UPMC McKeesport

Community Health Needs Assessment

And

Community Health Strategic Plan

June 30, 2013

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EXECUTIVE SUMMARY

UPMC McKeesport Plays a Major Role in its Community:

UPMC McKeesport is a nonprofit, 231-bed acute-care teaching hospital located in McKeesport, Pennsylvania. Situated in Allegheny County, the hospital delivers a full range of quality medical services — including highly specialized medical and surgical treatment — to the residents of the Monongahela, Youghiogheny, and Turtle Creek valleys.

UPMC McKeesport maintains a historically strong connection with its community, and offers an array of community-oriented programs and services to improve the health of local residents. One notable example is UPMC Health for Life Summer Camp at Braddock, which offers healthy life skills and physical activities to 100 local children.

UPMC McKeesport in the Community

UPMC McKeesport provided $7.3 million in uncompensated care in FY 2012

UPMC McKeesport's community health efforts provide education, information, and access to care for a wide range of health topics

UPMC McKeesport 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 2013, UPMC McKeesport conducted a Community Health Needs Assessment (CHNA) in keeping with requirements described in section 501(R)(3) of the Internal Revenue Code. The CHNA provided an opportunity for the hospital to engage public health experts and community stakeholders in a formal process to ensure that community benefit programs and resources are focused on significant health needs.

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 rigorous analysis of documented health and socioeconomic factors with a structured community input process, known as "Concept Mapping."

The CHNA process effectively engaged the community of UPMC McKeesport in a broad, systematic way. It included face-to-face meetings with the community advisory council, as well as use of an online survey tool.

Socioeconomic characteristics of the hospital's immediate service area in part reflect the economic decline the region has experienced over the past three decades since the downsizing of the steel industry. The UPMC McKeesport service area is noted for having a significant elderly population, areas of concentration with higher rates of poverty and unemployment, and a higher prevalence of chronic disease, such as diabetes.

Socioeconomic Characteristics	UPMC McKeesport Service Area	Allegheny County	National
Elderly (65+ years)	19%	17%	13%
Elderly living alone	14%	13%	9%
Household Income (Median)	$40,000	$45,400	$49,700

Source: U.S. Census

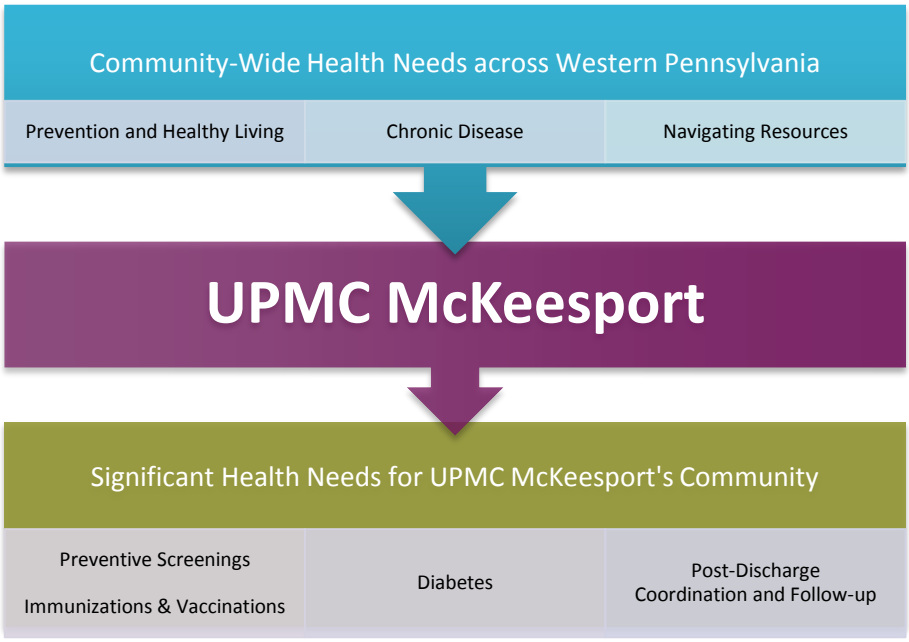
Through the CHNA process, UPMC McKeesport identified significant health needs for its particular community. They are:

Topic	Importance to the Community
Diabetes	Diabetes is a leading cause of death in Allegheny County. Obesity, a risk factor associated with diabetes, is high in the UPMC McKeesport service area.
Post-Discharge Coordination	The community identified post-discharge coordination and follow-up as a significant health need for UPMC McKeesport. Subsequent re-hospitalizations can be reduced through interventions at the time of hospital discharge, and also through follow-up with the patient.
Immunizations and Vaccinations	Influenza and pneumonia are leading causes of death in Allegheny County, and the risk of death due to influenza and pneumonia is a serious threat to the elderly. The UPMC McKeesport service area has a higher senior population than Allegheny County – which is one of the oldest counties in the nation.
Preventive Screenings	Screenings for colorectal cancer and breast cancer were lower in the UPMC McKeesport service area than benchmarks. 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.

UPMC is Responding to the Community's Input

Western Pennsylvania has a diverse range of health needs. Key themes that emerged from the UPMC McKeesport CHNA process were consistent with those found through CHNAs conducted at other UPMC hospitals throughout western Pennsylvania. In addition to being relevant to the CHNA, these themes are increasingly important in the rapidly changing landscape of health care reform:

Identifying Significant Health Needs Relevant for the Hospital Community



- **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 McKeesport is planning a wide range of initiatives to support prevention and care for chronic disease.
- **Navigating Available Resources:** Many established health care programs in UPMC McKeesport'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 McKeesport is collaborating successfully with local organizations on improving community health. The hospital will also leverage resources and synergies within the UPMC system, which includes population-focused health insurance products and comprehensive programs and resources targeted at areas including seniors.

UPMC McKeesport Is Improving Community Health in Measurable Ways:

On February 6, 2013, the UPMC McKeesport Board of Directors adopted an implementation plan to address the identified significant health needs and set measurable targets for improvement over the next three years.

The plan draws support from an array of active and engaged community partners, as well as from the larger UPMC system. Highlights of programs and goals contained in this plan are summarized below.

Managing Chronic Disease: Diabetes and Post-Discharge Coordination and Follow-Up

Goal: Increase community participation in diabetes education, prevention, detection, and management programs. Reduce hospital readmissions, with particular attention given to seniors and socially isolated populations within the community.

Collaborating Partners: YMCA, EMS, Mon River Fleet, UPMC Health Plan, Aging Institute of UPMC Senior Services & the University of Pittsburgh, religious and educational organizations, 9th Street Clinic, Latterman Family Health Clinic, national advocacy organizations, and civic organizations.

- **UPMC McKeesport will continue to focus on preventing and managing diabetes in the community.**
  - The Lion's Diabetes Center at UPMC McKeesport, an American Diabetes Association-accredited program, assisted 230 community members through group education and individual counseling in the past year. The hospital plans to increase community awareness and use of these program offerings among diabetics.
  - One-on-one counseling and education classes on blood glucose monitoring, insulin, and medication will help people with diabetes manage their disease to prevent complications and maintain independence.
- **UPMC McKeesport is supporting patients and caregivers in their recovery after they leave the hospital to reduce the need for re-hospitalization.**
  - UPMC McKeesport clinicians will contact every patient discharged from the hospital by telephone to check on progress and ensure that they understand and are capable of following the recommended care plan.
  - For homebound community members, a social worker follows patient progress after discharge by visiting patients at home. This will help to identify patients who need follow-up support to prevent them from becoming sick again. The program has a particular focus on older, isolated patients.

Promoting Wellness and Disease Prevention in the Community

Goal: Through community partnerships, continue the free immunization and vaccination program that has been recognized as a statewide model. Ensure that ongoing educational and preventive screening events offered through the hospital focus on specific populations and clinical topics identified as areas of community need.

