December 2018

Allegheny General Hospital Community Health Needs Assessment 2018

Conducted by: Tripp Umbach

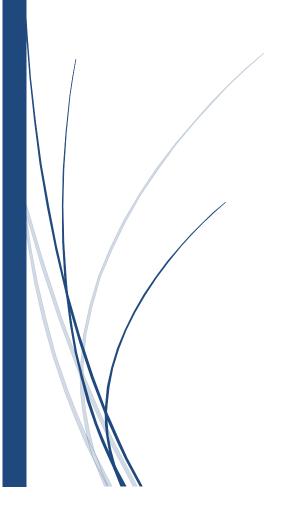


Table of Contents

Contents

Section 1. Executive Summary	2
Introduction	2
Objectives and Methodology	3
Key Prioritized Needs	5
Section 2. Community Definition	6
Section 3. Key Finding	7
Priority #1: Access to Care	8
Priority #2: Behavioral Health	9
Priority #3: Chronic Conditions	11
Appendix A. Primary Data Summary	17
Appendix B. Secondary Data Analysis Highlights	20
Appendix C. 2015 Implementation Planning Update and Evaluation	31
Appendix D. About Tripp Umbach	35

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 1,700 volunteers. Together, AHN provides world-class medicine to patients in their communities; AHN has proudly received accolades from numerous organizations, including Thomson Reuters, AARP, Healthgrades, and Consumer Reports.

Serving the community since 1886, Allegheny General Hospital (AGH) has evolved into a 576 licensed bed hospital with 800 physicians and 5,000 staff members. The leadership and staff are dedicated to providing patients with innovative treatments, pioneering research discoveries, and personalized medical care.



A national leader in cancer, cardiovascular, neuroscience and orthopedic and rehabilitation care, AGH has been recognized by U.S. News and World Report as one of the country's best hospitals. Truven Health Analytics, formerly Thomson Reuters Healthcare business, identified AGH as one of the country's "100 Top Hospitals". AGH has been a trailblazer in patient care and innovation:

- Surgeons designed the first suture-less heart valve.
- First hospital in the region to receive designation as a Level I Shock Trauma Center,
- LifeFlight aeromedical service was the first to fly in the northeastern United States.
- Houses the largest American Society for Radiation Oncology (ASTRO)/American College of Radiology (ACR)-accredited program in the country

AGH is committed to academic medicine, including graduate and undergraduate medical education and health sciences education. AGH serves as the clinical campus for third- and fourth-year students of the Temple University School of Medicine, is a clinical affiliate hospital of Drexel University College of Medicine, and is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing education for physicians.

As an AHN member hospital, AGH remains committed to the long history of improving health and promoting wellness in the communities they serve, one person at a time.

In 2018, AHN joined together with Tripp Umbach to conduct a comprehensive community health needs assessment for the AGH service area of Allegheny and Butler counties. 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:

- 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.

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 Allegheny General Hospital, including those with special knowledge of public health issues and representatives of vulnerable populations served by the hospital.

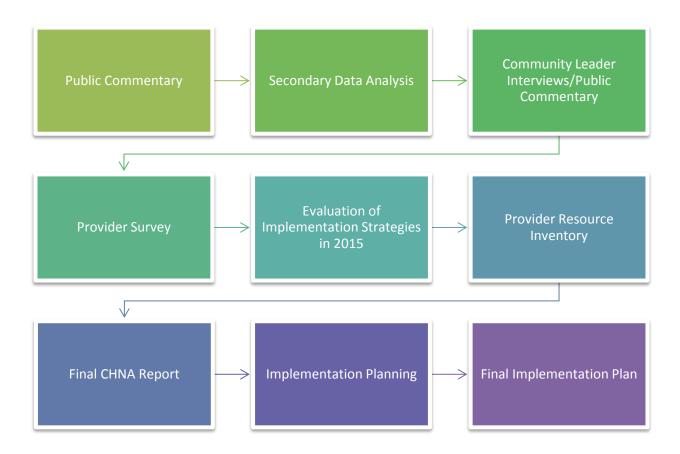
The project components used to determine the community health needs included:

- 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.



