



Community Health Needs Assessment
And
Community Health Strategic Plan

June 30, 2016

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EXECUTIVE SUMMARY

UPMC East Plays a Major Role in its Community:

UPMC East is a nonprofit, 155-bed acute-care hospital located in Monroeville, Pennsylvania, an eastern suburb of Pittsburgh, Pennsylvania, located in Allegheny County. The new, state-of-the-art hospital delivers a full range of quality medical services to the residents of Pittsburgh's eastern communities, and began operations in July of 2012. Its opening generated new economic energy in the community, created more than 800 jobs, and provided residents access to UPMC's nationally renowned medical services without traveling out of area.

UPMC maintains a historically strong connection with the community, having long been a significant provider of care for residents in the Monroeville area through outpatient operations, including a UPMC CancerCenter, UPMC surgery and UPMC outpatient centers, imaging services, a UPMC Sleep Lab, a Magee-Womens Hospital of UPMC satellite office, a Children's Hospital of Pittsburgh of UPMC satellite office, and numerous pediatric, primary, and specialty care doctors' offices. Since the opening of UPMC East, the hospital has committed to developing a new suite of community-oriented programs and services that will provide health education for residents in the area.

UPMC East in the Community

More than 800 people work at UPMC East, UPMC's newest hospital.

UPMC East brings UPMC's world-class care to Pittsburgh's eastern suburbs, and has become an economic engine that is stimulating the local and county economies.



UPMC East is part of UPMC, a leading Integrated Delivery and Finance System (IDFS) headquartered in Pittsburgh, Pennsylvania.

Identifying the Community's Significant Health Needs:

In Fiscal Year 2016, UPMC East conducted a Community Health Needs Assessment (CHNA) in keeping with requirements described in section 501(r)(3) of the Internal Revenue Code. Building on the initial CHNA conducted in Fiscal Year 2013, the Fiscal Year 2016 CHNA provided an opportunity for the hospital to re-engage with community stakeholders in a rigorous, structured process guided by public health experts.

An ongoing objective of the CHNA effort is to help align community benefit programs and resources with community health needs. This report documents progress toward addressing the significant health needs identified in Fiscal Year 2013, as well as an implementation plan to address new and ongoing community health needs over the Fiscal Year 2016-2019 period.

UPMC partnered with experts at the University of Pittsburgh Graduate School of Public Health (Pitt Public Health) to conduct the CHNA using a best-practice methodology. The assessment blended analysis of documented health and socioeconomic factors with a structured community input survey process that solicited feedback from a community advisory panel composed of leaders and organizations that represent patient constituencies, including medically-underserved, low-income, and minority populations within the hospital’s community.

Addressing the Community’s Significant Health Needs:

When the Fiscal Year 2013 CHNA was conducted, the significant health needs identified at that time were:

- **Senior Health and Caring for an Aging Population**
- **Preventive Screenings**
- **Preventive Health and Wellness**
- **Medication Management and Compliance**
- **Post-Discharge Coordination and Follow-Up**

Three years later, when the Fiscal Year 2016 CHNA was conducted, UPMC East affirmed the following health needs:

- **Preventive Health and Wellness**
- **Senior Health**

By organizing efforts related to preventive screenings under “Preventive Health and Wellness,” and medication management and compliance and post-discharge coordination under “Senior Health,” UPMC East will focus implementation efforts to make a greater impact on health improvement.

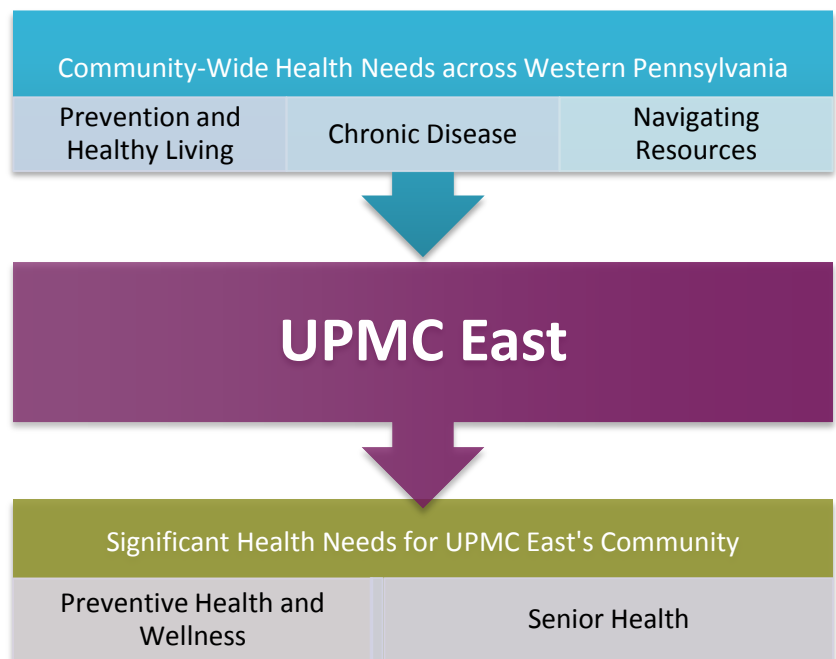
On May 13, 2016, the UPMC East Board of Directors adopted an implementation plan to address the significant health needs identified in the Fiscal Year 2016 CHNA, and to set measurable targets for continued improvement. The plan drew support from an array of community partners, as well as from the larger UPMC system. This plan builds upon the Fiscal Year 2013 plan, recognizing that significant health issues will generally need more than two to three years to show meaningful improvement.

Topic	Importance to the Community
Preventive Health and Wellness	Preventive Health/Wellness, including Preventive Screenings, can help prevent and detect some of the leading causes of death — such as heart disease, cancer, and diabetes — in early stages when treatment is likely to work best. Cancer screenings were lower in the UPMC East service area than benchmarks.
Senior Health	UPMC East’s service area has a larger percentage of seniors ages 65+, most elderly (85+), and seniors living alone compared to the state and nation. As individuals age, the risk for co-morbid health conditions increases. In addition, preventing falls and improving health literacy related to medication compliance, for example, are very important for the elderly.

Collective Impact Across Western Pennsylvania:

Western Pennsylvania has a diverse range of health needs. Key themes that emerged from the Fiscal Year 2016 UPMC East CHNA process were consistent with those found through CHNAs conducted at other UPMC hospitals throughout western Pennsylvania. These themes are increasingly important in the rapidly changing landscape of health care reform:

- **Focus on a Few High-Urgency Issues and Follow-Through:** The hospital is concentrating on a limited number of significant community health needs, and has developed concrete plans to chart measurable improvements.
- **Chronic Disease Prevention and Care:** Nearly two-thirds of deaths in the community are attributable to chronic disease. UPMC East is planning a wide range of prevention and chronic disease support activities.
- **Navigating Available Resources:** Established health care programs in UPMC East’s community are often untapped due, in part, to social and logistical challenges faced among populations and individuals lacking social support systems.
- **Community Partnerships:** UPMC East is collaborating successfully with local organizations on improving community health. The hospital will also leverage resources and synergies within the UPMC system, which include population-focused health insurance products and comprehensive programs and resources targeted at areas including seniors and children.



PROGRESS REPORT 2013-2016: PREVENTIVE HEALTH AND WELLNESS

GOAL: UPMC East is increasing awareness about healthy behaviors throughout the community.

STRATEGY:

The hospital is taking a community-oriented approach to educating area residents about healthy behaviors.

To achieve this goal, UPMC East is targeting the general population, with a focus on seniors. The newest hospital in the UPMC network, UPMC East offers easy access to world-class care, and serves as a great resource for the community. To promote health and wellness, UPMC East is actively engaging with the area residents through efforts including:

- » Establishing new programs, such as educational events and health screenings
- » Building partnerships with community organizations
- » Developing programming specifically for seniors

PROGRESS:

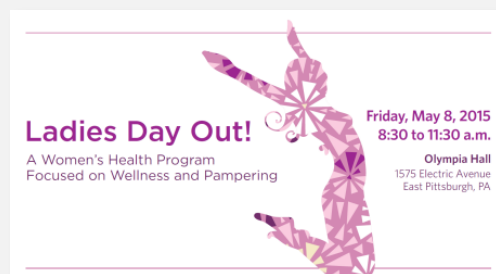
UPMC East established a suite of health promotion programs in the community.

Establishing a comprehensive community health program — more than 4,000 attendees this past year

The hospital developed a comprehensive monthly community health education calendar that includes the *Alive and Well* educational series, which covers topics from stroke prevention to colon cancer. This past year, nearly 345 individuals attended these monthly events.

In addition, the hospital partnered with Monroeville Mall to implement the UPMC East Mall Walkers Program. Since November 2013, a total of 273 individuals have joined this active group.

This past year, UPMC East held the inaugural Ladies Day Out, which provides women with a spa experience along with free health screenings and education on women's health issues, such as breast health and heart disease.



Fostering community relationships

UPMC East is an active and proud participant in many community events in the Monroeville area, including *Celebrate Monroeville* and *Unity in the Community*, which brings local faith-based organizations together. Additionally, UPMC East provides health education through fire department open houses and employer health fairs. UPMC East is also working together with local YMCAs to provide screenings and cooking demonstrations. In addition, the hospital is partnering with UPMC Health Plan to host health education talks, such as "Get Heart Health" and "Pit Stop for Men's Health." The hospital also offers a series of health education events at the Monroeville Library, covering topics from inpatient rehab to breast cancer.

