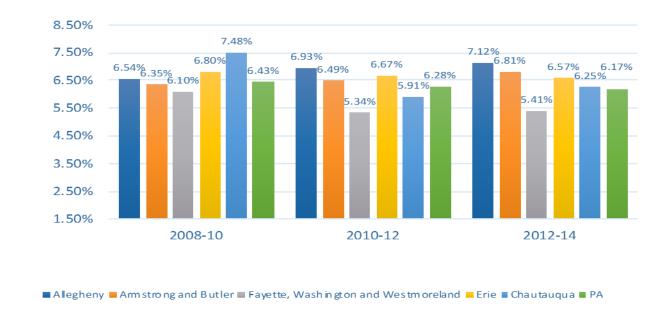
Alcohol Dependence



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- Key Insight: Allegheny, Armstrong/Butler, Erie, and Chautauqua County all reported a higher rate of Alcohol Dependence than the state (3.11%, 3.33%, 3.07%, and 3.08% respectively) during the 2012-2014 study period.
- Key Insight: Fayette, Washington, & Westmoreland, as well as Erie County, saw the largest decrease in Alcohol Dependence throughout the study period.

Needing But Not Receiving Treatment for Alcohol Use



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- Key Insight: Allegheny, Armstrong/Butler, Erie, and Chautauqua County all reported a higher rate of Needing But Not Receiving Treatment for Alcohol Use than the state (7.12%, 6.81%, 6.57%, and 6.25% respectively) during the 2012-2014 study period.
- Key Insight: Allegheny County saw the biggest increase in Needing But Not Receiving Treatment for Alcohol Use rates throughout the entire study period.

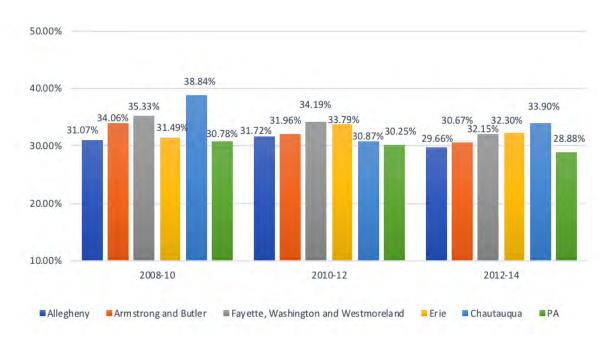
Cigarette Use



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- Key Insight: All County clusters reported a higher rate of Cigarette Use than the state during the 2012-2014 study period.
- Key Insight: Fayette, Washington, and Westmoreland County registered the largest decrease in Cigarette Use during the entire study period.

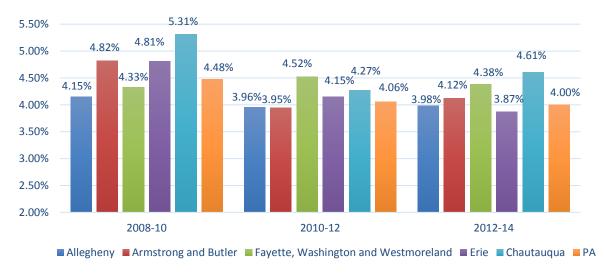
Any Tobacco Use



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- Key Insight: All County clusters reported a higher rate of Any Tobacco Use than the state during the 2012-2014 study period.
- Key Insight: Fayette, Washington, and Westmoreland County registered the largest decrease in Any Tobacco Use during the entire study period.

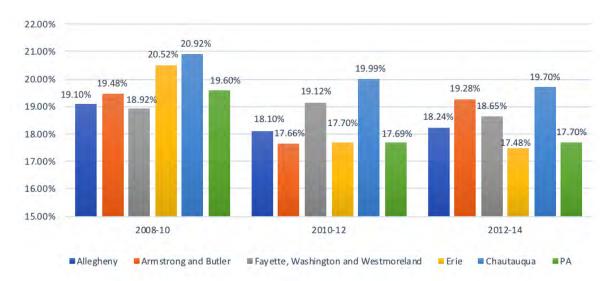
Serious Mental Illness in the Past Year (Aged 18 +)



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2010, 2012 and 2014

- Key Insight: Fayette, Washington and Westmoreland County had the largest decline in the rate of Serious Illness (4.52% to 4.38%) from 2010-2014.
- Key Insight: Allegheny and Erie County have lower rates of Serious Illness than the state rate of 4.0% during the 2012-2014 study period.