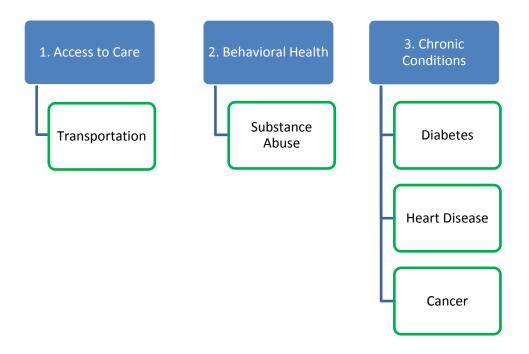
Tripp Umbach worked closely with leadership from AHN to complete the CHNA with the goal of gaining a better understanding of the health needs of the region. AGH will use the findings of the assessment to address local health care concerns and to work collaboratively with regional agencies to address 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

The AGH Leadership Team² identified five prioritized community needs using qualitative and quantitative data collected during this CHNA as well as input from facility, healthcare, and community leaders as well as persons with specialized knowledge or expertise in public health. From the beginning of the project, AHN placed a high value on maximizing input from each of the eight AHN facilities.

With a larger network perspective, three categories or priority areas were identified across the eight AHN hospitals: Access to Care, Behavioral Health, and Chronic Conditions. Leadership teams from each hospital were asked to identify priorities specific to their service area which were then categorized under one of these three headings. The specific priorities identified by the AGH Leadership Team include: transportation, substance abuse, diabetes, heart disease and cancer.



*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.

² The Steering Committee for this project consisted of representatives from each AHN facility, representatives from various AHN institutes, and AHN leadership.

Section 2. Community Definition

AGH'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 AGH's service area of Allegheny and Butler Counties.

Figure 1: Allegheny General Hospital Community Zip Codes

ZIP Code	City	County
15007	Bakerstown	Allegheny
15015	Bradford Woods	Allegheny
15017	Bridgeville	Allegheny
15044	Gibsonia	Allegheny
15056	Leetsdale	Allegheny
15086	Warrendale	Allegheny
15090	Wexford	Allegheny
15101	Allison Park	Allegheny
15106	Carnegie	Allegheny
15108	Corapolis	Allegheny
15116	Glenshaw	Allegheny
15136	McKees Rocks	Allegheny
15142	Presto	Allegheny
15143	Sewickley	Allegheny
15202	Pittsburgh	Allegheny
15203	Pittsburgh	Allegheny
15204	Pittsburgh	Allegheny
15228	Pittsburgh	Allegheny
15205	Pittsburgh	Allegheny
15209	Pittsburgh	Allegheny
15211	Pittsburgh	Allegheny
15212	Pittsburgh	Allegheny
15214	Pittsburgh	Allegheny
15216	Pittsburgh	Allegheny
15220	Pittsburgh	Allegheny
15225	Pittsburgh	Allegheny
15229	Pittsburgh	Allegheny
15233	Pittsburgh	Allegheny
15237	Pittsburgh	Allegheny
15243	Pittsburgh	Allegheny
15275	Pittsburgh	Allegheny
16046	Mars	Butler
16059	Valencia	Butler
16066	Cranberry	Butler

Section 3. Key Findings from CHNA Process

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. As a result of the primary and secondary data collected in the CHNA process In the Allegheny General Hospital study area, three health need priority areas and five health needs overall were identified:

- 1. Access to Health Care (transportation)
- Behavioral Health (substance abuse)
- 3. Chronic Conditions (diabetes, heart disease, cancer)

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.

Although listed separately, health systems are approaching the health needs of their communities using an integrated approach. Directing resources towards factors and social determinants of health in order to avoid an increase in chronic disease creates social and physical environments that promote good health for all populations. Health needs should not be addressed in isolation, but should be looked at as a system of factors that are influencing the health status of a community.



Health and well-being are linked to the social and economic conditions in which people live. Research has shown that only 20% of health can be attributed to medical care, while social and economic factors — like access to healthy food, housing status, educational attainment and access to transportation — account for 40%.³

³ American Hospital Association, Determinants of Health Series: Transportation and the Role of Hospitals

Individuals struggling with food insecurity, housing instability, limited access to transportation or other barriers may experience poor health outcomes, increased health care utilization and increased health care costs. Addressing these social determinants of health will have a significant positive impact on people's health, including longer life expectancy, healthier behaviors and better overall health.⁴

Priority 1: Access to Health Care

Transportation

Access to health care services has a significant impact on health including improved overall physical, social and mental health status, prevention of disease and disability, and better quality of life. Having adequate transportation is often a barrier to accessing services and can greatly affect the quality of people's lives:

- 3.6 million people in the U.S. do not obtain medical care due to transportation barriers.⁵
- Regardless of insurance status, 4% of children (approximately 3 million) in the U.S. miss a healthcare appointment each year due to unavailable transportation; this includes 9% of children in families with incomes of less than \$50000.⁶
- Transportation is the third most commonly cited barrier to accessing health services for older adults.