Meeting seniors where they live and play

Located in an area with a higher percentage of seniors, UPMC East is taking a community-oriented approach to educating seniors about ways to stay healthy during their golden years. For instance, UPMC East is providing health education lectures during visits to senior centers, including Redstone Highlands Senior Communities and Monroeville Senior Center. Discussion topics include cancer, addiction, and diabetes.

PROGRESS REPORT 2013-2016: POST-DISCHARGE COORDINATION AND FOLLOW-UP

GOAL: UPMC East is improving the transition from hospital to home.**STRATEGY:**

The hospital is developing a comprehensive approach to address post-discharge coordination and medication management.

To achieve this goal, UPMC East is targeting the general community. As part of its CHNA initiatives, the hospital is working proactively with post-acute care facilities to improve coordination of efforts and also to educate the community about post-discharge care, including how to manage medications.

- » Offering new education sessions to engage individuals in conversations about care
- » Establishing new programs to educate community members about medication management

PROGRESS:

UPMC East is making a measurable impact in its community.

Helping community members make informed decisions

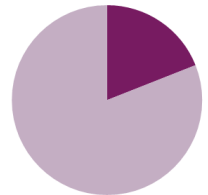
To increase community members' awareness about post-acute coordination, UPMC East offered education sessions about living wills, advanced directives, medical power of attorney, and differences in levels of care (e.g., skilled nursing to assisted living). Overall, 115 people have attended these sessions.

Establishing new programs — *Ask the Pharmacist and Medication Check-Up*

The hospital provided six events at senior centers and at the local mall to help educate community members about medications, such as those used to treat depression and respiratory disease. To date, more than 350 residents have taken advantage of these new programs, learning important lessons about medication management and compliance. In addition, the hospital provides tools, such as medication organizers and medication pocket cards, to help individuals manage their medications.

Community Need

**Nearly
1 in 5**



residents in the UPMC East community are seniors (65+).

(U.S. Census, 2010)



COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT

I. Objectives of a Community Health Needs Assessment

CHNA Goals and Purpose:

In Fiscal Year 2016, UPMC East conducted a CHNA. In keeping with IRS 501(r) guidelines, the CHNA incorporated input from community stakeholders and public health experts, and established action plans to address identified significant community health needs. The plan builds upon a prior assessment and implementation plan developed in Fiscal Year 2013.

UPMC East is a relatively new hospital (2012), and is focusing on developing a suite of initiatives aimed at improving the health of its community. UPMC approached this CHNA process as an opportunity to evaluate and assess needs through a formalized, rigorous, and structured process to ensure that health improvement efforts and resources are aligned with community health priorities. Goals of the CHNA were to:

- **Better understand community health care needs**
- **Develop a roadmap to direct resources where services are most needed and impact is most beneficial**
- **Collaborate with community partners where, together, positive impact can be achieved**
- **Improve the community's health and achieve measurable results**

The overall health of the community is a shared responsibility among many stakeholders and entities, including government agencies, health care providers, nongovernmental organizations, and community members themselves. While the new IRS CHNA requirements apply specifically to nonprofit hospital organizations, collaboration with community partners is essential for implementing and achieving effective community health improvement.

Description of UPMC East:

UPMC East is a nonprofit, 155-bed acute-care hospital located in Allegheny County, Pennsylvania. It offers a full range of quality medical services to the people of Monroeville and Pittsburgh's eastern suburbs. The hospital provides area residents with access to medical, surgical, rehabilitation, and transitional care, as well as cutting-edge medical services not typically found at a local community hospital. Specialized services include CT imaging, digital mammography, minimally invasive surgery, and an on-site UPMC CancerCenter. UPMC East opened in July of 2012, and is UPMC's newest hospital. During the Fiscal Year ended June 30, 2015, UPMC East had a total of 12,508 admissions and observations, 44,813 emergency room visits, and 4,462 surgeries.

UPMC East is part of UPMC, one of the country's leading Integrated Delivery and Finance Systems (IDFS), which positions the hospital to draw on the expertise of the larger organization when patients require access to more complex or highly specialized care.

VITAL STATISTICS		JOBS AND STRENGTHENING THE LOCAL ECONOMY	
Fiscal Year 2015			
Licensed Beds	155	UPMC East Employees	842
Hospital Patients	12,508	Jobs Created During Construction	300
Emergency Dept. Visits	44,813	Community Benefits Contributions	\$9 million
Total Surgeries	4,462	Free and Reduced Cost Care	\$8 million
Affiliated Physicians	349	\$240 million Total Economic Impact of Hospital Operations	

II. Definition of the UPMC East Community

For the purpose of this CHNA, the UPMC East community is defined as Allegheny County. With 59 percent of patients treated at UPMC East residing in Allegheny County, the hospital primarily serves residents of this geographic region. By concentrating on the county, UPMC East can both consider the needs of the great majority of its patients and do so in a way that allows accurate measurement using available secondary data sources.

Most Patients Treated at UPMC East Live in Allegheny County

County	UPMC East %	Medical Surgical Discharges
Allegheny County	58.9%	4,040
All Other Regions	41.1%	2,818
Total Hospital Discharges	100%	6,858

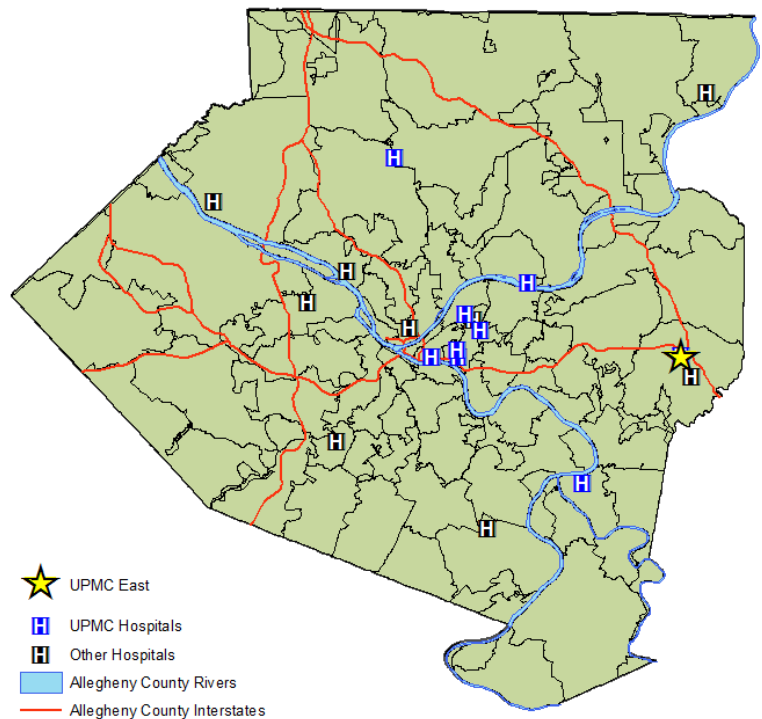
Source: Pennsylvania Health Care Cost Containment Council, Fiscal Year 2015

The hospital is situated in the eastern region of the county, which is composed of a mix of residential and commercial neighborhoods that are suburbs of Pittsburgh. While the county represents the basic geographic definition of UPMC East’s community, this CHNA also considered specific focus areas within the hospital’s immediate geographic “service area.” Small “focus area” analyses were conducted to identify geographical areas within the county, as well as areas of concentration with potentially higher health needs — such as areas with high minority populations, low per-capita incomes, and areas with historically distinct health needs. Health data reflecting Zip Codes of neighborhoods within the service area was also analyzed.

Existing Healthcare Resources in the Area:

Additionally, UPMC East is supported by nearly 110 UPMC outpatient offices within Allegheny County. These facilities include UPMC CancerCenters, Urgent Care Centers, Senior Living Facilities, Centers for Rehabilitation Services, Imaging Centers, Children’s Hospital of Pittsburgh of UPMC satellite offices, and pediatric, primary, and specialty care doctors’ offices.

Hospitals in Allegheny County



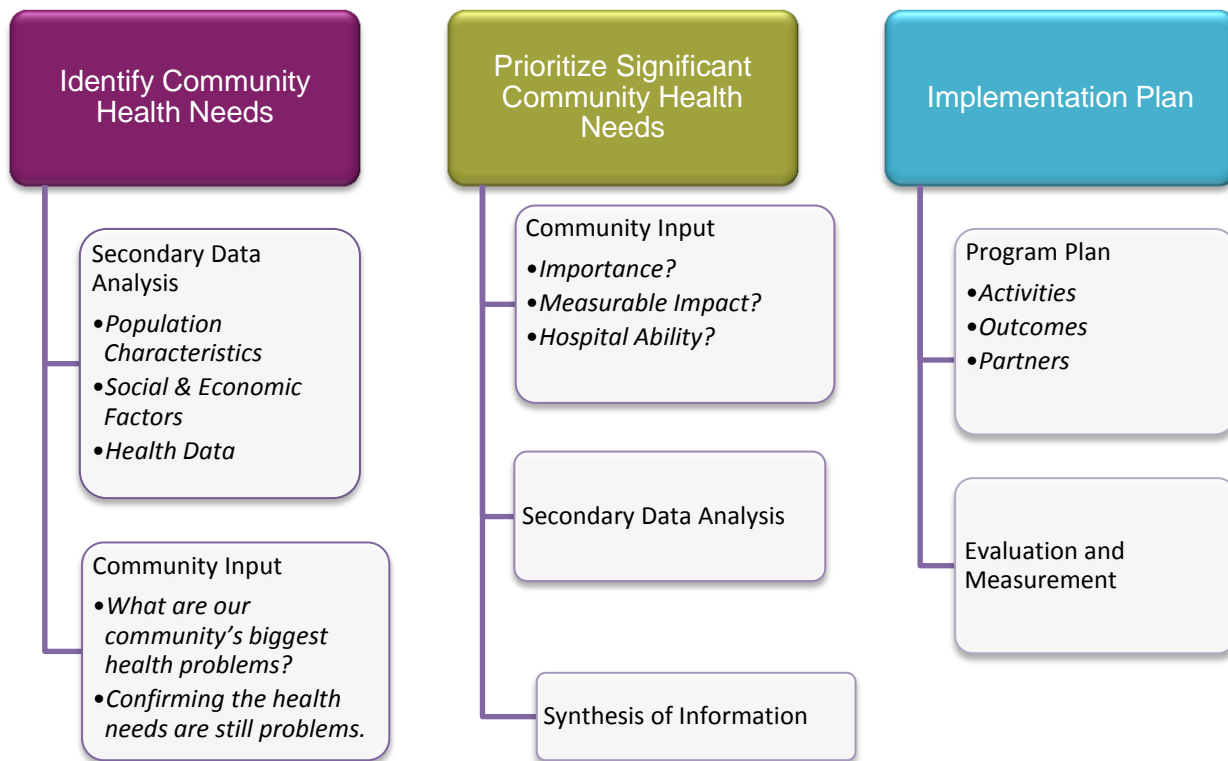
III. Methods Used to Conduct the Community Health Needs Assessment