Collaborating Partners: YMCA, EMS, Mon River Fleet, UPMC Health Plan, Aging Institute of UPMC Senior Services & the University of Pittsburgh, religious and educational organizations, 9th Street Clinic, Latterman Family Health Clinic, national advocacy organizations, and civic organizations.

- **UPMC McKeesport will continue to offer a highly successful free influenza immunization program in conjunction with UPMC Health Plan, the McKeesport Hospital Foundation, the Pennsylvania Department of Health, and the Mon River Fleet – which is composed of State Health Improvement Partnerships (SHIPs) located in the municipalities of Clairton, McKeesport, Duquesne, and Braddock.**
  - To enhance this already impressive program, which vaccinated 5,000 community members in the past year, UPMC McKeesport plans to focus on vaccinating hard-to-reach populations within their area — including elderly and low-income residents.
- **UPMC McKeesport is involved in a wide range of community health activities that emphasize disease prevention. The hospital will measure the impact of these programs to ensure that resources are distributed where they are most needed.**
  - The hospital's UPMC Health for Life Summer Camp at Braddock is a popular way for local kids to learn about healthier living. Through a seven-week day camp and a one-week overnight experience, 100 children will learn about healthy eating and how physical activity can be fun and healthy.
  - Community events and educational seminars will focus on preventing and diagnosing chronic conditions, such as heart disease, stroke, and diabetes. Hospital clinicians will take these presentations to community locations, such as local churches and the YMCA.

COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT

I. Objectives of a Community Health Needs Assessment

CHNA Goals and Purpose:

In Fiscal Year 2013, UPMC McKeesport conducted a Community Health Needs Assessment (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.

UPMC McKeesport has many long-standing initiatives focused on improving the health of its community. UPMC approached this CHNA 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 community 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 McKeesport:

UPMC McKeesport is a nonprofit, 231-bed acute-care hospital located in Allegheny County, Pennsylvania. It offers a full range of quality medical services to the people of the Monongahela, Youghiogheny, and Turtle Creek valleys. The hospital provides area residents with access to medical, surgical, behavioral health, 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. During the Fiscal Year ended June 30, 2012, UPMC McKeesport had a total of 13,838 admissions and observations, 41,347 emergency room visits, and 4,266 surgeries.

UPMC McKeesport is a teaching hospital, with residency programs in both family practice and internal medicine. It is also 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.

UPMC McKeesport in Your Community

UPMC McKeesport provides world-class medicine in a local hospital attuned to community needs — serving the Monongahela, Youghiogheny, and Turtle Creek valleys.

Anchoring Local Economy

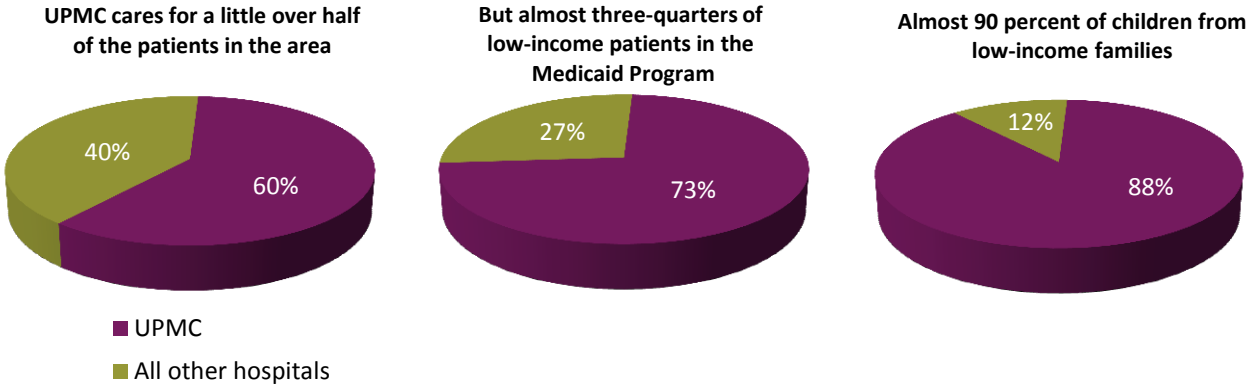
- **$59.2 million in salaries and benefits to 1,129 employees**
- **Nursing education and Allied Health Apprenticeships offer job opportunities**
- **Key operating measures improving; $9 million investment in FY2012 for physical plant and clinical technology**
- **UPMC McKeesport offered more than 200 community health events in FY2012**

UPMC McKeesport's Community Service and Community Benefit Initiatives:

UPMC McKeesport provides a broad array of benefits to the community.

- **Subsidizing Care through Charity Care and Shortfalls in Payments from Government Programs for the Poor:** In keeping with UPMC McKeesport's commitment to serve all members of its community, the hospital provides certain care regardless of an individual's ability to pay. Avenues for offering care to those who can't afford it include free or subsidized care, and care provided to persons covered by governmental programs when those programs don't cover the full cost.
- **Providing Care for Low-Income and Elderly Populations:** Recognizing its mission to the community, UPMC McKeesport is committed to serving Medicare and Medicaid patients. In Fiscal Year 2012, these patients represented 75 percent of UPMC McKeesport's patient population. UPMC McKeesport and the larger UPMC organization care for a disproportionate share of the community's most vulnerable, as shown in the figure below:

UPMC CARES FOR A DISPROPORTIONATE NUMBER OF ALLEGHENY COUNTY'S MOST VULNERABLE*



Source: Pennsylvania Health Care Cost Containment Council, FY 2012

- **Educating the Next Generation of Health Professionals:** UPMC McKeesport is a teaching hospital and supports medical education and training through a number of programs and activities such as:
  - Career training through the nursing education program offered in cooperation with the UPMC St. Margaret School of Nursing
  - The Allied Health Apprenticeship Program, which guides local high school students through training and certification as nursing assistants
- **Offering Community Health Improvement Programs and Donations:** UPMC McKeesport provides services to the community through outreach programs, including referral centers, screenings and educational classes. Through the 2012 Fiscal Year, the hospital offered nearly 200 community health events, including the annual Harvest of Health Fair, which provided health testing, screenings (blood pressure, cholesterol, bone density, visual acuity, diabetes, etc.), flu vaccines, breast and prostate exams, and health education focused on diverse, underserved populations. The hospital also made available programs in various communities throughout the year that included geriatric van transport, community health screenings, smoking cessation classes, and the UPMC McKeesport Golden Key Club. Among the hospital's youth programs, the UPMC Health for Life Summer Camp at Braddock offered instruction on healthy life skills and trips to Kennywood Amusement Park and the Pittsburgh Zoo & Aquarium to 100 local kids. The estimated cost of these programs, in addition to donations to allied nonprofit partner organizations that enhance UPMC McKeesport's community services, was $2.8 million in Fiscal Year 2012.
- **Actively Partnering with the Mon River Fleet:** UPMC McKeesport plays a key leadership role in the McKeesport Healthier Communities PartnerSHIP (State Health Improvement Plan) and the Mon River Fleet Community PartnerSHIPs. These state-sponsored, locally run organizations are actively involved in facilitating health improvements for residents residing in the Monongahela, Youghiogheny, and Turtle Creek valleys, and have served as state-wide models for successful SHIPs.

  Activities with the SHIPS and the Mon River Fleet include:
  - Regular meetings of the many community member agencies and community residents
  - Collaborative events to provide health, education, safety, spiritual, social, and recreation improvements and opportunities through health fairs and community days
  - Children's safety/health events
  - In-service meetings provided for partners on various social and health and human service topics/training
- **Anchoring the Local Economy:** With deep roots in the community dating back to 1894, the hospital takes an active role in supporting the local economy through employment, local spending, and strategic community partnerships. A major employer in the area, UPMC McKeesport has paid $59.2 million in salaries and benefits to its 1,129 employees — 63 percent of whom live in the area — and generated a total economic impact of $274 million.