Transportation issues can include lack of vehicle access, long distances and lengthy times to reach needed health care services, transportation costs and adverse policies. Transportation challenges affect populations in both rural and urban communities.

Key Insight: When asked for the reasons why their patient population may be noncompliant
to treatment/medication plans, surveyed AHN providers said transportation was the second
most frequently reason, only to behind the high cost of healthcare and medications.

Because transportation touches many aspects of a person's life, adequate and reliable transportation services are fundamental to accessing health care services and creating healthy communities. Inadequate transportation may result in missed or delayed health care appointments, increased health expenditures and overall poorer health outcomes.

• Key Insight: When providers in the AHN were asked what they perceived was the greatest barrier for patients to receiving care, transportation registered as the third greatest barrier only behind out of pocket costs and no insurance coverage.

⁴ American Hospital Association, 2017

⁵ Wallace, R., Hughes-Cromwick, P., Mull, H., & Khasnabis, S. (2005). Access to health care and nonemergency medical transportation: Two missing links. Transportation *Research Record: Journal of Transportation Research Board*

⁶ Grant, R., Gracy, D., Goldsmith, G., Sobelson, M. & Johnson, D. (2014). Transportation barriers to child health care access remain after health reform. *JAMA Pediatrics*, 168(4): 385-386.

 Key Insight: When interviewees from the community were asked to name the three top health concerns in their area, 61% of responses included access to care (which includes transportation).

Transportation challenges affect urban and rural communities. Overall, individuals who are older, less educated, female, minority, or low income—or have a combination of these characteristics—are affected more by transportation barriers. Children, older adults and veterans are especially vulnerable to transportation barriers due to social isolation, comorbidities, and greater need for frequent clinician visits. Time and distance often play a role in utilizing health care services. This association exists at all levels of geographies — local, urban and rural.

Priority 2: Behavioral Health

Substance Abuse

Although there has been some progress lowering rates of substance abuse in the United States, the use of behavior-altering substances continues to take a major toll on the health of individuals, families, and communities nationwide. From 2015 to 2016, the rate of alcohol or illicit drug use in the past 30 days among adolescents aged 12–17 years decreased by 7.0% from 14.2% to 13.2%, moving toward the Healthy People 2020 target of 12.8%.⁸

 Key Insight: When AHN providers were asked to list the top three health problems in their service areas, substance abuse was the number one response, with 44% of providers listing that as a top three concern.

Along with other states across the nation, Pennsylvania is currently experiencing an unprecedented number of heroin, opioid, and substance use deaths. The Pennsylvania State Coroners Association reported that deaths resulting from drug poisoning continue to increase, with the state seeing an average increase of 20% in most counties between 2013 and 2014. At the time of reporting, the number of drug-related deaths in 2014 was almost 2,500. Almost half (49%) of overdose deaths are caused by opioid medications (25%) and non-legal drugs (24%). The typical overdose victim is white, male, aged 41-50, and single.⁹

 Key Insight: When providers in the AHN were asked what they perceived as top three risky behaviors/lifestyle choices in their service area, drug use was the number one response with 55% of votes.

⁷ Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling towards disease: Transportation barriers to health care access. *Journal of Community Health*, 38(5): 976-993.

⁸ Healthy People, 2020.

⁹ Pennsylvania State Coroners Association

According to the County Health Rankings, Allegheny County experiences the highest rate in several areas pertaining to alcohol and drug use:

- Alcohol use (62.07%)
- Cocaine use (2.15%)
- Illicit Drug Dependence (3.29%)
- Any illicit drug Use other Than Marijuana (4.02%)

Currently, the United States is experiencing an epidemic of drug overdose deaths. Since 2000, the rate of drug overdose deaths has increased by 137% nationwide. Opioids contribute largely to drug overdose deaths; since 2000, there has been a 200% increase in deaths involving opioids (opioid pain relievers and heroin).¹⁰

• Key Insight: When providers in the AHN were asked what the most pressing risky behaviors/lifestyle choices in the community they serve are, 56% of respondents indicated substance abuse as one of the top three high-riskiest behaviors.