Overview:

In conducting this CHNA and the prior CHNA conducted in Fiscal Year 2013, UPMC pursued an approach that was comprehensive, methodologically rigorous, inclusive, and open to the community’s perspective on health care needs. To conduct the CHNA in a manner that reflects best practices, UPMC partnered with the University of Pittsburgh Graduate School of Public Health (Pitt Public Health). Pitt Public Health’s mission is to provide leadership in health promotion, disease prevention, and the elimination of health disparities in populations. Pitt Public Health faculty and researchers’ expertise supported a structured process for obtaining community input on health care needs and perceived priorities and helped establish criteria for the evaluation and measurement of progress.

Framework for Conducting the CHNA:

The Community Health Improvement Process developed by the Institute of Medicine served as a guiding framework in assessing the health needs of the UPMC hospital communities. The hospital adapted this model to guide the development of its CHNA.



Secondary Data Sources and Analysis:

To identify the health needs of a community, UPMC conducted an analysis of publicly available data. Secondary data — including population demographics, mortality, morbidity, health behavior, clinical care, and physical environmental data — were used to identify and prioritize significant community health needs. Data which informed this CHNA were compiled from a variety of state and national data sources, and are reflected in the table below.

Population characteristics, socioeconomic, and health status data were also examined. Community-level data (usually county-level) were compared to the state, nation, and *Healthy People 2020* benchmarks to help identify key health issues. When available, data specific to low-income individuals, underserved minorities, and uninsured populations were examined. In addition, analysis considered federal designations of Health Professional Shortage Areas (HPSA) — defined as “designated as having a shortage of primary medical care providers” and Medically Underserved Areas (MUA) — which may consist of a whole county or a group of contiguous counties, a group of county or civil divisions, or a group of urban census tracts.

Publicly Available Data and Sources Used for Community Health Needs Assessment

Data Category	Data Items	Description	Source
Demographic Data	Population Change	Comparison of total population and age-specific populations in 2000 and 2010 by county, state, and nation.	U.S. Census
	Age and Gender	Median age, gender, and the percent of Elderly Living Alone by Zip Code, county, state, and nation in 2010.	
	Population Density	2010 total population divided by area in square miles by county, state, and nation.	
	Median Income/Home Values	By Zip Code, county, state, and nation in 2010.	
	Race/Ethnicity	Percent for each item by Zip Code, county, state, and nation in 2010. Note: Zip Code level data was not available for disabled.	
	Insurance: Uninsured, Medicare, Medicaid		
	Female Headed Households		
	Individuals with a Disability		
	Poverty		
	Unemployed		
No High School Diploma			

Data Category	Data Items	Description	Source
Morbidity Data	Adult Diabetes	2010-2013 data collected and compared by county, state, and nation.	Allegheny County Health Survey, 2009-2010.
	Cancer		
	Mental Health		
	Asthma (Childhood)		
	Birth Outcomes		
Health Behaviors Data	Obesity (Childhood and Adult)	2010-2015 data collected and compared by county, state, and nation.	PA Department of Health Behavioral Risk Factors Surveillance System; Birth, Death, and Other Vital Statistics; Cancer Statistics.
	Alcohol Use		
	Tobacco Use		
	Sexually Transmitted Disease		
Clinical Care Data	Immunization	2010-2015 data collected and compared by county, state, and nation.	Allegheny County Health Survey, 2009-2010.
	Cancer Screening (breast/colorectal)		
	Primary Care Physician Data		
Benchmark Data	Mortality Rates, Morbidity Rates, Health Behaviors, and Clinical Care Data	National benchmark goal measures on various topics for the purpose of comparison with current measures for neighborhood, county, state, and nation.	Healthy People 2020.

Information Gaps Impacting Ability to Assess Needs Described:

The best available data were used to obtain the most meaningful comparison and analysis possible. Public data sources, however, are limited by some information gaps, and small sample sizes can represent statistically unreliable estimates.

The community definition hinged at the county-level, in part, because the quality and availability of data at this level was generally most comprehensive and allowed for meaningful comparisons with state and national data. In some cases, data from geographical sources below the county level (such as Zip Codes) were available with adequate sample size for analysis. Whenever possible, population health data were examined for individual neighborhoods and sub-populations including low-income, high-minority, and uninsured populations.

Community Input:

Community input on the perceived health needs of the region was used to complement analysis of publicly available data. UPMC used an inclusive and systematic process to collect information pertaining to the community's perceptions of its greatest needs, as well as its expectations of what the hospital's role should be in meeting those needs.

The Fiscal Year 2016 CHNA builds on the assessment process originally applied in Fiscal Year 2013. In the initial assessment, Pitt Public Health facilitated this process and employed "Concept Mapping," a participatory, qualitative research method with a proven track record for gaining stakeholder input and consensus. In the subsequent assessment, UPMC conducted a survey of community leaders and stakeholders specific to the hospital's community to assess the continuing importance of identified community health needs.

To gather community input, the hospital formed a community advisory panel to provide broad-based input on health needs present in the hospital's surrounding community. These groups were made up of:

- **Persons with special knowledge or expertise in public health**
- **Representatives from health departments or governmental agencies serving community health**
- **Leaders or members of medically underserved, low-income, minority populations, and populations with chronic disease**
- **Other stakeholders in community health (*see Appendices C and D for more information on Concept Mapping and for a complete list and description of community participants*)**

The full community input survey process consisted of multiple stages:

- **Brainstorming on Health Problems:** During brainstorming, the hospital's community advisory council met to gather input on the question, "What are our community's biggest health care problems?" Brainstorming resulted in the development of a 50-item list of health problems.
- **Rating and Sorting Health Problems to Identify Significant Health Needs:** Community members participated in the rating and sorting process via the Internet to prioritize the 50 health problems and identify significant health needs according to their perceptions of the community health needs. Each participant sorted the list into overarching themes, and then rated the problems using a 1 to 5 Likert scale (1 = not important; 5 = most important), according to the following criteria:
 - » How important is the problem to our community?
 - » What is the likelihood of being able to make a measurable impact on the problem?
 - » Does the hospital have the ability to address this problem?
- **Confirming Topics:** In Fiscal Year 2016, community advisory panels were again surveyed about the continuing importance of the identified health needs. Advisory panel members participated in an online Qualtrics survey that solicited feedback on new health problems and asked participants to rate whether the health problem "remains a major problem," "is somewhat of a problem," or "is no longer a problem."

Synthesis of Information and Development of Implementation Plan:

In the final phase of the process, the community input survey results were summarized by experts from Pitt Public Health and merged with results gathered from the analysis of publicly available data. Through this process, UPMC hospital leadership identified a set of significant health needs that are critical, addressable, and have high levels of urgency in the community. The process then matched those needs to:

- **Best-practice methods for addressing these needs**
- **Existing hospital community health programs and resources**
- **Programs and partners elsewhere in the community that can be supported and leveraged**
- **Enhanced data collection concerning programs**
- **A system of assessment and reassessment measurements to gauge progress over regular intervals**

IV. Results of the Community Health Needs Assessment and In-Depth Community Profile

Characteristics of the Community:

Sizable Elderly Population: A notable characteristic of the region surrounding UPMC East is the large and increasing percentage of elderly residents. The UPMC East immediate service area in particular has a large elderly population aged 65 and over (19 percent), especially when compared to Allegheny County (17 percent), Pennsylvania (15 percent), and the United States (13 percent). A higher percentage of elderly in Allegheny County live alone, compared with Pennsylvania and the United States. Reflective of the higher proportion of elderly, the percentage of Medicare recipients was higher in the county than the state and nation (see Appendix B).