II. Definition of the UPMC McKeesport Community

For the purpose of this CHNA, the UPMC McKeesport community is defined as Allegheny County. With 92 percent of patients treated at UPMC McKeesport residing in Allegheny County, the hospital primarily serves residents of this geographic region. By concentrating on the county, UPMC McKeesport 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 McKeesport Live in Allegheny County

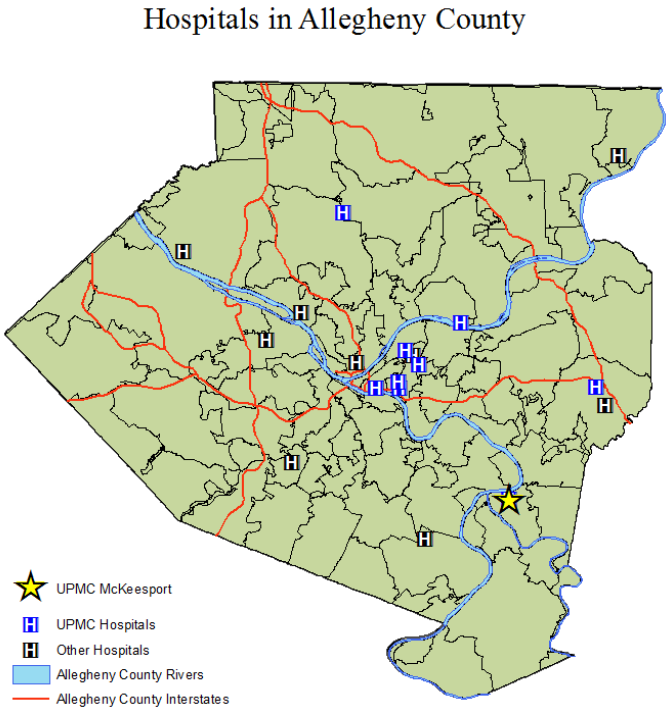
County	UPMC McKeesport %	Medical Surgical Discharges
Allegheny County	92.1%	7,088
All Other Regions	7.9%	606
Total Hospital Discharges	100%	7,694

Source: Pennsylvania Health Care Cost Containment Council, FY2012

The hospital is situated in the southeastern region of the county, an area noted for its economic challenges over the past three decades. While the county represents the basic geographic definition of UPMC McKeesport'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:

UPMC McKeesport is one of 8 UPMC licensed hospitals, and a total of 16 total hospitals in Allegheny County.



In the immediate service area, UPMC McKeesport is supported by nearly 60 UPMC outpatient offices, as well as the seven other licensed UPMC hospitals and numerous other UPMC facilities located in the county. These facilities include two UPMC CancerCenters, two UPMC Surgery and UPMC Outpatient Centers, a UPMC Urgent Care Center, three Centers for Rehabilitation Services sites, four UPMC Imaging Centers, a Magee-Womens Hospital of UPMC satellite office, and more than 40 pediatric, primary and specialty care doctor's offices.

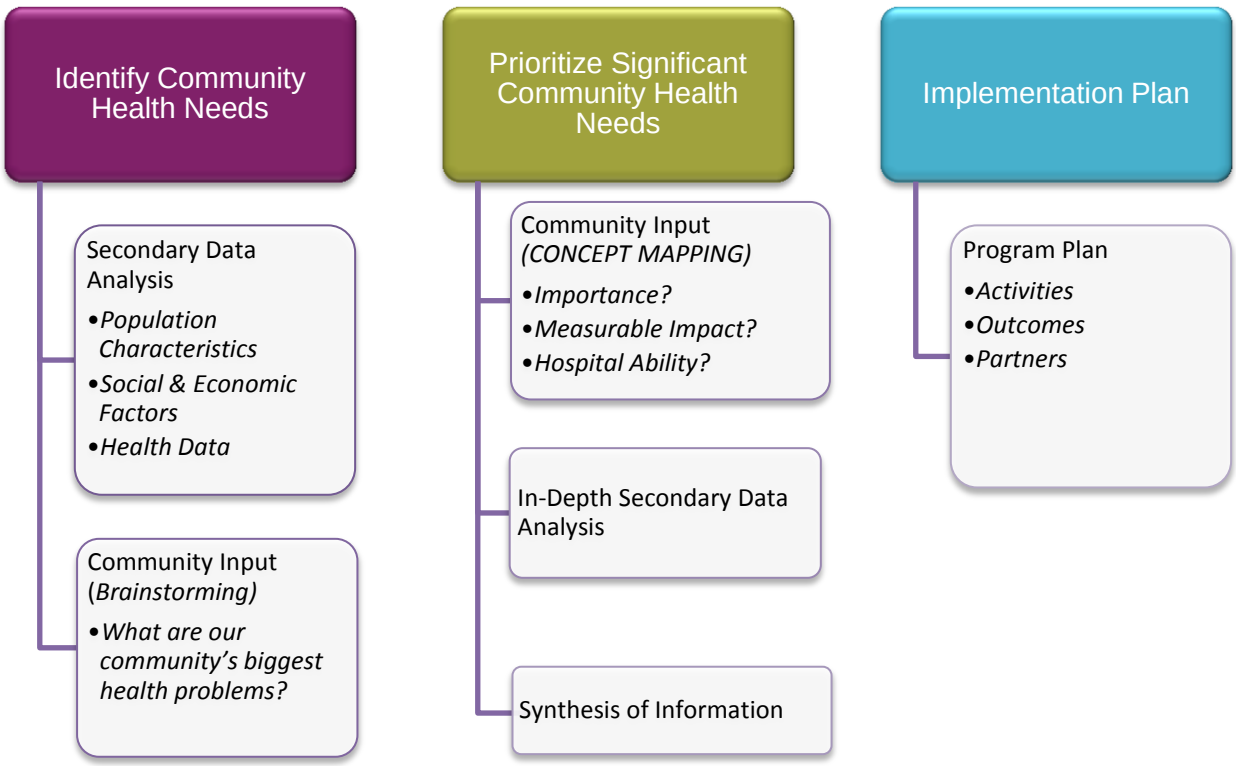
III. Methods Used to Conduct the Community Health Needs Assessment

Overview

In conducting this CHNA, 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 ensured that the CHNA was undertaken using a structured process for obtaining community input on health care needs and perceived priorities, and that analysis leveraged best practices in the areas of evaluation and measurement.

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 — with assistance of faculty from Pitt Public Health — conducted an analysis of publicly available data. Secondary data — including population demographics, mortality, morbidity, health behavior, clinical care, and physical environment 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, the 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	2007 - 2009 data collected and compared by neighborhood, county, state and nation.	Allegheny County Health Survey, 2009-2010 PA Department of Health Behavioral Risk Factors Surveillance System; birth, death, and other vital statistics; cancer statistics U.S. Centers for Disease Control and Prevention Behavioral Risk Factors Surveillance System National Center for Health Statistics
	Cancer		
	Mental Health		
	Asthma (Childhood)		
	Birth Outcomes		
Health Behaviors Data	Obesity (Childhood and Adult)		
	Alcohol Use		
	Tobacco Use		
	Sexually Transmitted Disease		
Clinical Care Data	Immunization	2007 - 2009 data collected and compared by county, state and nation. 2011 County Health Rankings by County.	Allegheny County Health Survey, 2009-2010 PA Department of Health Behavioral Risk Factors Surveillance System; birth, death, and other vital statistics; cancer statistics U.S. Centers for Disease Control and Prevention Behavioral Risk Factors Surveillance System Robert Wood Johnson Foundation County Health Rankings National Center for Health Statistics
	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
Physical Environment Data	Access to Healthy Foods	2011 County Health Rankings by County.	Robert Wood Johnson Foundation County Health Rankings
	Access to Recreational Facilities		

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. The CHNA 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. 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. (See Appendix C for more information on Concept Mapping.)