In 2014, 27.0 million people aged 12 or older used an illicit drug in the past 30 days, which corresponds to about 1 in 10 Americans (10.2%). This percentage in 2014 was higher than those in every year from 2002 through 2013.

According to Community Commons, Allegheny County reported a higher rate of binge alcohol use (24%) than Butler (22%), the state (21%) and other adjacent counties to the Allegheny General's service area. Allegheny County has a higher rate of drug poisoning death (37 per 100,000) than Butler (31) and the state (28); however, adjacent counties have almost the same rate or higher).



The reoccurring use of alcohol and/or drugs

physically impairs and damages the overall health and well-being of an individual. Long-term effects can harm the users' social life, work environment, and can significantly affect educational obtainment. In 2014, about 21.5 million Americans aged 12 and older (8.1%) were classified with a substance use disorder in the past year. Of those, 2.6 million had problems with both alcohol and drugs, 4.5 million had problems with drugs but not alcohol, and 14.4 million had problems with alcohol only.¹²

¹⁰ Centers for Disease Control and Prevention (CDC)

¹¹ World Health Organization, 2013

¹² The Substance Abuse and Mental Health Services Administration

Priority 3: Chronic Disease

Chronic diseases are a major cause of disability and death in Pennsylvania, as well as in the United States. 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 the management of chronic disease will increase significantly, if there are no changes made.

Diabetes

Regular HbA1c monitoring among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When symptoms of diabetes are addressed and controlled, complications from diabetes can be delayed or prevented.

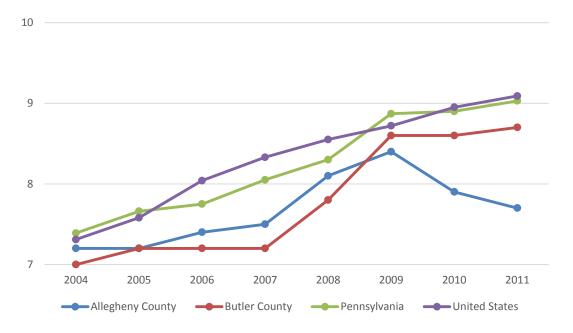


Figure 2: Percent Adults with Diagnosed Diabetes by Year

Source: Community Commons

In Pennsylvania, 11% of adults 20 years of age and older have been diagnosed with diabetes while in both Allegheny and Butler counties, 10% of adults age 20 and above have been diagnosed with diabetes. ¹³ In 2012, more males were diagnosed with diabetes (9.1%) than

¹³ County Health Rankings, 2017

females (7.9%) in Allegheny County and were lower than state percentages at 9.85% and 8.61%, respectively.

 Key Insight: When providers in the AHN 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. Studies show that a healthy diet leads to improved health outcomes for diabetic patients.

From 2004-2012, the increase in the percent of adults diagnosed with diabetes was higher at the state level than the increase in Allegheny County. From 2004-2012 at the state level, there was an increase of 1.64%, while Allegheny County experienced an increase of only .5%. However, the percent increase in Butler County from 2004-2012 was 1.7%, higher than the state increase and just lower than the national rate.

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 AHN 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.

In both Allegheny and Butler counties, the percentage of diabetic Medicare enrollees who are receiving the HbA1c test has remained steady from 2006-2014.

• Key Insight: According to the 2017 County Health Rankings, the percentage of diabetic adults increased in Allegheny County and Butler County from 2014-2017.

The percent of Medicare enrollees receiving the HbA1c testing in Allegheny County is slightly lower at 81%, than the state (89%) and national (85%) levels. The percent of Medicare enrollees receiving the HbA1c testing in Butler County is slightly lower at 85%, than the state (89%) but equal to the national (85%) levels.

Heart Disease

Heart disease is a broad term used to describe a range of diseases that affect one's heart and is a general term used to describe several different conditions, all of which are potentially fatal, but are also treatable and preventable. The most common type of heart disease is coronary heart disease (CHD), also called coronary artery disease. Other types of heart disease include cardiomyopathy, heart failure, hypertensive heart disease, inflammatory heart disease, pulmonary heart disease, cardiac dysrhythmias and valve heart disease.