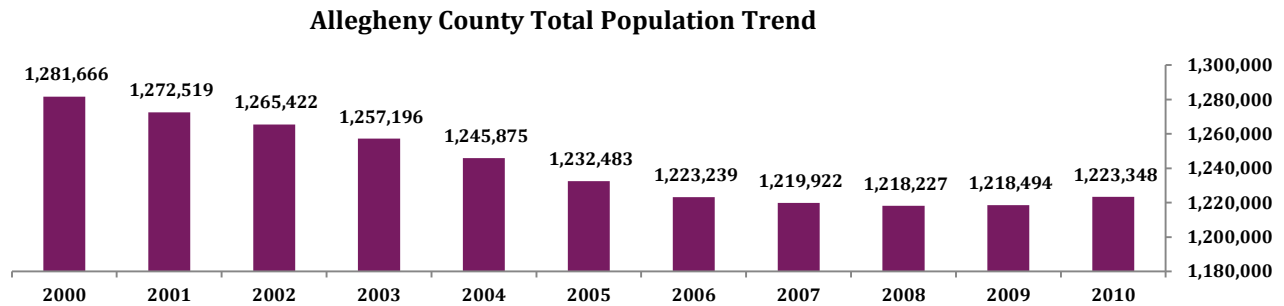
Allegheny County Has a Sizable Elderly Population

Age Distribution - 2010				
	Allegheny County	UPMC East Service Area	Pennsylvania	United States
Median Age	41.3	43.8	40.1	37.2
% Children (<18)	19.8%	20.3%	22.0%	24.0%
% 18-64	63.4%	60.4%	62.6%	63.0%
% 20-49	39.2%	35.3%	39.0%	41.0%
% 50-64	21.3%	23.1%	20.6%	19.0%
% 65+	16.8%	19.3%	15.4%	13.0%
% 65-74	7.8%	9.4%	7.8%	7.0%
% 75-84	6.1%	7.0%	5.4%	4.3%
% 85+	2.9%	3.0%	2.4%	1.8%
% Elderly Living Alone	13.1%	13.2%	11.4%	9.4%

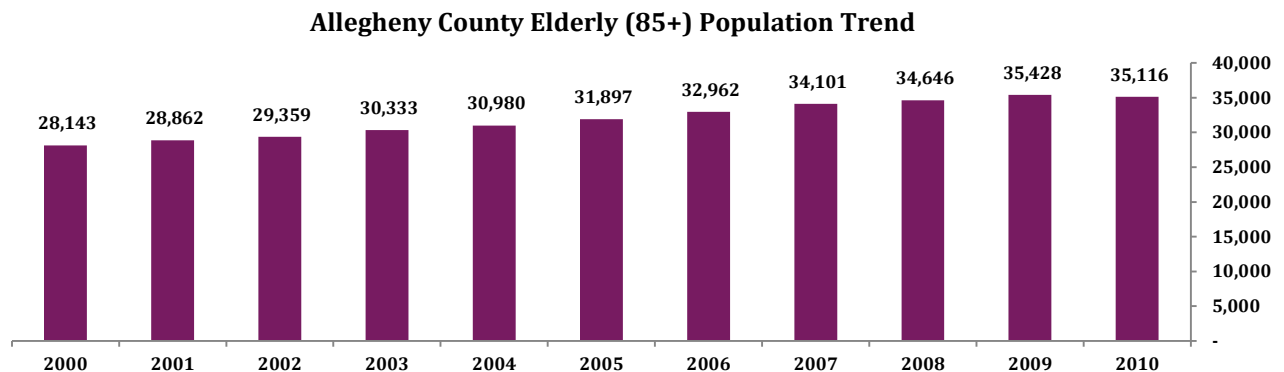
Source: U.S. Census

Total Population Decline in Allegheny County but Aging Population Increasing: In 2010, Allegheny County had a total population of 1,223,348. The population density of Allegheny County at the time was 1,675.6 people per square mile. Between 2000 and 2010, the county's total population decreased from 1.28 million to 1.22 million, representing a five-percent decline (see figure below). At the same time, the county's most elderly population *increased* by 25 percent, from 28,143 to 35,116 (see figure below). This trend resulted in a higher median age (41 years) in the county compared with Pennsylvania (40 years) and the United States (37 years).

Allegheny County's total population has seen a 5 percent decrease from 2000 to 2010.



However, the most elderly population (85+) has grown 25 percent from 2000 to 2010.



Source: U.S. Census

Economically Stable in Allegheny County Overall: When compared to the Commonwealth of Pennsylvania and the nation, the overall population of Allegheny County is economically stronger and faces fewer economic health challenges on average. Allegheny County tends to:

- **Be more educated**
- **Have fewer people unemployed**
- **Have fewer people living in poverty**
- **Have fewer uninsured and fewer recipients of the income based Medicaid health insurance program (See Appendix B)**

Compared to Allegheny County, the immediate service area of UPMC East is characterized by:

- **Comparatively higher median household income**
- **A lower percentage of families in poverty**
- **A lower percentage of residents without a high school diploma**
- **A lower percentage of unemployed**

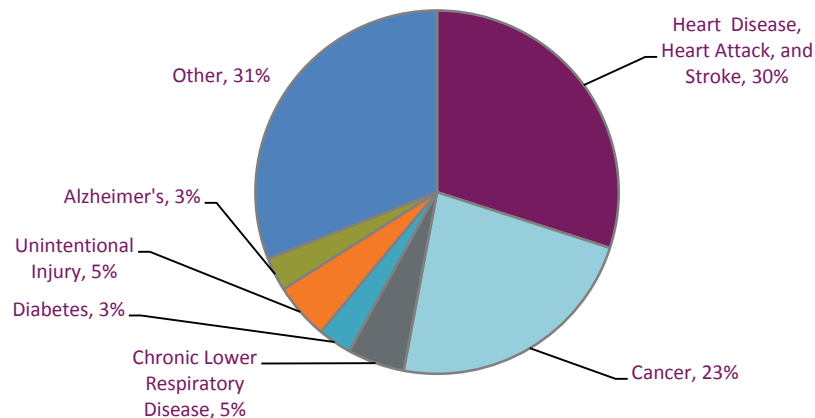
Similar to the good supply of primary care physicians to the population in Allegheny County (109:100,000), none of the UPMC East service area is federally designated as a Medically Underserved Area.

Social and Economic Population Demographics		
	Allegheny County	UPMC East Service Area
Median Household Income	\$45,362	\$50,719
% in Poverty	8.7%	5.6%
% with No High School Diploma (among those 25+)	8.4%	6.9%
% Unemployed (among total labor force)	7.2%	4.7%
Racial Groups		
% White	81.5%	79.3%
% African-American	13.2%	15.6%
% Other Race	5.3%	5.1%

Source: U.S. Census

Chronic Disease and Mortality:

Nearly two-thirds of deaths in Allegheny County are attributable to chronic disease.



Source: Pennsylvania Department of Health, 2012

Significant Health Needs for UPMC East's Community:

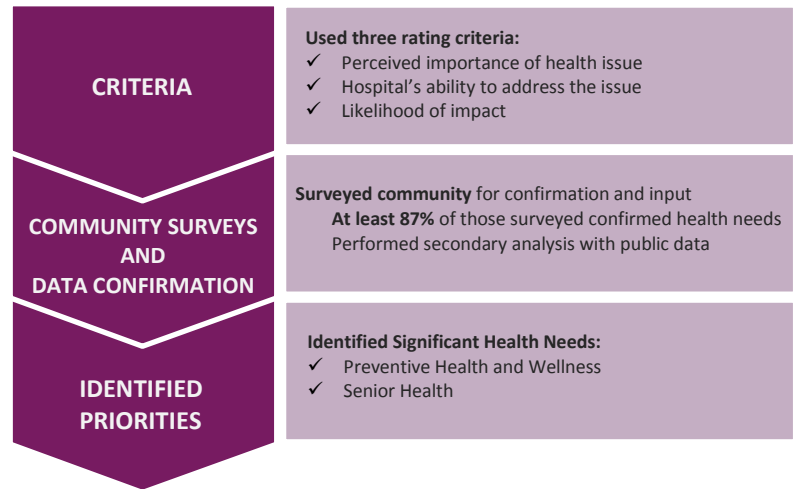
Concept mapping input was deployed across all UPMC hospital communities within western Pennsylvania and yielded three overarching themes to contextualize the health care needs of the community:

- **Chronic Disease**
- **Prevention and Healthy Living**
- **Navigating Resources**

For UPMC East's community, the assessment identified several significant health needs that were rated highly across the three criteria of importance, likelihood of making a measurable impact, and the hospital's ability to address the problem. The significant health needs are:

- **Preventive Health and Wellness**
- **Senior Health**

Prioritizing Community Health Needs



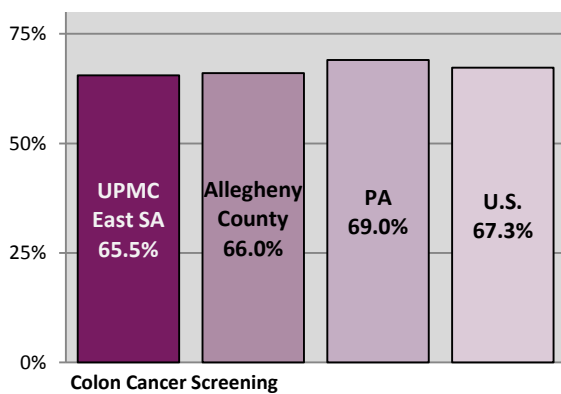
UPMC East Significant Health Needs:

In-depth secondary data analysis reinforced that these health topics were areas of concern for the UPMC East community.

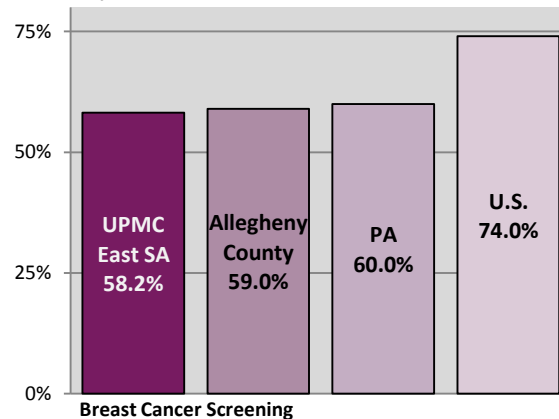
Preventive Health and Wellness – Importance to the Community:

- Preventive screenings can help identify some of the leading causes of death — such as heart disease, cancer, and diabetes — in early stages when treatment is likely to work best.
- Cancer screenings were lower in the UPMC East service area than benchmarks.