Any Mental Illness in the Past Year (Aged 18 +)



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2010, 2012-2014

- Key Insight: Chautauqua County reported the highest rate for Any Mental Illness at 19.70% while Erie County has the lowest rate and is lower than the state rate
- Key Insight: Allegheny Armstrong and Butler counties report a sharp rise in the rates of residents with any mental illness from 2010-2012 to 2012-2014.

Appendix C: 2015 Implementation Planning Update and Evaluation

As part of the current CHNA process, Tripp Umbach collaborated with each AHN facility to create an updated evaluation of its progress and strategies used to address the health needs identified in the previous 2015 CHNA. By doing so, each facility will be well positioned to carry over these strategies in 2019 and beyond (if applicable), as well as create strategies for new health needs identified in this CHNA.

1. HEALTH PRIORITY: BEHAVIORAL HEALTH

Goal: Reduce mortality and morbidity related to mental health and substance use disorders.

West Penn Hospital Work to Meet Objective 1: *Increase utilization of outpatient behavioral health services, particularly for the most vulnerable populations.*

West Penn Hospital increased utilization of outpatient behavioral health services particularly for prenatal, perinatal, and post-partum women and their significant others by creating and expanding women's behavioral health services.

- West Penn established of a perinatal depression program in 2015
- Increase in the number of women screened for mental health. In addition, there is Inpatient screening for mental health issues pre and post delivery
- Increased assessment of behavioral health prior to discharge and at follow-up visits
 - o 2015-data unavailable
 - o 2016-559 referrals
 - o 2017-1149 referrals
 - 2018 YTD April-460 referrals
- Outreach to all OB offices for education on screening
- Destigmatization of postpartum depression
- Established Perinatal Hope Program for maternal addiction- Late in 2016
- Allegheny Health Network and the Alexis Joy D'Achille Foundation opened The Alexis
 Joy D'Achille Center for Women's Behavioral Health at West Penn Hospital, a unique
 facility that offers the most comprehensive, state-of-the-art care available in western
 Pennsylvania for women suffering from pregnancy-related depression.

West Penn Hospital Work to Meet Objective 2: *Increase knowledge and skills of first responders and community members around behavioral health.*

- Crisis prevention and Intervention training: 2015 ,2016 and ongoing for security staff, ED staff
- EMS-Mission Wellness programs established/Provider wellness with Mental health component established

- EMS/Pre hospital staff having difficulty finding a MH partner to commit to lectures.
- Established "Change the Culture for providers" –Destignatize the culture of providers around mental illness
- Staff education around crisis prevention has extended beyond the Ed and security staff. Included in new nurse hire orientation and additional trainings for other staff
- Unsuccessful at Mental Health First Aid training. Revisiting now and starting to engage individuals to develop program in 2018.

West Penn Hospital Work to Meet Objective 3: *Increase the number of healthcare providers integrating behavioral health and physical health.*

- Number of behavioral health personnel working at the hospital.
- Number of mental personnel has increased exponentially with program growth
 - o 8/2016-Pyschiatrist for Perinatal program
 - 2016-4 Mental health therapists., and 1 Mental health intake staff member
 - Staff psychiatrist for inpatient consults
- Establishment of Hospital Elder Life Program(HELP)
 - o 2016-At 18 months: 1,673 patients served
 - 58 active volunteers
 - o 5,404 volunteer hours
 - o Decrease in LOS from 5.4 to 3.8
- With inpatient access to psychiatric services, ability to transfer to higher level of care within the network
- Increased awareness and screening to facilitate referrals

2. HEALTH PRIORITY: CANCER

Goal: Reduce the number of new cancer cases, as well as the illness, disability, and death caused by cancer.

West Penn Hospital Work to Meet Objectives 1: Increase the percentage of adults who receive timely age-appropriate cancer screenings based on the most recent guidelines. Increase access to health screenings and education to high-risk populations.

- During annual wellness visit, follow-up visits and/or initial visits.
- Education to Primary care providers to ensure screenings is a part of routine appointments.