 Key Insight: When AHN providers were asked to list the top three health problems in their service areas, heart disease was the fifth most frequent response, with 33% of providers listing that as a top three concern.

According to Community Commons, 4.2% of adults aged 18 and older have been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.¹⁴

Pennsylvania has the 17th lowest death rate from cardiovascular disease in the country. Heart disease is the number one killer in Pennsylvania with 32,042 people in Pennsylvania dying of heart disease in 2015.¹⁵ The death rate of heart disease is higher in men than in women. African Americans had a higher mortality rate than white residents in Pennsylvania. Black men had the highest heart disease mortality rate when comparing to gender and other races. Heart disease mortality rate increases with age, however, heart disease not only affects older populations in Pennsylvania, it also is the major cause of premature deaths in Pennsylvania.

Figure 3: Adults with Heart Disease

Report Area	Survey Population (Adults Age 18+)	Total Adults with Heart Disease	Percent Adults with Heart Disease
Allegheny County	953,116	44,255	4.6%
Butler County	120,745	5,039	4.2%
Pennsylvania	9,757,195	500,791	5.1%
United States	236,406,904	10,407,185	4.4%

Source: Community Commons, 2015

Allegheny County has a lower percent of adults with heart disease (4.6%), than the state level (5.1%), but a higher percent than the national level (4.4%). Butler County's percentage is lower (4.6%) than Allegheny, the state and the national levels.

Certain health conditions, lifestyle, age, and family history can increase the risk for heart disease. About half of all Americans (47%) have at least one of the three key risk factors for heart disease: high blood pressure, high cholesterol, and smoking. ¹⁶

¹⁴ Community Commons, 2015

¹⁵ American Heart Association. Heart Disease and Stroke Statistics: 2015

¹⁶ Centers for Disease Control and Prevention, 2018

An important aspect of lowering risk of cardiovascular disease, is managing certain health behaviors and risk factors, such as diet quality, physical activity, smoking, body mass index (BMI), blood pressure, total cholesterol or blood glucose.

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. ¹⁷ 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.

• 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.

The most common cancer diagnoses in Pennsylvania are breast (female), lung, prostate, and colon. 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.

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.

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 County	133.3	5.9	131.7	45.1	59.8
United States	123.5	7.62	114.8	39.8	61.2
Pennsylvania	129.8	7.6	117.5	43.1	65.4

Source: Community Commons

¹⁷ Centers for Disease Control and Prevention, 2018

¹⁸ American Cancer Society, 2018

¹⁹ Centers for Disease Control and Prevention, 2018

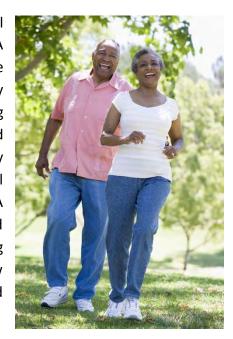
Allegheny County had a higher incidence rate (136.7) for breast cancer than the state rate (129.8) and the national rate (123.5). Allegheny also had a higher rate for lung cancer (72) then Butler (59.8), the state (65.4) and the nation (61.2).

Butler County had a notably higher incidence rate (131.7) for prostate cancer than Allegheny County (113), the state (117.5) and the nation (114.8). Butler also had a higher rate for colon and rectum cancer (45.1) then Allegheny (41.7), the state (43.1) and the nation (39.8)

According to the American Cancer Society, nearly half of all cancer deaths could be avoided if people live healthier lifestyles, quit smoking, and had 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 diet that limits saturated fat. The best defense against cancer is finding it early, when it is easiest to treat.²⁰

Conclusions and Recommendations

With the completion of the 2018 CHNA, Allegheny General 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 Allegheny General Hospital will address the identified community health needs.



Allegheny General 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.