Colorectal cancer screening in UPMC East service area is lower than Benchmark: 70.5%



Breast cancer screening for women in UPMC East service area is lower than the county, PA, U.S., and Benchmark: 81.1%



Sources: Allegheny County Health Survey 2009-2010; Pennsylvania Department of Health, 2012; Healthy People 2020; U.S. Centers for Disease Control and Prevention, 2013

Screening rates are on par with state and nation: Preventive screenings are a cost-effective approach in promoting health, and can help further delay the progression or worsening of certain diseases. Screening rates within Allegheny County for conditions such as colorectal cancer were generally on par with the state and the nation.

Opportunities for improvement within specific clinical areas and sub-populations reflect the opportunity for navigation to existing resources: In the UPMC East service area, colorectal screening and mammogram screening were lower, compared to the county, state, and national benchmarks. Additionally, variations in screening rates were observed for certain demographics and areas within Allegheny County. For colorectal screening, a higher proportion of older individuals (65+) reported having a colorectal screening, compared to people 50 to 64 years old. In addition, those with a college degree reported receiving colorectal screening more so than those without a degree. No significant differences were observed based on sex, household income, or race. For mammography screening, women with less than a high school education were significantly less likely to report receiving a mammogram, compared to women with more education. There were no significant differences by age, income, or race.

Senior Health Concerns – Importance to the Community:

- UPMC East’s service area has a larger percentage of seniors ages 65+, most elderly (85+), and seniors living alone compared to the county, state, and nation.
- As individuals age, the risk for co-morbid health conditions increases. In addition, improving care coordination and health literacy related to medication compliance are important for seniors.

	UPMC East Service Area	Allegheny County	Pennsylvania	United States
% 65+	19.3%	16.8%	15.4%	13.0%
% 85+	3.0%	2.9%	2.4%	1.8%
% Elderly Living Alone	13.2%	13.1%	11.4%	9.4%

Source: U.S. Census 2010

Increasing trends in the aging population: The U.S. aging population (65+) is predicted to more than double by 2050, which has consequences on health care and aging services. These trends are especially important for the UPMC East service area, where a sizable percentage of elderly aged 65 years and older (19 percent) live.

Increasing need for aging-related services: For older adults, navigating resources can be challenging. Even more so, tapping into health care services is more challenging for older adults whose family members no longer live in close proximity. U.S. Census data support this notion — a higher percentage of elderly are living alone (13 percent) in the UPMC East service area, compared to the state (11 percent) and the nation (9 percent).

Older individuals have more health problems, so prevention and helping them navigate are key: Health problems affect seniors more so than other age groups. In fact, national data show that two out of three older adults have more than one chronic condition. In Allegheny County, older residents experience more health problems, such as diabetes (22 percent), limitations in activities (38 percent), and a majority of influenza and pneumonia deaths (86 percent). In addition, post discharge coordination and medication management can be particularly challenging for seniors. In particular, elderly living alone, those whose medication is complex (e.g., >5 medications), and those with chronic disease — especially depression — may have more challenges in managing and complying with their medication. Research suggests that adverse events after discharge, and subsequent re-hospitalizations, can be reduced through interventions at the time of hospital discharge, and also through follow-up with the patient. The community identified navigating existing resources, specifically medication management and compliance and post-discharge coordination and follow-up, as significant health needs for UPMC East. UPMC East has several community events underway and has planned efforts to coordinate with aging agencies to assist in serving the growing senior population.

V. Overview of the Implementation Plan

Overview:

UPMC East developed an implementation plan that addresses the significant community health needs identified through the CHNA process. The plan relies on collaboration and the leveraging of partnerships with many of the same organizations and stakeholders that participated in the assessment process. The plan also represents a synthesis of input from:

- **Community-based organizations**
- **Government organizations**
- **Non-government organizations**
- **UPMC hospital and Health Plan leadership**
- **Public health experts that include Pitt Public Health**

Adoption of the Implementation Plan:

On May 13, 2016 the UPMC East Board of Directors adopted an implementation plan to address the identified significant health needs:

- **Preventive Health and Wellness**
- **Senior Health**

A high level overview of the UPMC East implementation plan is illustrated in the figure below and details are found in Appendix A:

High-Level Overview of UPMC East Implementation Plan

Topic	Programs	Anticipated Impact	
		Goal-Year 3	Planned Collaborations
Preventive Health and Wellness	Heart Disease Community Education and Support Cancer Community Education and Support Behavioral Health	Increase number of participants attending and number of programs offered that increase awareness about preventing chronic disease, such as heart disease, cancer, and behavioral health.	Alliance Cardiology-UPMC, American Heart Association, Eastern Area PreHospital Services, Hamill Manufacturing Company, Monroeville Area Chamber of Commerce, Monroeville Mall, UPMC Rehabilitation Institute, Sampson Family YMCA, UPMC Diabetes Education, UPMC Heart and Vascular Institute, American Cancer Society, UPMC CancerCenters, UPMC Centers for Rehab Services, Monroeville Senior Center, Monroeville Public Library, Beatty Pointe Village-UPMC Senior Communities, Prevention Point Pittsburgh, Monroeville Police Department, Western Psychiatric Institute and Clinic of UPMC
Senior Health	Senior Health Community Education and Support Coordination of care with local skilled nursing facilities Post-discharge education Pharmacist education at skilled nursing facilities and in the community	Increase number of participants attending and number of programs offered focusing on senior health. Enhanced coordination of care, especially for patients transitioning to skilled nursing, long-term acute care, and rehabilitation facilities.	Beatty Pointe Village-UPMC Senior Communities, Monroeville Library, Monroeville Senior Center, Penn Hills Senior Center, Penn Hills YMCA, State Representative Tony Deluca, all local UPMC and non-UPMC skilled facilities, all local home health agencies and SNF, LTAC, rehab facilities

The UPMC East implementation plan calls for collaboration with community partners and leveraging UPMC system-wide resources, to support a number of initiatives focused on the identified health priorities.

VI. APPENDICES

APPENDIX A: Detailed Implementation Plan

Priority Health Issue: Addressing Preventive Health and Wellness

Preventive health and wellness is an important priority in UPMC East’s community: Preventive health and wellness, including preventive screenings, can help prevent and detect some of the leading causes of death — such as heart disease and cancer — in early stages when treatment is likely to work best. In addition, increasing awareness about risk factors for these diseases, ways to prevent them, treatment options, and providing support can help mitigate the burden of these diseases.

UPMC East is leveraging UPMC and community resources to address preventive health and wellness: UPMC East continues many of its community initiatives, established through the 2013 CHNA, that focus on prevention and management of chronic diseases. The hospital leverages UPMC-wide efforts and expertise to support these initiatives, such as through the UPMC Heart and Vascular Institute and UPMC CancerCenters. In addition, through established partnerships with community organizations, such as libraries, area employers, and local YMCAs, the hospital continues to promote preventive health and wellness throughout the community. Many of these partnerships have been instrumental in collectively working together to promote healthy behaviors in the community. In addition, UPMC East programs are complemented by UPMC Insurance Services’ efforts in many clinical areas, including primary care and community-based initiatives that support preventive health and encourage wellness among health plan members.

Preventive Health and Wellness				
Program	Intended Actions	Anticipated Impact Goal-Year 3	Target Population	Planned Collaborations
Heart Disease Community Education and Support Cancer Community Education and Support Behavioral Health	Continue collaboration with UPMC Heart and Vascular Institute and hospital heart experts to promote heart disease prevention in the community. Continue to provide and support educational events and screenings offered throughout the community. Continue collaboration with UPMC CancerCenters to promote cancer prevention and support in the community.	Increase number of participants attending and number of programs that increase awareness about preventing chronic disease, such as heart disease, cancer, and behavioral health.	General population, heart disease and cancer survivors	Alliance Cardiology-UPMC, American Heart Association, Eastern Area PreHospital Services, Hamill Manufacturing Company, Monroeville Area Chamber of Commerce, Monroeville Mall, UPMC Rehabilitation Institute, Sampson Family YMCA, UPMC Diabetes Education, UPMC Heart and Vascular Institute, American Cancer Society, UPMC CancerCenters, UPMC Centers for Rehab Services, Monroeville Senior Center, Monroeville Public Library, Beatty Pointe Village-UPMC Senior Communities, Prevention Point Pittsburgh, Monroeville Police Department, Western Psychiatric Institute and Clinic of UPMC

Priority Health Issue: Addressing Senior Health

Senior health is an important priority in UPMC East’s community: UPMC East’s service area has a larger percentage of seniors ages 65+, most elderly (85+), and seniors living alone compared to the county, state, and nation. Seniors are a diverse group, but on the whole they are more vulnerable than other age groups, particularly in terms of health and income limitations. Low-income seniors in particular are some of the most vulnerable individuals as they often require specialized care and are at a higher risk for comorbid conditions. In addition, they may have difficulty navigating the health care system, managing their medications, or performing daily activities on their own.