West Penn Hospital Work to Meet Objectives 2: Reduce the incidence rate for the top four most commonly diagnosed cancers: prostate (male), lung and bronchus, colon and rectum, and breast (female) and the overall cancer mortality rate by promoting healthy lifestyle behaviors related to tobacco use and diet and exercise.

- Low dose CT scans utilized for Lung cancer screenings.
- All sites
 - o 8/14-3/2015-403 lung scans
 - o 213 negative, will have annual screen
 - o 156-need 6-12 month follow up
 - o 31, probably benign 3-6 month f/u. PET scan need if > 8m
 - 6 Suspicious with F/u Chest CT and Pet Scans
- 2016 WPH Scans
 - o 108 total scans
 - 12 significant findings
 - 5 positive for lung Cancer
- 2017 WPH Lung Scans
 - o 143 scans
 - o 13 significant findings
 - o 27 follow ups
 - 5-positive
- Educational outreach completed by staff physicians from WPMA and oncology offices at the Bloomfield Saturday market. Average attendance per market day 400-800 people
- 11/19/2016-Community education for patients and caregivers on blood cancers

West Penn Hospital Work to Meet Objective 3: *Increase access to health screenings and education to high-risk populations.*

- Screening event 5/30/2105
 - 5/14/2016: Total screens= 257; 23 with abnormal results referred to specialists/PCP
 - 64 Skin screens
 - 12 Breast
 - 12 Pelvic
 - 21 PAP
 - 36 FBOT

- 16 Prostrate
- 17 PSA Lab
- 4 Lung
- 39 Hep C
- 36 HIV
- Data unable to be retrieved for 2015 event
- Educational offerings and Survivor events

3. HEALTH PRIORITY: CHRONIC DISEASE

Goal 1: Decrease preventable chronic disease by ensuring access to resources, knowledge, and opportunities for residents to adopt healthy behaviors.

West Penn Hospital Work to Meet Objective 1: *Increase primary care provider (PCP) recommendations for preventive screenings per risk and age guidelines.*

- Increase monitoring of baseline screens in PCP
- Health coaches utilized for education and patient calls on preventative screens
- Additional Care team coaches utilized from Highmark for care management of members

West Penn Hospital Work to Meet Objective 2: Provide health screenings and education to high-risk populations.

- Multiple disciplines represented for education at Bloomfield farmers market-B/P Screening, COPD education, Early Asthma Warning signs education. Healthy nutrition counseling and demonstrations. Brochures created for healthy eating and shopping.
- Monthly Wellness Wednesdays at Bloomfield Garfield Community Center
 - o 2016-20-30 participants monthly
 - Wellness Wednesdays re-evaluated to look at ways to increase attendance.
- Education by Dieticians on healthy foods
- Nutritional facts listed for food in dining hall. This benefited employees and visitors.

West Penn Hospital Work to Meet Objective 3: Partner with community organizations to promote healthy lifestyles.

- Participate in annual heart walk
- Developed walk paths thru Friendship Park and around the hospital.
- Walks held for employees in park Increase lighting and visibility in the park
- Go Red celebrations and education on heart disease 2/2016, 2/2017
- Participated in great American Smoke out event-11/17/16-
 - PFT screenings
 - WPH Wintergarden-60 screens
 - o 11/16/17-67 total participants;
 - 25 PFT tests;
 - 15 COPD education;
 - 12 smoking cessation instruction;
 - o 8 MDI instructions
- Data from other events not obtained or measured

Goal 2: Improve management and outcomes for patients diagnosed with a chronic disease.

West Penn Hospital Work to Meet Objective 1: Reduce hospital 30-day readmissions rates for chronic disease.

- Multi- disciplinary team formed to look at all readmissions for targeted populations,
 - Meetings initially bimonthly.
 - Review of all readmissions for opportunities to improve care. Led by CMO.
 Readmissions evaluated by Provider as well.
- Overall readmissions:
 - 0 2015-9.1
 - o 2016-9.2
- High risk coordinator position established in 3/2015
- Nurse Navigators in place to follow patients within service lines
- Healthcare at home liaison on site and coordinates care with care management team
- Daily LOS rounds established to review all patients and High risk
- COPD coordinator 3/2108
- Each targeted disease evaluated or areas of improvement.
 - CHF discharge compliance-WPH purchased scales for patients on discharge to monitor daily weights or fluid overload
 - COPD patients given education and follow up with Home care companies for compliance
 - Care coordination is strong. Readmission group reviews any readmissions and potential complications monthly
- Social service established SNF Community Forum quarterly meetings-Looking at High risk populations, readmissions and care transitions. Multiple service line directors involved as well as community groups

West Penn Hospital Work to Meet Objective 2: Manage high risk populations through care coordination and partnership with social service partners.