To gather community input, the hospital convened a community advisory council to provide broad-based input on health needs present in the hospital's surrounding community. UPMC also convened a community focus group for the purpose of discussing the overarching needs of the larger region served by UPMC's 13 licensed Pennsylvania hospitals. 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 Appendix D for a more complete list and description of community participants)**

The Concept Mapping process consisted of two 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 in order 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?

Synthesis of Information and Development of Implementation Plan:

The Concept Mapping results were merged with results gathered from the analysis of publicly available data. In the final phase of the process, UPMC hospital leadership consulted with experts from Pitt Public Health, as well as the community advisory council, to identify a set of significant health needs that are critical, addressable, and have high levels of urgency in the community. The process then matched these needs to:

- **Best-practice methods for addressing these needs, identified by Pitt Public Health**
- **Existing hospital community health programs**
- **Programs and partners elsewhere in the community that can be supported and leveraged**
- **Enhanced data collection concerning programs, again with the consultation of Pitt Public Health**
- **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 with High Social Needs: A notable characteristic of the region surrounding UPMC McKeesport is the large and increasing percentage of elderly residents (65 years and older). The UPMC McKeesport immediate service area in particular has a large elderly population (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).

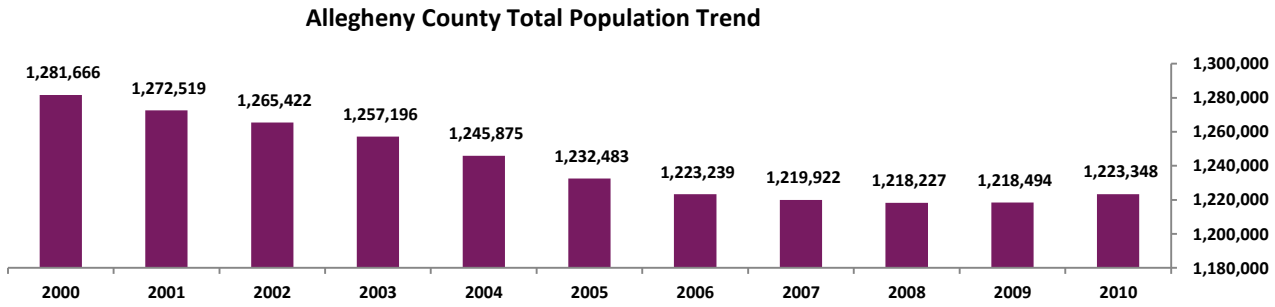
Allegheny County Has a Sizable Elderly Population

Age Distribution - 2010				
	Allegheny County	UPMC McKeesport Service Area	Pennsylvania	National
Median Age	41.3	44.1	40.1	37.2
% Children (<18)	19.8%	20.9%	22.0%	24.0%
% 18-64	63.4%	60.6%	62.6%	63.0%
% 20-49	39.2%	35.5%	39.0%	41.0%
% 50-64	21.3%	22.7%	20.6%	19.0%
% 65+	16.8%	18.5%	15.4%	13.0%
% 65-74	7.8%	8.7%	7.8%	7.0%
% 75-84	6.1%	6.8%	5.4%	4.3%
% 85+	2.9%	3.1%	2.4%	1.8%
% Elderly Living Alone	13.1%	14.4%	11.4%	9.4%

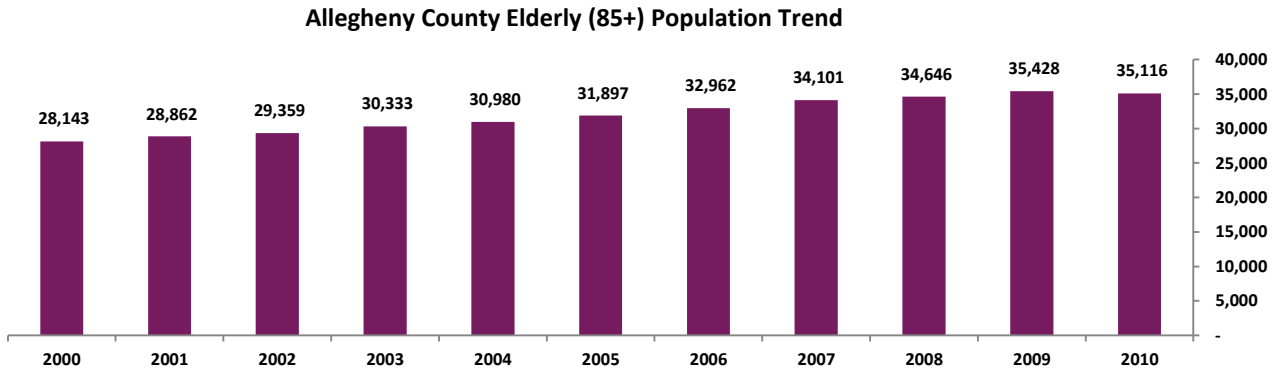
Source: U.S. Census

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 (85+) *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 families living in poverty**
- **Have fewer uninsured and fewer recipients of the income-based Medicaid health insurance program (See Appendix B)**

Medically Underserved Areas in UPMC McKeesport Service Area: In contrast to the relatively strong Allegheny County statistics, UPMC McKeesport is surrounded by some neighborhoods that have the potential for health disparities. The immediate service area of UPMC McKeesport is characterized by:

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

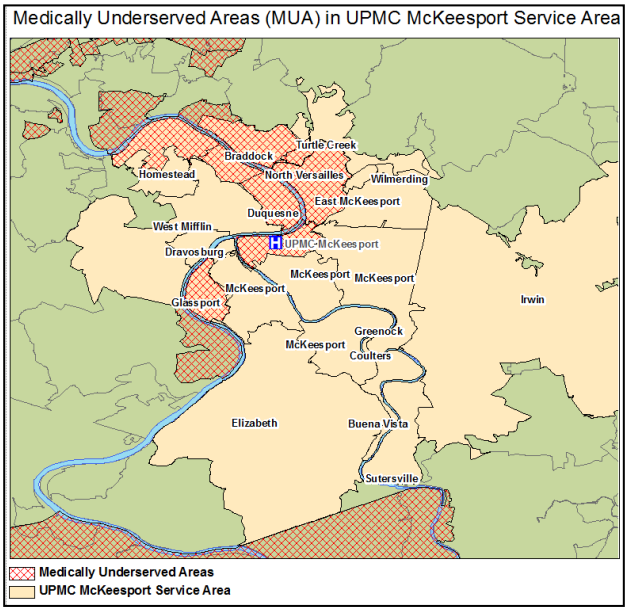
Social and Economic Population Demographics		
	Allegheny County	UPMC McKeesport Service Area
Median Household Income	$45,362	$39,929
% in Poverty (among families)	8.7%	11.2%
% with No High School Diploma (among those 25+)	8.4%	9.6%
% Unemployed (among total labor force)	7.2%	7.8%
Racial Groups		
% White	81.5%	83.1%
% African-American	13.2%	13.9%
% Other Race	5.3%	3.0%

Source: U.S. Census

In Allegheny County, the ratio of primary care physicians to the general population — 1:638 — was higher, compared with 1:1,067 in Pennsylvania, suggesting a good supply of providers.