UPMC East is leveraging UPMC and community resources to address senior health: UPMC East continues many of its community initiatives, established through the 2013 CHNA, that focus on senior health. Efforts include collaborating with local community partners to bring senior health education and free screenings to local senior centers, senior living facilities, fitness facilities, and local libraries. In addition, UPMC East continues to enhance coordination of care for patients transitioning from the hospital to post-acute care facilities, such as local nursing homes and skilled nursing facilities. In addition, UPMC East programs are complemented by UPMC Insurance Services’ efforts to provide screenings and health management services to health plan members who are seniors.

Senior Health				
Program	Intended Actions	Anticipated Impact Goal-Year 3	Target Population	Planned Collaborations
Senior Health Community Education and Support Coordination of care with local skilled nursing facilities Post-Discharge Education Pharmacist Education at Skilled Nursing Facilities and in the community	Continue collaboration with local community partners to bring senior health education and free screenings to local senior centers, senior living facilities, fitness facilities, and local library. Continue to collaborate with skilled nursing facilities to improve communication and coordination of care, including post-discharge coordination and follow-up. Continue to provide education about medication management in the community and in skilled nursing facilities and independent living facilities.	Increase number of participants attending and number of programs focusing on senior health. Enhanced coordination of care, especially for patients transitioning to skilled nursing, long-term acute care, and rehabilitation facilities.	Seniors and caregivers Staff from post-acute care facilities Skilled nursing home patients	Beatty Pointe Village-UPMC Senior Communities, Monroeville Library, Monroeville Senior Center, Penn Hills Senior Center, Penn Hills YMCA, State Representative Tony Deluca, home health agencies, skilled nursing facilities, long-term acute care facilities, rehabilitation facilities

Outcomes and Evaluation of Hospital Implementation Plans:

UPMC engaged with researchers from Pitt Public Health to develop evaluation metrics to measure and track progress related to this implementation plan. The metrics vary by hospital, according to health outcomes, current hospital efforts, and hospital resources.

The implementation plan was developed with the expectation that future progress would be reviewed by the hospital as well as potentially by public health agencies. Therefore, two types of outcomes are considered:

- **Process Outcomes (directly relating to hospital/partner delivery of services):**
Process outcomes indicate efforts hospitals and community partners can undertake to increase delivery of a service designed to change a health impact indicator. These mostly involve increases (or better targeting) in programming, outreach, publicity, or related efforts. Process outcomes can be measured by increases in investment (dollars or personnel), outreach (media messages, public service announcements), service units delivered (classes, screenings), people attending or completing programs, and number of sites for delivery of programs.
- **Health Impact Outcomes (applies to changes in population health for which the hospital's efforts are only indirectly responsible):**
Health impact outcomes are changes in population health related to a broad array of factors of which hospital and community partner efforts are only one contributing part. These outcomes include reductions in the prevalence of disease, risk factors, and health behaviors associated with disease. Benchmarks for progress in population indicators are available from *Healthy People 2020* and Robert Wood Johnson Foundation county health rankings.

APPENDIX B:**Detailed Community Health Needs Profile***Population Demographics*

Characteristics	Allegheny County	Pennsylvania	United States
Area (sq. miles)	730.08	44,742.70	3,531,905.43
Density (persons per square mile)	1675.6	283.9	87.4
Total Population, 2010	1,223,348	12,702,379	308,745,538
Total Population, 2000	1,281,666	12,281,054	281,424,600
Population Change ('00-'10)	(58,318)	421,325	27,320,938
Population % Change ('00-'10)	-4.6%	3.4%	9.7%
Age			
Median Age	41.3	40.1	37.2
%<18	19.8%	22.0%	24.0%
%18-44	34.9%	34.3%	36.5%
%45-64	28.5%	28.1%	26.4%
% >65+	16.8%	15.4%	13.0%
% >85+	2.9%	2.4%	1.8%
Gender			
% Male	47.9%	48.7%	49.2%
% Female	52.1%	51.3%	50.8%
Race/Ethnicity			
% White*	81.5%	81.9%	72.4%
% African-American*	13.2%	10.8%	12.6%
% American Indian and Alaska Native*	0.1%	0.2%	0.9%
% Asian*	2.8%	2.7%	4.8%
% Native Hawaiian/Other Pacific Islander*	0.0%	0.0%	0.2%
% Hispanic or Latino**	1.6%	5.7%	16.3%
Disability	12.8%	13.1%	11.9%

*Reported as single race; **Reported as any race

Source: US Census, 2010

Social and Economic Factors:

Characteristics	Allegheny County	Pennsylvania	United States
Income, Median Household	\$47,505	\$49,288	\$50,046
Home Value, Median	\$119,000	\$165,500	\$179,900
% No High School Diploma*	7.4%	11.6%	14.4%
% Unemployed**	8.3%	9.6%	10.8%
% of People in Poverty	12.0%	13.4%	15.3%
% Elderly Living Alone	13.1%	11.4%	9.4%
% Female-headed households with own children <18	6.2%	6.5%	7.2%
Health Insurance			
% Uninsured	8.0	10.2	15.5
% Medicaid	11.3	13.1	14.4
% Medicare	12.1	11.2	9.3

*Based on those ≥25 years of age; **Based on those ≥16 years and in the labor force

Source: US Census, 2010

**Leading Causes of Mortality for the United States Compared to Pennsylvania and Allegheny County
(rates per 100,000 population):**

Causes of Death	Allegheny County	Pennsylvania	United States
	Percent of Total Deaths	Percent of Total Deaths	Percent of Total Deaths
All Causes	100.0	100.0	100.0
Diseases of Heart	24.8	24.3	23.5
Malignant Neoplasms	23.2	22.8	22.5
Chronic Lower Respiratory Diseases	4.8	5.2	5.7
Cerebrovascular Diseases	4.8	5.1	5.0
Unintentional Injuries	5.0	4.9	5.0
Alzheimer's Disease	2.9	2.8	3.3
Diabetes Mellitus	2.7	2.9	2.9
Influenza and Pneumonia	2.1	1.9	2.2
Nephritis, Nephrotic Syndrome and nephrosis	2.1	2.2	1.8
Intentional Self-Harm (Suicide)	1.1	1.3	1.6

Sources: Pennsylvania Department of Health, 2012; National Center for Health Statistics, 2013

Comparison of Additional Health Indicators for Allegheny County to Pennsylvania, United States, and Healthy People 2020:

Characteristics	Allegheny County	Pennsylvania	United States	Healthy People 2020
Morbidity				
Diabetes (%)	11.0	10.0	8.7	NA
Mental Health (Mental health not good \geq 1 day in past month) (%)	43.0	35.0	NA	NA
Low Birthweight (% of live births)	7.6	8.1	8.0	7.8
Health Behaviors				
Obesity (Adult) (%)	28.5	30.0	29.4	30.5
Childhood Obesity (Grades K-6) (%)	15.3	16.4	17.7	15.7
Childhood Obesity (Grades 7-12) (%)	17.0	18.0	20.5	16.1
Excessive Alcohol Use (%)	33.0	17.0	16.8	24.4
Current Tobacco Use (%)	23.0	21.0	19.0	12.0
STDs (Gonorrhea per 100,000)*	251.5	150.5	250.6	251.9
Clinical Care (%)				
Immunization: Ever had a Pneumonia Vaccination (65+) (%)	78.0	69.0	69.5	90.0
Cancer Screening				
Mammography (%)	59.0	60.0	74.0	81.1
Colorectal Screening (%)	66.0	69.0	67.3	70.5
Primary Care Physician: Population (PCP Physicians/100K Population)	108.6	82.0	75.8	NA
Receive Prenatal Care in First Trimester (%)	89.1	72.4	71.0	77.9

Sources:

Allegheny County Data: Allegheny County Health Survey 2009-2010; Pennsylvania Department of Health, 2012; Obesity Data, 2012-2013; Health Resources and Services Administration (HRSA), 2014-2015

Pennsylvania Data: Pennsylvania Department of Health, 2012; Data from Behavioral Risk Factor Surveillance System, 2013; Obesity Data, 2012-2013; Health Resources and Services Administration (HRSA), 2014-2015

U.S. Data: U.S. Centers for Disease Control and Prevention, 2013; Health Resources and Services Administration (HRSA), 2014-2015; Healthy People, 2020

**Gonorrhea data: County and Pennsylvania rates are per 15-35+ year old women; National and Healthy People 2020 rates are per 15-44 year old women*

APPENDIX C:

Input from Persons Representing the Broad Interests of the Community

Overview:

To identify and prioritize health needs of the communities served by UPMC hospitals, the organization solicited and took into account input from persons who represent the broad interests of the community. During June through July 2015, more than 1,500 community leaders and members representing medically underserved, low-income and minority populations, consumer advocates, nonprofit organizations, academic experts, local government officials, local school districts, community-based organizations, and health care providers were invited to participate in UPMC's community health needs survey. More than 500 individuals completed the survey, and greater than 70 percent of those participants self-identified as being a representative or member of a medically underserved, minority, or low-income population. The goal of the survey was not only to provide community members with an opportunity to comment on UPMC's 2013 CHNA and implementation strategy, but also to identify other potential significant health needs.

To ensure the CHNA community input process was conducted in a rigorous manner reflecting best practices, UPMC sought support and guidance from individuals and organizations with expertise in public health. UPMC engaged with the University of Pittsburgh Graduate School of Public Health (Pitt Public Health) Department of Behavioral and Community Health Sciences to build on the methodology employed in UPMC's 2013 CHNA. Pitt Public Health assisted in:

- Developing a framework to itemize and prioritize community health needs
- Developing a survey tool for obtaining structured input from community leaders and community members
- Administering the online survey using Qualtrics web software (and also in paper format upon request)
- Analyzing survey results

In addition, local and state public health department input and data were obtained and utilized in this community health needs assessment. UPMC relied on publicly available Pennsylvania Department of Health reports and additional local health department information accessed via telephone conversations and in-person meetings.