15

²⁰ American Cancer Society, 2018

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



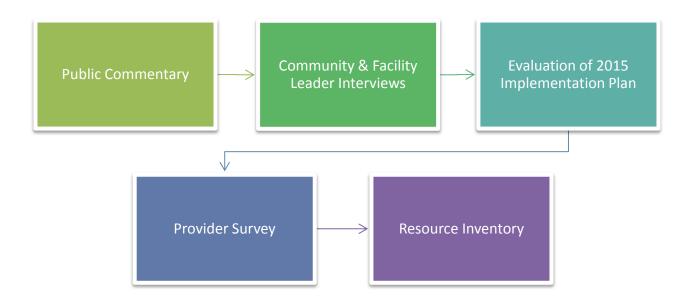
goals and objectives set for in the implementation strategies, Allegheny General Hospital must leverage existing partnerships within the region as well as develop new relationships among organizations and agencies in the community. Collaboration effectively utilizes community resources by reducing redundancy 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 Allegheny General 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. Allegheny General 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 experts
- 2) 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 those concerns.

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

In this 2018 CHNA process, Tripp Umbach provided Allegheny General 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 Allegheny General 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 was 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

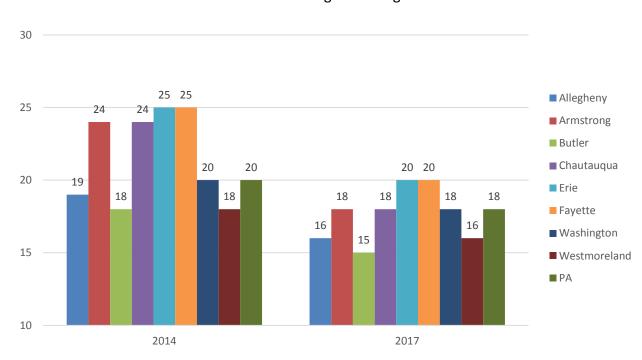
An inventory of programs and services available in the Allegheny General Hospital and Allegheny Health Network service area/region was developed by Tripp Umbach. The provider inventory highlights available programs and services within Allegheny General Hospital's primary service area. The inventory identifies 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 Analysis Highlights

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.

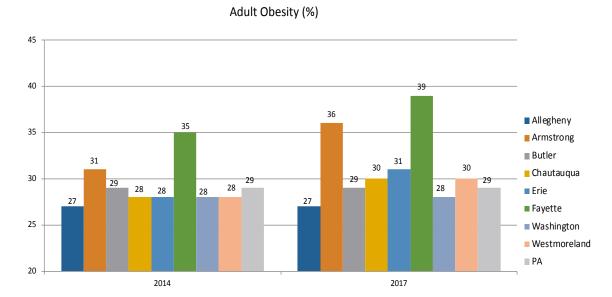
This secondary data summary includes information from multiple health, social and demographics sources. Tripp Umbach used secondary data sources to compile information related to disease prevalence, socioeconomic factors and health behaviors. Where applicable, data was benchmarked against state trends. 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.



Adult Smoking Percentage

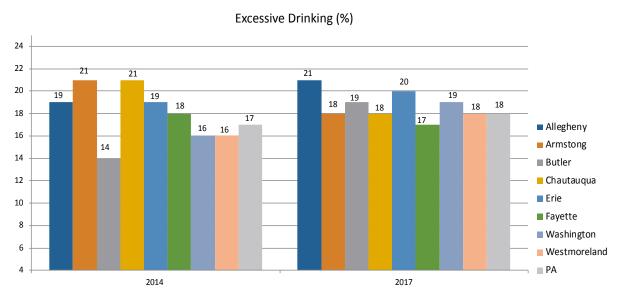
Source: 2017 County Health Rankings

- 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.



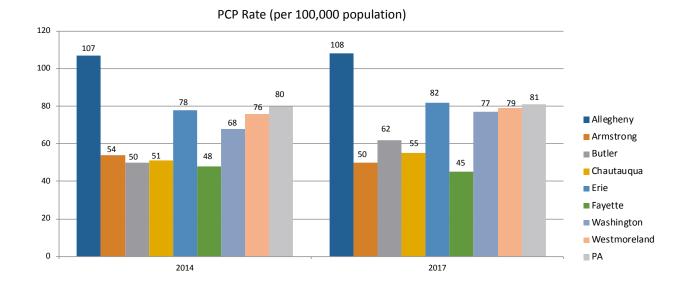
Source: 2017 County Health Rankings

- 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.