In the UPMC McKeesport service area, however, a number of neighborhoods are federally designated as Medically Underserved Areas (MUAs). The following factors are considered in the determination of MUAs:

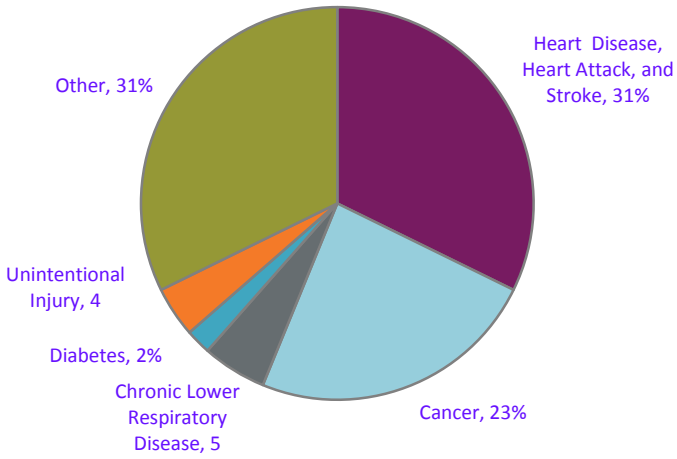
- **A high percentage of individuals living below the poverty level**
- **High percentages of individuals over age 65**
- **High infant mortality**
- **Lower primary care provider to population ratios**



Source: Health Resources and Services Administration

Chronic Disease and Mortality:

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



Source: Pennsylvania Department of Health, 2009

Significant Health Needs for UPMC McKeesport'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 areas served by UPMC hospitals:

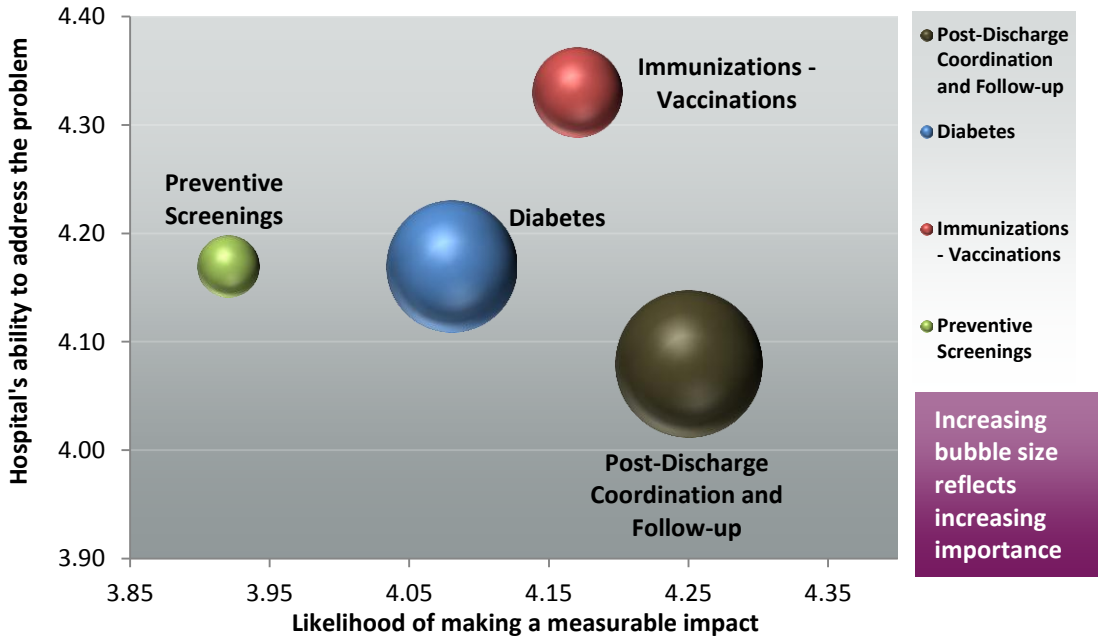
- **Chronic Disease**
- **Prevention and Healthy Living**
- **Navigating Resources**

For UPMC McKeesport's community, the assessment identified 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:

- **Diabetes**
- **Post-Discharge Coordination and Follow-Up**
- **Immunizations and Vaccinations**
- **Preventive Screenings**

The following illustration depicts where these significant health needs ranked within the criteria considered. Please note, metrics are rated on a Likert scale of 1 through 5.

UPMC McKeesport Significant Health Needs

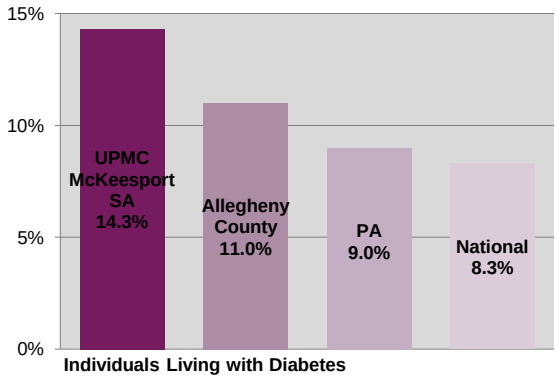


In-depth secondary data analysis reinforced that these health topics were areas of concern for the UPMC McKeesport community. The secondary data findings are illustrated below:

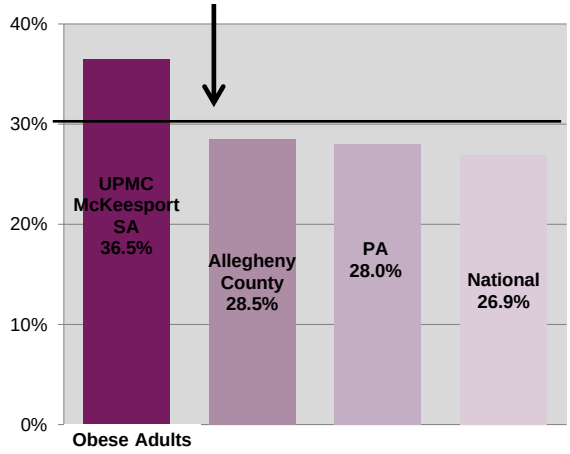
Diabetes –Importance to the Community

- **Diabetes is a leading cause of death in the UPMC McKeesport service area and is associated with heart disease, the #1 leading cause of death.**
- **A high percentage of individuals in the UPMC McKeesport service area are living with diabetes.**
- **Obesity, a risk factor associated with diabetes, is high in the UPMC McKeesport service area.**

Diabetes rate is high in the UPMC McKeesport service area



Obesity is worse in UPMC McKeesport service area, where rates greatly exceed the Benchmark: 30.6



Sources: Allegheny County Health Survey 2009-2010; Pennsylvania Department of Health, 2011; Healthy People 2020. U.S. Centers for Disease Control and Prevention, 2009.

Diabetes affects many people: Nationally, 8.3 percent of the total U.S. population has been diagnosed with diabetes, and it is estimated that almost one-third of people with the disease have not been diagnosed. Diabetes is the sixth leading cause of death in the UPMC McKeesport service area. Diabetes is also a major cause of heart disease and stroke, and may underlie many deaths attributed to these conditions. Unmanaged diabetes can lead to hypertension, blindness, kidney disease, and lower-limb amputations. In the UPMC McKeesport service area, 14 percent of residents reported having diabetes, which was higher than the county, state, and the nation. UPMC McKeesport has existing programs that address diabetes. There is potential to leverage strong community partnerships to enhance these efforts.

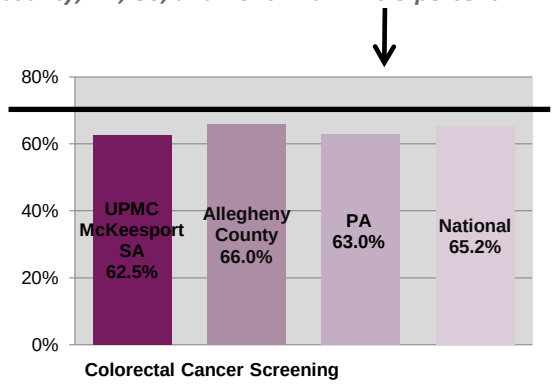
Diabetes rates are increasing: The prevalence of diabetes in the county increased from 7 to 11 percent between 2002 and 2009-2010. The prevalence of diabetes was higher in the county than in the state.