UPMC also considered findings from the Allegheny County Health Department's (ACHD) *2015 Community Health Assessment*, released in April 2015, which identified five areas of focus: chronic disease; maternal and child health; mental and substance use disorders; access; and environment. In addition, UPMC examined ACHD's *Plan for a Healthier Allegheny*, a strategic plan that addresses the health issues identified in the assessment. UPMC takes an active role in Allegheny County's community health initiatives. During Fiscal Years 2015 and 2016, UPMC representatives attended ACHD community and workgroup meetings, served on a County Advisory Council, and met with ACHD officials to discuss community health initiatives and identify approaches to better align efforts.

Stakeholder Input

UPMC East's Fiscal Year 2016 CHNA builds on the assessment process originally applied in 2013. That assessment used concept mapping to elicit stakeholder prioritization of health problems and develop group consensus on priorities. In the concept mapping effort, community advisory panels at each hospital participated in focus groups to brainstorm and then sort a set of 50 community health problems (see Appendix D for list of 50 topics). Concept mapping software uses this sorting data to create a display that illustrates the relationships between health topics, and allows aggregation of topics into thematic areas. The 50 topics were grouped into three main thematic areas: prevention and health living, chronic disease, and navigating the health care system. For example, stakeholders reliably sorted "access to specialist care" and "care coordination and continuity" into a common group. These form clusters in concept maps and allow rational aggregation into larger health priority areas, in this case "navigating the health care system."

Community panel members then rated community health problem areas according to the following three dimensions — importance of the problem to the community, the likelihood of having a measurable impact on the problem, and the ability of the hospital to address the problem. Using a criterion of high ratings on all three dimensions, combined with results of secondary analysis of population health indicators, generated health topics which were considered significant health needs.

Confirming Community Health Needs

In Fiscal Year 2015, surveys of hospital community advisory panels were used to assess the stability and continuing importance of Fiscal Year 2013 significant health needs. Advisory panels were invited to participate in an online Qualtrics survey, administered by Pitt Public Health. Survey respondents were presented community health priorities from Fiscal Year 2013 and asked to rate these on whether the health problem "remains a major problem," "is somewhat of a problem," or "is no longer a problem." Before the survey was sent out, advisory panels were able to nominate new health priorities, which were added to this initial list. In addition, panels repeated their ratings of importance, impact, and hospital ability for a set of all 18 community health priorities identified by all UPMC hospitals in the previous Fiscal Year 2013 CHNA to identify potentially new community health needs. Finally, the survey included an open-ended question to allow participants an opportunity to suggest other health problems.

Overall, nearly 90 percent of participants responded that health topics identified in the first round of CHNAs continue to remain or are somewhat a problem in UPMC's hospital communities. Stability and consistency are not surprising, given that these are significant health issues that need more than two to three years to show meaningful improvement. Fiscal Year 2013 community health need priorities were considered to remain priorities if more than half of respondents considered them to "remain a major problem." If a Fiscal Year 2013 health priority did not achieve this rating, new priorities were added based on ratings of other health priorities. These new health priorities were identified by high scores on the dimensions of importance, measurable impact, and hospital ability and also represented health concerns not subsumed in current specified priorities.

Community Representation and Rationale for Approach

Each hospital community advisory panel consisted of hospital board members, hospital staff, and community members. Community members were leaders of organizations that represented different patient constituencies and medically underserved, low-income, and minority populations and were invited to participate to ensure that a wide range of community interests were engaged in identifying community health needs. Organizations serving the medically underserved were well represented on the panels. In addition to hospital panels, the CHNA also included a community-wide panel consisting of health departments, mental health service providers, philanthropies, and other agencies providing health services not linked to particular hospitals.

Analyses disaggregated ratings to confirm that ratings were stable across different stakeholders.

The panels ensured that a wide variety of constituencies had an opportunity to weigh in on hospital community health priorities. Use of advisory panels and a survey explicitly assessing the continuing relevance of prior health priorities offers a number of advantages:

- It explicitly assesses stability/change of community health needs, while allowing participants an opportunity to consider new health priorities
- It uses the same measures to assess importance, impact, and hospital ability to address health priorities, which will allow tracking over time
- It elicits perceptions of a broad and inclusive list of hospital and community leaders who in turn represent a broad group of constituents
- It allows assessment of consensus across different kinds of stakeholders

UPMC East invited representatives from the following organizations to participate in the community needs survey conducted in June 2015:

- **Chief of Police, Monroeville, PA**
- **Community College of Allegheny County, Boyce Campus, Monroeville, PA**
- **Community Leaders, Monroeville, PA**
- **Gateway Board of School Directors, Gateway School District, Monroeville, PA**
- **Mayor's Office, City of Monroeville, PA**
- **Monroeville Arts Council, Monroeville, PA**
- **Monroeville Senior Citizens Center, Monroeville, PA**
- **Professional Nurses Home Care Services, Monroeville, PA**
- **Redstone Highlands, Murrysville, PA**
- **Turtle Creek Valley Council of Governments, Monroeville, PA**
- **Westmoreland County Chamber of Commerce, Greensburg, PA**
- **YMCA of Greater Pittsburgh, East District**

The UPMC East community survey was also supported by members of the hospital's Board of Directors and physicians, as well as hospital leadership.

Additionally, a UPMC system-wide group comprised of individuals and organizations representing the broad interests of the region's communities — including representatives from medically underserved, low-income, and minority populations — was invited to participate in the survey. Invitees included representatives from the following organizations:

- **Achieva, Pittsburgh, PA**
- **Action Housing, Inc., Pittsburgh, PA**
- **Allegheny County Area Agency on Aging, Pittsburgh, PA**
- **Allegheny County Department of Human Services, Pittsburgh, PA**
- **Allegheny County Office of Children, Youth, and Families, Pittsburgh, PA**
- **Allegheny Intermediate Unit, Homestead, PA**
- **Bethlehem Haven, Pittsburgh, PA**
- **Big Brothers Big Sisters of Greater Pittsburgh, Pittsburgh, PA**
- **Carlow University, Pittsburgh, PA**
- **Catholic Charities Free Health Care Center, Pittsburgh, PA**
- **Center for Engagement and Inclusion, UPMC, Pittsburgh, PA**
- **City of Pittsburgh Bureau of Police, Pittsburgh, PA**

- Community College of Allegheny County, Monroeville, PA
- Consumer Health Coalition, Pittsburgh, PA
- Coro Center for Civic Leadership, Pittsburgh, PA
- EDSI Solutions, Pittsburgh, PA
- Erie Regional Chamber and Growth Partnership, Erie, PA
- Expanding Minds, LLC, Pittsburgh, PA
- Goodwill of Southwestern Pennsylvania, Pittsburgh, PA
- Greater Pittsburgh Community Food Bank, Duquesne, PA
- Healthy Lungs Pennsylvania, Cranberry Township, PA
- Higher Achievement, Pittsburgh, PA
- Hosanna House, Inc., Wilkensburg, PA
- iGate Corporation, Pittsburgh, PA
- Imani Christian Academy, Pittsburgh, PA
- Jewish Family and Children’s Service of Pittsburgh, Pittsburgh, PA
- Josh Gibson Foundation, Pittsburgh, PA
- Junior Achievement of Western Pennsylvania, Pittsburgh, PA
- Kaplan Career Institute, Pittsburgh, PA
- Kingsley Association, Pittsburgh, PA
- LEAD Pittsburgh, Pittsburgh, PA
- Let’s Move Pittsburgh, Pittsburgh, PA
- Mainstay Life Services, Pittsburgh, PA
- The Mentoring Partnership of Southwestern PA, Pittsburgh, PA
- NAMI Southwest Pennsylvania, Pittsburgh, PA
- Neighborhood Learning Alliance, Pittsburgh, PA
- Office of Human Services, Allegheny County Department of Human Services, Pittsburgh, PA
- Operation StrongVet Western Pennsylvania, Wexford, PA
- Pennsylvania Health Access Network, Pittsburgh, PA
- Pennsylvania Health Law Project, Pittsburgh, PA
- Persad Center, Pittsburgh, PA
- Pittsburgh Action Against Rape, Pittsburgh, PA
- Pittsburgh Black Nurses in Action, Pittsburgh, PA
- Pittsburgh Board of Education, Pittsburgh, PA
- Pittsburgh Disability Employment Project for Freedom, Pittsburgh, PA
- Pittsburgh Job Corps Center, Pittsburgh, PA
- The Pittsburgh Promise, Pittsburgh, PA
- Ralph A. Falbo, Inc., Pittsburgh, PA
- Randall Industries, LLC, Pittsburgh, PA
- Salvation Army of Western Pennsylvania, Carnegie, PA
- Smart Futures, Pittsburgh, PA
- United Way of Allegheny County, Pittsburgh, PA
- University of Pittsburgh School of Health and Rehabilitation Sciences, Pittsburgh, PA
- University of Pittsburgh Health Sciences, Pittsburgh, PA
- UPMC Board Diversity and Inclusion Committee, Pittsburgh, PA
- Urban League of Greater Pittsburgh, Pittsburgh, PA
- Ursuline Support Services, Pittsburgh, PA
- VA Pittsburgh Healthcare System, Pittsburgh, PA
- The Waters Foundation, Pittsburgh, PA
- The Wynning Experience, Pittsburgh, PA
- Vibrant Pittsburgh, Pittsburgh, PA
- Western Pennsylvania Conservancy, Pittsburgh, PA
- Women for a Healthy Environment, Pittsburgh, PA
- Women’s Center and Shelter of Greater Pittsburgh, Pittsburgh, PA
- YMCA of Greater Pittsburgh, Pittsburgh, PA
- YWCA of Greater Pittsburgh, Pittsburgh, PA

APPENDIX D:

Concept Mapping Methodology

Overview:

UPMC East, with consultation and support from Pitt Public Health, utilized a research method known as concept mapping to develop a better understanding of perceived health problems for its community. Concept mapping is well suited for a Community Health Needs Assessment because the research method involves stakeholders in the process and allows for prioritization of health problems based on community input.