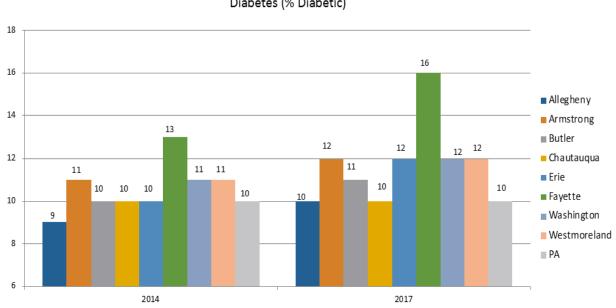
Source: 2017 County Health Rankings

- 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.

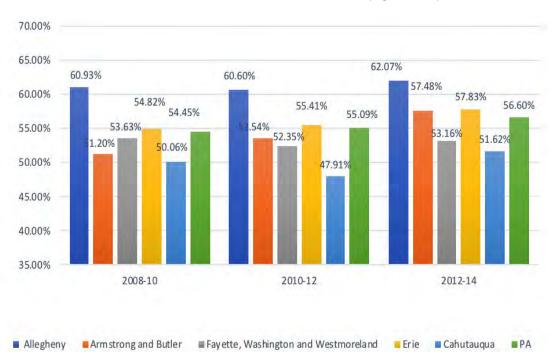


Diabetes (% Diabetic)

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 +)

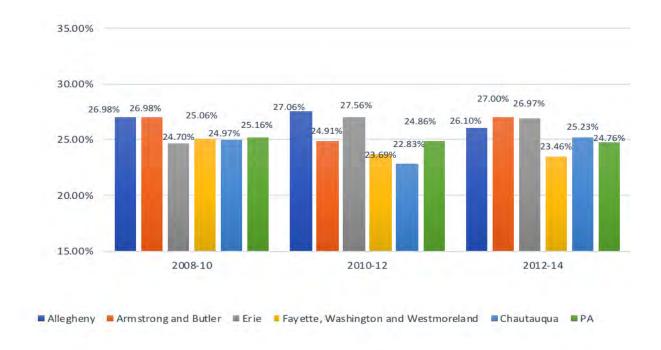
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- Key Insight: Armstrong/ Butler²¹, 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

²¹ Armstrong and Butler Counties are grouped together due to their geographic proximity for display purposes.

Binge Alcohol Use



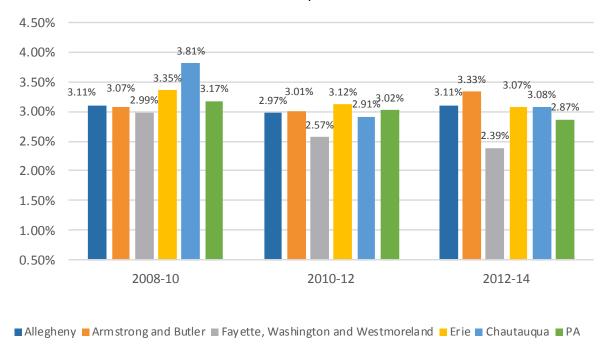
Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health 2014

- 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 County²² saw the largest decrease in Binge Alcohol Use throughout the study period.

24

²² Fayette, Washington, and Westmoreland Counties were grouped together due to their geographic proximity for display purposes.

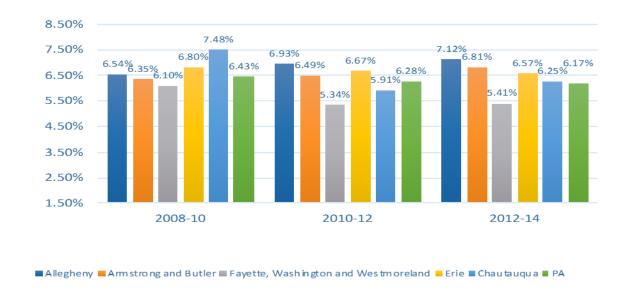
Alcohol Dependence



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.

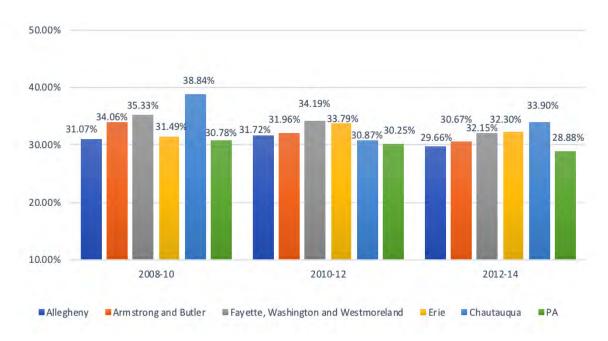
Cigarette Use



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.