Diabetes is particularly problematic for sub-populations, including low-income and underserved minorities: Within Allegheny County, specific sub-populations have significantly elevated diabetes mortality rates. The mortality rate was higher among men (22.3/100,000) compared with women (15.8/100,000), higher among African-Americans (35.6/100,000) than in Whites (16.6/100,000), and increased with age. In parallel with mortality rates, the prevalence of diabetes is much higher among specific sub-populations within Allegheny County. Diabetes affects a significantly higher percentage of African-Americans (15 percent) compared with Whites (11 percent). A higher proportion of the elderly (22 percent) reported having diabetes than young adults (1 percent). Those with a high school education or less, or those with low-incomes (less than $15,000) were more likely to report having diabetes. There were no differences between men and women.

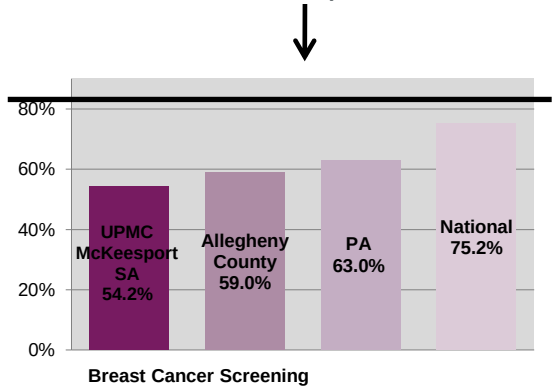
Preventive Screenings –Importance to the Community

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

Colorectal cancer screening in UPMC McKeesport service area is lower than county, PA, US, and Benchmark: 70.5 percent



Breast cancer screening for women in UPMC McKeesport service area is lower than the county, PA, US, and Benchmark: 81.1 percent



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

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

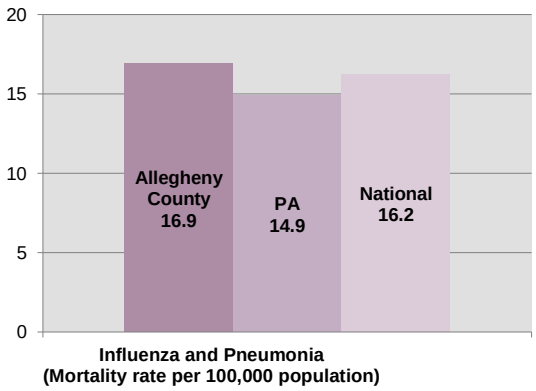
Enhancing navigation to existing resources creates opportunities for improvement within specific clinical areas and among specific sub-populations: In the UPMC McKeesport service area, however, colorectal cancer screening and mammogram screening were lower, compared to the county, state, and national benchmarks. Additionally, variations in screening rates were observed for certain demographics and areas within Allegheny County. For colorectal cancer screening, a higher proportion of older individuals (65+) reported having a screening, compared to people 50 to 64 years old. In addition, those with a college degree reported receiving colorectal cancer screening more than those without a degree. No significant differences were observed based on sex, 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.

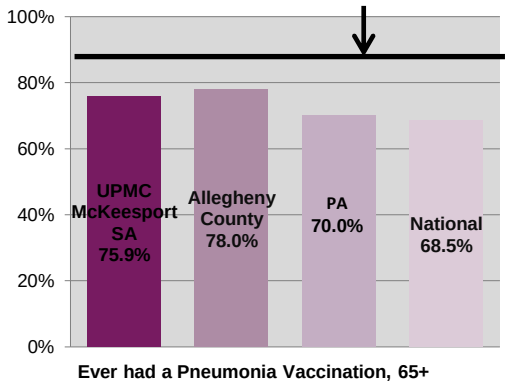
Immunizations and Vaccinations – Importance to the Community

- **Influenza and pneumonia are leading causes of death in Allegheny County, and the risk of death due to influenza and pneumonia is a serious threat to the elderly.**
- **Vaccinations are particularly important for specific populations, such as the elderly. The UPMC McKeesport service area has a higher senior population than Allegheny County – which is one of the oldest counties in the nation.**

Influenza and pneumonia death rate is higher in Allegheny County than in PA and US



Percent of seniors vaccinated in UPMC McKeesport Service Area is higher than National rates but lower than Benchmark:



Sources: Allegheny County Health Survey 2009-2010; Pennsylvania Department of Health, 2011; Healthy People 2020; National Center for Health Statistics, 2011; U.S. Centers for Disease Control and Prevention, 2009.

High Immunization Rates Reflect Existing and Successful Initiatives: Immunizations and vaccinations are effective ways of preventing or limiting the severity of infectious diseases. Immunizations and vaccinations are particularly important for certain at-risk populations, such as the elderly. The UPMC McKeesport service area has a proportionately larger senior population than Allegheny County — which is one of the oldest counties in the nation. To ensure access to seniors, other at-risk populations, and the overall community, UPMC McKeesport has established a suite of programs that provide immunizations and vaccinations, and is leveraging strong community partnerships — particularly with the Mon River Fleet.

The percentage of individuals receiving immunizations and vaccinations, such as pneumococcal vaccination, was higher in the UPMC McKeesport service area, compared to the state and nation, a hallmark of the strength of the Mon River Fleet vaccination program. However, rates were still lower than Healthy People 2020 benchmarks, indicating there is an opportunity to expand outreach efforts to sub-populations with the lowest immunization/vaccination rates.

Opportunities for Improvement Exist Within Specific Clinical Areas and Subpopulations: Despite successful immunization and vaccination rates for the overall population, several sub-populations in the county have lower rates of immunization and vaccination, particularly in people over 65 years of age and African-Americans. Additionally, those with less education or with lower incomes received influenza or pneumonia shots at lower rates than the overall population.

Post-Discharge Coordination and Follow-up – Importance to the Community

The community identified post-discharge coordination and follow-up as a significant health need for UPMC McKeesport. 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. Approximately 84 percent of patients who were discharged from UPMC McKeesport in 2011 had a staff member speak with them about help after discharge. These patients also received information regarding symptoms to look for upon discharge.

Qualitative information collected during the CHNA process and focus groups placed significant emphasis on the need for assistance with navigating available health care resources. There is an opportunity to expand post-discharge and follow-up initiatives beyond clinical protocol to emphasize referrals to existing community, hospital, and social-support resources.

V. Overview of the Implementation Plan

Overview:

UPMC McKeesport has 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 who 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 February 6, 2013, the UPMC McKeesport Board of Directors adopted an implementation plan to address the significant health needs:

- **Diabetes**
- **Post-Discharge Coordination and Follow-Up**
- **Immunizations and Vaccinations**
- **Preventive Screenings**

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

High-Level Overview of UPMC McKeesport Implementation Plan

Topic	Goal	Collaborating Community Partners
Diabetes	Increase utilization and awareness of the Lions Diabetes Center at UPMC McKeesport — an accredited diabetes education center that offers strong clinical programs for diabetes management.	YMCA EMS Mon River Fleet UPMC Health Plan Aging Institute of UPMC Senior Services and the University of Pittsburgh Religious and educational organizations 9th Street Clinic Latterman Family Health Clinic National Advocacy organizations Civic organizations
Post-Discharge Coordination and Follow-Up	Reduce hospital readmissions, with particular attention given to seniors and socially isolated populations within the community. This will be accomplished through a combination of post-discharge coordination planning, medication management education, and ensuring that every individual has a follow-up appointment scheduled prior to discharge.	
Immunizations and Vaccinations	In conjunction with community partners, continue the free immunization/ vaccination program which is a statewide model that has dispensed more vaccines than any other program in the state. Moving forward UPMC McKeesport will place additional emphasis on getting vaccinations to hard-to-reach populations in the Mon Valley area.	
Preventive Screenings	Ensure that on-going educational and preventive screening events offered in the hospital and community focus on specific populations and clinical topics identified as areas of community need.	