Concept mapping is a participatory research method that yields a conceptual framework for how a group of stakeholders views a particular topic or issue. The method explores the relationships of ideas and concepts and allows for the development of group consensus. It allows for the collection of a wide range of stakeholder-generated ideas and applies quantitative analytical tools (i.e., multidimensional scaling and hierarchical cluster analysis). Concept mapping output includes a concept map which is a diagram that illustrates the relationships between ideas. The research method is used to facilitate the creation of a shared vision and understanding within a group. The research method synthesizes individual data and includes a rating process that is used to prioritize key problems.

Each UPMC hospital completed the concept mapping and through the process identified hospital-specific priority community health problems based on stakeholder input.

Application of Concept Mapping for UPMC East:

UPMC East established a community advisory council. Participants contributed through face-to-face meetings and online input.

The concept mapping research method consisted of two stages:

- **Brainstorming — gathering stakeholder input**
- **Sorting and Rating — organizing and prioritizing the stakeholder input**

Brainstorming - Identifying Health Needs:

In the brainstorming meeting, the UPMC East Community Advisory Council met in person to solicit members' input on the focal question, "What are our community's biggest health problems?"

Council members first brainstormed independently and then shared their lists with the Pitt Public Health research team. Their responses were then compiled to generate a full list of community health problems for the hospital. The Pitt Public Health research team shared the full list with the group and facilitated a group discussion of the responses to ensure the list was comprehensive and reflected the scope of health problems faced in the UPMC East community.

The UPMC East brainstorming list was integrated with brainstorming lists from the other UPMC hospitals to develop a final master list of community health problems to be used in the subsequent concept mapping sorting and rating. A consolidated final master list of the 50 community health problems was distilled from the robust community input. The following table presents each of the 50 community health problems and provides a numerical value in parentheses so that the item can be linked with the concept map presented in the following figure.

Final Master List of 50 Community Health Problems

Nutrition and healthy eating (1)	Diabetes (11)	Medication management and compliance (21)	High blood pressure/ Hypertension (31)	Smoking and tobacco use (41)
Immunizations/ Vaccinations (2)	Health literacy – ability to understand health information and make decisions (12)	Exercise (22)	Breast cancer (32)	Adolescent health and social needs (42)
Lung cancer (3)	Urgent care for non-emergencies (13)	Navigating existing healthcare and community resources (23)	Pediatrics and child health (33)	Depression (43)
Maternal and infant health (4)	End of life care (14)	Preventive Screenings (cancer, diabetes, etc) (24)	Sexual health including pregnancy and STD prevention (34)	Support for families/caregivers (44)
Alcohol abuse (5)	Asthma (15)	Heart Disease (25)	Dementia and Alzheimer’s (35)	Health insurance: understanding benefits and coverage options (45)
Adult obesity (6)	Prenatal care (16)	Primary Care (26)	Chronic Obstructive Pulmonary Disease (COPD) (36)	Preventive health/wellness (46)
Drug abuse (7)	Dental care (17)	Childhood obesity (27)	Stroke (37)	Injuries including crashes and sports related, etc (47)
Access to specialist physicians (8)	Financial access: understanding options (18)	Intentional injuries including violence and abuse (28)	Post-discharge coordination and follow-up (38)	Childhood developmental delays including Autism (48)
Behavioral health /mental health (9)	High cholesterol (19)	Cancer (29)	Arthritis (39)	Eye and vision care (49)
Geographic access to care (10)	Care coordination and continuity (20)	Social support for aging and elderly (30)	Senior health and caring for aging population (40)	Environmental health (50)

Sorting and Rating – Prioritizing Health Needs:

The UPMC East Community Advisory Council completed the sorting and rating activities via the Internet. Each participant was asked to sort the master list of 50 community health problems into thematic areas, and to then rate the problems using a 1 to 5 Likert scale, according to the following criteria:

Importance:

How important is the problem to our community?

(1 = not important; 5 = most important)

Measurable Impact:

What is the likelihood of being able to make a measurable impact on the problem?

(1 = not likely to make an impact; 5 = highly likely to make an impact)

Hospital Ability to Address:

Does the hospital have the ability to address this problem?

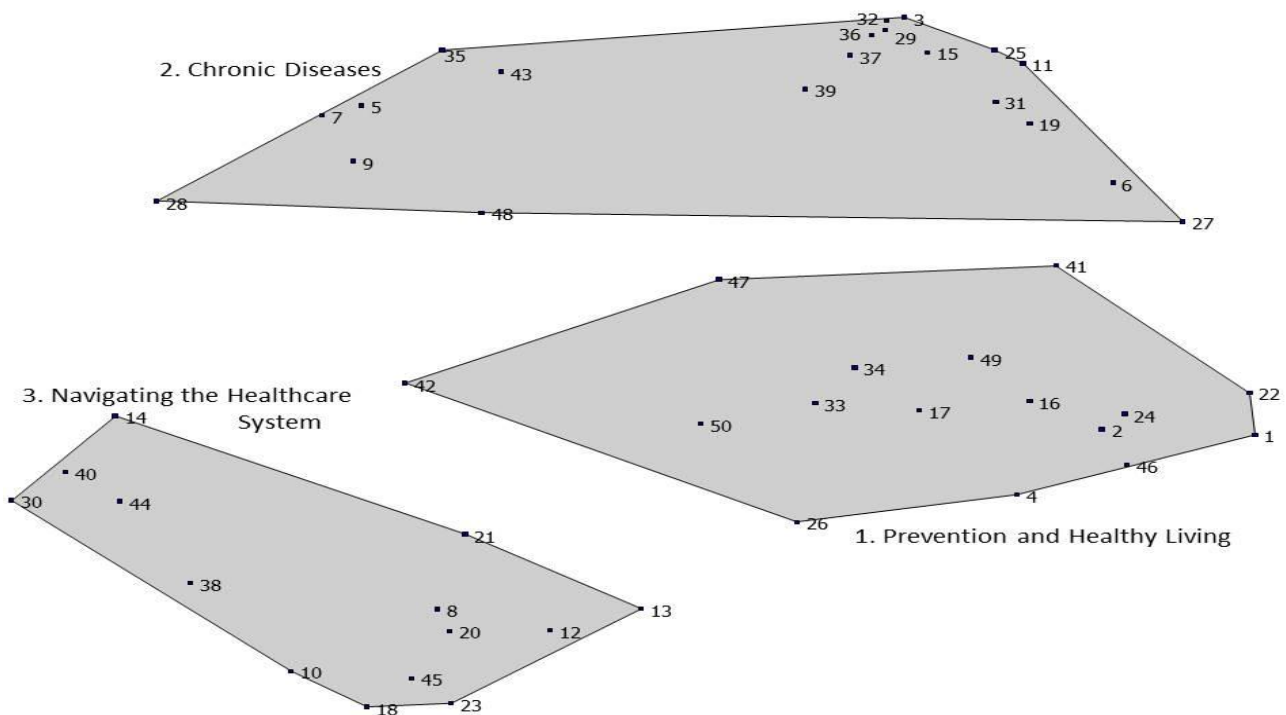
(1 = no ability; 5 = great ability)

Multi-dimensional scaling was applied to the sorting data to examine similarities between the 50 community health problems. Hierarchical clustering was used to group the sorting data into common thematic areas and to establish a final cluster map which provided a visual representation of the data. The final cluster map of the 50 community health problems reflects three thematic areas (See Figure below):

- **Prevention and Healthy Living (16 items)**
- **Chronic Diseases (20 items)**
- **Navigating the Healthcare System (14 items)**

Each of the 50 community health problems are represented in the figure below as a point. The numbers next to each point correspond to the item number. For example, item #31 is High Blood Pressure/Hypertension. The proximity of the points to each other illustrates the group thoughts about the degree of similarity between the items. For example, item #31 (High Blood Pressure/Hypertension) and item #19 (High Cholesterol) were felt to be very similar. Those two community health problems appear on the right side of the Chronic Diseases cluster.

Final Cluster Map:



For each of the rating criteria, the rating levels were broken into three equal distributions (tertiles) representing high, moderate, and low priority. The cut points for each rating criteria are as follows:

Importance:

Low (1-3.67); Moderate (3.68-4.06); High (4.07-5.0)

Measurable Impact:

Low (1-3.33); Moderate (3.34-3.83); High (3.84-5.0)

Hospital Ability to Address:

Low (1-3.20); Moderate (3.21-3.85); High (3.86-5.0)

Within each cluster, the rating data for each individual community health problem was examined across all three rating criteria. For example, in the Prevention and Healthy Living cluster, the 16 individual community health problems were identified as being low, moderate, or high for the importance, measurable impact, and hospital ability to address rating criteria.

The rating categories results were then combined with results from secondary data analyses and used to identify high priority community health problems for UPMC East. UPMC East leadership next consulted with experts from Pitt Public Health and members of the community advisory council to review the list of high priority community health problems and identify the set of needs that are critical, addressable, and have high levels of urgency in the community. The resulting list constituted the top tier of health problems for the community.