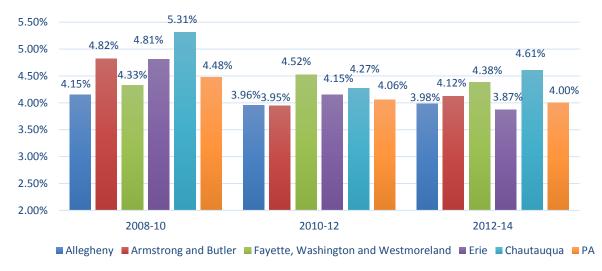
Any Tobacco Use



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.

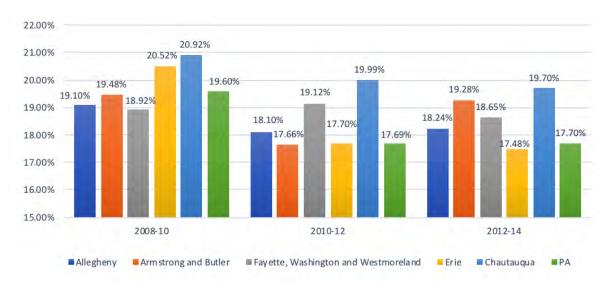
Serious Mental Illness in the Past Year (Aged 18 +)



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.

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

- Referrals, treatment plans
- AHN Center for Inclusive Health provides outreach and resource referral/ Social Work

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

- Referrals, treatment plans
- Partner with Center for Inclusion, Pittsburgh Police and other 1st Responders

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

- Referrals, treatment plans
- Allegheny Center for Inclusive Health provides outreach and resource referral/ Social Work impatient/ Outpatient Offices

2. HEALTH PRIORITY: CANCER

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

Allegheny General 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.

- Screenings, referrals, appointments, treatments and treatment plans
- AHN and AGH to continue to partner with Community Organizations at health fairs

Allegheny General 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.

- Screenings, referrals, appointments, treatments and treatment plans
- AHN and AGH to continue to partner with Community Organizations at health fair

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

- Screenings, referrals, appointments, treatments and treatment plans
- AHN and AGH to continue to partner with Community Organizations at health fairs

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.

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

- Screenings, referrals, appointments, treatments and treatment plans
- PCP offices, community partners, screening events, Insurance provider data
- AGH and Highmark are tracking data of members and frequent flyers in the ER

Allegheny General Hospital Work to Meet Objective 2: *Provide health screenings and education to high-risk populations.*

- Screenings, referrals, appointments, treatments and treatment plans
- High risk diabetic patients

Allegheny General Hospital Work to Meet Objective 3: Partner with community organizations to promote healthy lifestyles.

- Screenings, referrals, appointments, treatments and treatment plans
- AGH and Highmark are partnering with Project Destiny to address social determinants that effect health in 3 North Side Zip Codes

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

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

• Reductions in readmissions to post-acute patients

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

- Screenings, referrals, appointments, treatments and treatment plans
- AGH and Highmark are partnering with Project Destiny to address social determinants that effect health in 3 North Side Zip Codes

Allegheny General Hospital Work to Meet Objective 3: Partner with community organizations to promote healthy lifestyles.

- Screenings, referrals, appointments, treatments and treatment plans
- AGH and Highmark are partnering with Project Destiny to address social determinants that effect health in 3 North Side Zip Codes

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.

Allegheny General 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.

- Screenings, referrals, appointments, treatments and treatment plans
- Referral to centralized AHN perinatal resources at West Penn Hospital

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

- Screenings, referrals, appointments, treatments and treatment plans
- Consult with centralized AHN perinatal resources at West Penn Hospital

Allegheny General 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.

- Screenings, referrals, appointments, treatments and treatment plans
- Consult with centralized AHN perinatal resources at West Penn Hospital

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

- Screenings, referrals, appointments, treatments and treatment plans
- Consult with centralized AHN perinatal resources at West Penn Hospital

Allegheny General 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.).

- Screenings, referrals, appointments, treatments and treatment plans
- Consult with centralized AHN perinatal resources at West Penn Hospital

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

- Screenings, referrals, appointments, treatments and treatment plans
- Consult with centralized AHN perinatal resources at West Penn Hospital

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.