The UPMC McKeesport implementation plan calls for collaboration with community partners and leveraging UPMC system-wide resources, such as UPMC Health Plan, to support a number of initiatives focused on the identified health priorities that are illustrated in the figure below:

Support from UPMC Health Plan

Significant Health Needs	UPMC Health Plan Initiatives
Chronic Disease Management (Diabetes)	• **Patient Centered Medical Home at two large PCP practices** • **Nurse care managers provide education and navigation**
Post-Discharge Coordination and Follow-Up	• **Nurse care managers on site at UPMC McKeesport to develop discharge plans, review medications, make follow-up physician appointments**
Immunizations and Vaccinations	• **Provide flu vaccines, which are distributed to community residents through McKeesport's SHIP annual fall flu campaign** • **Provided over 2,000 vaccines this year**
Preventive Screenings	• **Hold preventive screenings for members** • **Incentives and reminders for PCPs** • **Incentives for UPMC for You members to encourage use of services such as lab work for diabetics, mammograms, and pap smears**
Navigating Health Care Resources	• **ER Navigator provides education on appropriate use of ER, links individuals with PCP for appointment, and follows up** • **Connected Care program for those with serious mental illnesses; education provided on managing chronic conditions, smoking cessation, increasing exercise, improving diet** • **Community teams to help most fragile and vulnerable — nurses and social workers visit individuals in their homes**

VI. APPENDICES

APPENDIX A: Detailed Community Health Needs Assessment Implementation Plans

Priority Health Issue: Addressing Chronic Disease Management, including Post-Discharge Coordination and Diabetes

Chronic disease management issues, including post-discharge coordination and follow-up and diabetes prevention and management, are important to the UPMC McKeesport community: The term "care transition" describes a process in which a patient's care shifts from being provided in one setting of care to another, such as from a hospital to a patient's home or a skilled nursing facility. The Institute of Medicine notes in its report *Crossing the Quality Chasm* that when patients experience care transitions, they often receive little information on how to proceed after the transition. This lack of information can contribute to the diminished health of the patient. Patients often lack knowledge about when to resume normal activities, medication side effects, and where to get answers to questions they might have. Effective management of care transitions can help prevent patients' conditions from worsening and may prevent unnecessary hospital readmissions.

Diabetes is the sixth-leading cause of mortality in the UPMC McKeesport service area, where there is a much larger percentage of people living with diabetes (14.3 percent) than the state (9.0 percent) and nation (8.3 percent). Diabetes is also associated with other leading causes of death, including heart disease, which is the number one cause of death. Diabetes can be prevented through increased physical activity, a healthy diet, and maintenance of a healthy weight. For those living with diabetes, education about the disease, coupled with self-management techniques, can greatly improve wellness and quality of life.

UPMC McKeesport is addressing these issues: UPMC McKeesport currently offers many programs to address care transitions through post-discharge coordination and follow-up. Many of these programs focus on the senior population, which is larger in the UPMC McKeesport service area than it is in Allegheny County. Other programs target individuals living with specific chronic diseases, such as congestive heart failure and chronic obstructive pulmonary disease (COPD), as well as programs which focus on inpatient populations being discharged to home, especially those who are older and who have little or no support at home. UPMC McKeesport offers programs and education to build knowledge and help prevent and manage diabetes. Its cornerstone program, the Lions Diabetes Center, offers group education on topics such as blood glucose monitoring, insulin training, medication management, reducing the risk of complications, healthy eating, activity and exercise, coping with stress and life changes, and referrals to community resources. A follow-up session is also offered upon completion of these classes, as is individual counseling. Initiatives include lifestyle classes, as well as clinical and self-management programs for those living with diabetes.

UPMC McKeesport plans to do more to focus on these priorities: In addition to existing programs related to post-discharge coordination and follow-up, UPMC McKeesport plans to align more closely with home and community based programs that target the reduction of readmissions to the hospital and provide a comprehensive continuum of care for seniors, such as Community LIFE.

UPMC McKeesport plans to create more awareness in the community and within its inpatient population about the resources offered through the Lions Diabetes Center.

Diabetes				
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Post-Discharge and Follow-Up	Call each patient discharged to home within 48 hours of discharge. Nurse Manager makes calls.	• Reduce readmissions (in accordance with CMS policy).	Patients discharged to home.	
CHF Patient Educator	Provide education through teach-back methodology to teach patients with heart failure self-management skills. CHF clinician and pharmacist provide education. Follow-up calls are made post-discharge.	• Reduce readmissions (in accordance with CMS policy).	Patients discharged to home.	
Hospital Association of Pennsylvania Hospital Engagement Network – HAPHEN (Project Red)	Implement Optimal Discharge Process — UPMC Health Plan Pneumonia Discharge.	• Reduce readmissions (in accordance with CMS policy).	Patients discharged to home.	The Hospital and Health System Association of Pennsylvania.
In-home navigator to assist homebound patients	Integrate post-discharge social services into the continuum of care for inpatients by providing the following: Complete assessment to identify patients needing follow-up support (hospital case management team completes assessment). Refer appropriate patients to outreach social service coordinator (SSC). SSC visits patient in hospital to establish connection with patient and assess willingness to accept home visit and change at least one issue. Explore potential to offer Staying at Home program to patients without UPMC Health Plan.	• Reduce readmissions (in accordance with CMS policy).	Criteria for this program are age, disease, readmission, and social isolation. Focus on seniors and socially isolated populations.	Community Provider Services UPMC Health Plan.
Support Groups	Host weekly/monthly support groups for post-discharge patients and caregivers. Support group topics to include smoking cessation, cancer workshops, and stroke and Alzheimer support groups.	• Reduce readmissions (in accordance with CMS policy).	People with the disease or condition, plus interested community.	American Cancer Society, AHA.

Diabetes				
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Lions Diabetes Center Diabetes Self-Management Education	Provide group education consisting of four 2.5-hour classes about diabetes self-management for people with diabetes. Education classes include blood glucose monitoring, insulin training, medicines reducing the risk of complications, healthy eating, exercise, coping with stress and life changes. Refer participants to community resources (diabetes self-management support). Provide quarterly follow-up sessions to those completing the initial group classes (most classes are focused on lifestyle behaviors). Provide one-on-one counseling with focus on issues or concerns related to diabetes self-management, including sessions to discuss healthy eating habits, meal planning, carbohydrate counting, and individualized meal planning for people with diabetes. Offer additional diabetes programs including insulin pump training and the Annual Diabetes Update, and community education activities such as Go RED, Harvest of Health Fair, Sampson Mills Presbyterian Church Health Fair, and Student Nurse Orientation/Education.	• Increase awareness of the Lions Diabetes Center throughout the community through other community events, the McKeesport Daily News, physician offices, and mailings. • Increase number of post-discharge patients utilizing the Lions Diabetes Center.	Individuals with diabetes or pre-diabetes and their significant others. In-patients, physician or self-referred adults with diabetes.	University of Pittsburgh Diabetes Institute, YMCA, UPMC McKeesport Cardiopulmonary Rehabilitation Center, Lion's organization, McKeesport Hospital Foundation, UPMC Health Plan

Priority Health Issue: Addressing Immunizations and Preventive Screenings

Immunizations and vaccinations and preventive screenings are an important priority in the UPMC McKeesport community: Influenza and pneumonia rank among the top-ten leading causes of mortality in the UPMC McKeesport community, as well as in the county, state, and nation. Vaccines are among the most successful and cost-effective public health tools for preventing disease and death. Preventive screenings and screenings that support the early detection of chronic disease are also extremely important to the health of the UPMC McKeesport community. Preventive screenings include regular physical exams conducted by a primary care physician, blood tests (such as blood sugar or cholesterol), certain measurements (such as weight and blood pressure), and tests to identify signs of diabetes, cancer, or heart disease. All of these services may help to identify common, yet potentially serious, health concerns early. Early detection frequently means more successful treatment. Available data show that currently the UPMC McKeesport service area has a lower screening rate than the nation, and is below the national benchmark set by Healthy People 2020 when it comes to cancer screenings.