- High risk coordinator position established in 3/2015
- Nurse Navigators in place to follow patients within service lines
- Healthcare at home liaison on site and coordinates care with care management team
- Daily LOS rounds established to review all patients and High risk
- COPD coordinator 3/2108
- Care coordination is strong.
- Readmission group reviews any readmissions and potential complications monthly

 Social service established SNF Community Forum quarterly meetings-Looking at High risk populations, readmissions and care transitions. Multiple service line directors involved as well as community group.

West Penn Hospital Work to Meet Objective 3: Partner with community organizations to promote healthy lifestyles.

- Established Health Bucks program
 - o 2016-35 participants
 - o 2017-7 participants
 - This program will be rolled into the Healthy food center and partner with Bloomfield Food Pantry.
 - Metrics not available on any impacts to targeted population
- Annual Healthy Eating seminar held at Bloomfield Market-2016 and 2017

4. HEALTH PRIORITY: MATERNAL AND CHILD HEALTH

Goal: Reduce morbidity and mortality, by improving the health and quality of life of women, infants, children, caretakers, and their families, especially in vulnerable communities.

West Penn Hospital Work to Meet Objective 1: Reduce the proportion of preterm and low birth weight births and reduce the disparity between White, African American, and Hispanic populations.

- Participate in the March of Dimes' March for Babies 4/24/16
- Utilize March of Dimes Prematurity Tool kit for education
- Professional forum for social service providers and leaders on perinatal depression
 5/6/16 Highmark
- Additional data not tracked or available on all activities

West Penn Hospital Work to Meet Objective 2: Reduce the disparity between White, Black, and Hispanic mothers who receive prenatal care within the first trimester.

- Increasing availability of care and identifying needs for prenatal care
- Need to look at ways to increase outreach

West Penn Hospital Work to Meet Objective 3: Increase the proportion of mothers who breastfeed for the first six months after birth and reduce the disparity between White, African American, and Hispanic populations.

- Robust education in Ob practices on each trimester with books addressing breastfeeding.
- Nursing MOM café's
 - Education at least 2x per month on breastfeeding by certified lactation specialist

- Getting ready for breastfeeding classes -2x per month
- New Born Baby class
- 4 hour on line video training on breast feeding for new residents
 - o moving to add to onboarding
- Demonstrated active education and compliance
- High focus on post-partum in patient units with lactation consultants

West Penn Hospital Work to Meet Objective 4: Reduce the disparity between White, African American, and Hispanic births resulting in infant mortality.

- Safe Sleep Initiatives-Provided new moms with sleep sacks
- Baby 911 class/Infant Child CPR and safety class
 - course reviews car seat safety, SIDS, safe sleeping, and baby proofing household tips
- New parents education on "Shaken baby syndrome"-Video and nurse education
- EMS Safe Landing program-partner with EMS on safe home environments and car seat

West Penn Hospital Work to Meet Objective 5: Partner with community organizations to improve prenatal indicators (including not smoking during pregnancy, not drinking during pregnancy, prenatal care in first trimester, etc.).

- Increase in the number of MDs who can prescribe Subutex/Suboxone
- Trimester books in offices expanded targeting healthy behaviors education

West Penn Hospital Work to Meet Objective 6: Reduce the number of Neonatal Abstinence Syndrome babies.

- MD s educated and trained on Subutex and Suboxone to assist in preventing withdrawal
- Perinatal Hope program
 - Designed to make it easier for addicted moms to seek help, prenatal appointments and appoints for themselves-
 - All available at one central location
- Fresh Start Program

Appendix D: About Tripp Umbach

Allegheny Health Network contracted with Tripp Umbach, a private health care consulting firm with offices throughout the United States, to complete this community health needs assessment (CHNA). Tripp Umbach has worked with more than 300 communities in all 50 states. In fact, more than one in five Americans lives in a community where our firm has worked.

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 conducted more than 400 community health needs assessments and has worked with over 800 hospitals.

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.