UPMC McKeesport is addressing this issue: UPMC McKeesport has an established suite of programs that provide vaccinations and leverage strong community partnerships — particularly with the Mon River Fleet, composed of State Health Improvement Partnerships (SHIPs) located in the municipalities of Clairton, McKeesport, Duquesne, and Braddock, Pennsylvania. In fact, the Mon River Fleet has been a model for influenza vaccine distribution in communities across the state. UPMC McKeesport also currently offers many preventive screenings, including those for heart disease and stroke, diabetes, and other conditions, at the hospital and at events held in the community. The hospital also provides educational seminars aimed to increase awareness of screenings and preventive behaviors, as well as prevention of chronic disease.

UPMC McKeesport plans to do more to focus on these priorities: The hospital plans to enhance the current influenza and pneumococcal vaccine distribution program provided through UPMC McKeesport, the Mon River Fleet, and other partners that include UPMC Health Plan. One barrier to getting people immunized is lack of information on the importance of immunizations, and a fear that the vaccine will cause the flu. To address these issues, a one-page educational brochure will be created and made available in the hospital, as well as at sites where vaccinations are offered. The number of vaccination distribution sites will also be increased. In addition to enhancements made to the immunization program, UPMC McKeesport will also focus its hospital screening events on specific topics to reach a more targeted population and increase the frequency of events.

Immunizations and Preventive Screenings				
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Free Flu and Pneumonia Vaccine Program	Provide free seasonal influenza and pneumococcal vaccinations at 106 sites, such as fire halls, senior centers, community centers, and churches.	• Increase the number of people who receive an influenza vaccine. • Increase the number of sites that distribute the vaccines, including those in underserved neighborhoods/ hard to reach populations.	Non-insured, non-pregnant adults, 18 yrs. or older, seniors.	State Health Improvement Partnerships (SHIPs) of Clairton, McKeesport, Duquesne and Braddock, Department of Health, EMS of Clairton, White Oak, McKeesport, Elizabeth, Munhall, Braddock, East Pittsburgh, Woodland Hills, Baldwin, Duquesne, North Versailles, Jefferson Hills, and Penn Hills.
UPMC McKeesport Golden Key Club Screenings and Education	Hold monthly group activity with lunch for active seniors that may include a speaker, screenings, or off-site activity. Offer one screening specific to health education presentation.	• Increase participation. • Improve targeting of specific populations and clinical topics.	Older adults (55+).	SHIPs, Lions, Kiwanis, volunteer services.

Immunizations and Preventive Screenings				
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Screening Events at Hospital	Host one event annually. Screenings may include: blood glucose screening, ABI, carotid occlusion, smoking cessation and breath CO, bone density, diabetes/ BGMs, blood pressure, pulmonary function, cholesterol or screenings based on a presented topic.	• Increase participation and number of events. • Improve targeting of specific populations and clinical topics.	Employees and the general population – mainly adults, seniors, those at risk for chronic disease, and the underserved.	American Heart Association, American. Cancer Society, Magee-Womens Hospital of UPMC, Kidz Korner, Respiratory Services at UPMC McKeesport, Riverside Care Center, Kane Regional Center, UPMC McKeesport School of Nursing, Agona Chiropractic, Stiffler, PAAR, WIC, UPMC McKeesport Internal Residency Program, YMCA
Community Screenings and Education	Provide health screenings and health education at locations in the community, such as senior and community centers. Screenings may include: smoking cessation and breath CO, bone density, blood pressure, and pulmonary function. Offer screening at summer camps: Assess physical activity levels and BMI in children ages 6-17 years attending a 7-week day camp held in a local school building.	• Increase participation and number of events. • Improve targeting of specific populations and clinical topics.	Seniors, underserved children primarily from at-risk communities, i.e., Braddock and Rankin.	SHIP partners, agencies, boroughs, churches, businesses UPMC McKeesport, Partnership for a Caring Community (formerly Braddock Community Partnership), UPMC, McKeesport Hospital Foundation, Heritage Community Initiatives (formerly Heritage Health Foundation), Braddock and Swissvale Rotary Clubs, AAA, Borough of Braddock, Woodland Hills School District, Latterman Family Health Center, Camp Guyasuta, University of Pittsburgh Department of Family Practice, Magee-Womens Hospital of UPMC , Penn State Cooperative. Extension, UPMC Health Plan and the Church of the Resurrection.

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.

The following table identifies measurable process outcomes and related health impact indicators proposed by Pitt Public Health. Some of the outcomes indicators, particularly the process outcomes, may be impacted in short time frames, such as the three-year span of a Community Health Needs Assessment cycle. Others, including many of the health impact indicators, are not expected to change significantly over the short-term.

Health Topic	Process Outcomes (Hospital/Partner Delivery of Services)	Health Impact Outcomes (Changes in Population Health)
Preventive Screenings	Increase — • **Venues for screening: PCP, ED, community events**	Decrease — • **Hospitalization resulting from untreated disease** • **Initial physician contact of patients with advanced disease**
Older Adult Wellness	Increase — • **Osteoporosis screening** • **Medication management education** • **Access to home care services** • **Pneumonia vaccination**	Decrease — • **Falls-related ED admissions** • **Hospitalization for preventable conditions** • **Hospital readmission**
Diabetes	Increase — • **Classes in prevention (diet, weight, nutrition, exercise)** • **Access to monitoring and screening exams (eyes, feet, HbA1c, glucose)** • **Completion rate in diabetes self-management classes** • **Number of community partners offering programs** • **Number of discharged patients using diabetes programs** • **Media efforts to promote diabetes awareness** • **Telemedicine management and access to specialists in rural hospitals** • **Access to primary care providers**	Decrease — • **Community prevalence of diabetes** • **Disparities in prevalence among minorities** • **Prevalence of related chronic conditions (stroke, heart disease)** • **Prevalence of undiagnosed patients without appropriate treatment**
Care Coordination Post-Discharge	Increase— • **Follow-up after discharge (assistance with medication, discharge plan compliance, and home safety**	Decrease— • **Hospital readmissions** • **Frequent ED use**

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 Percent 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 civilian labor force*
Source: US Census, 2010

Leading Causes of Mortality for Allegheny County, Pennsylvania and the United States (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	100.00	100.0	100.0
Diseases of Heart	26.83	25.9	24.6
Malignant Neoplasms	23.02	23.1	23.3
Chronic Lower Respiratory Diseases	5.06	5.2	5.6
Cerebrovascular Diseases	5.52	5.5	5.3
Unintentional Injuries	1.84	4.4	4.8
Alzheimer's Disease	2.79	2.9	2.8
Diabetes Mellitus	2.22	2.6	2.2
Influenza and Pneumonia	2.35	2.0	2.0
Nephritis, Nephrotic Syndrome and nephrosis	2.51	2.4	1.5
Intentional Self-Harm (Suicide)	0.97	1.3	1.5

Sources: Pennsylvania Department of Health, 2009; National Center for Health Statistics, 2011

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	9.0	8.0	NA
Mental Health (Mental health not good ≥1 day in past month) (%)	38.0	35.0	NA	NA
Low Birthweight (% of live births)	8.1	8.4	8.2	7.8
Health Behaviors				
Obesity (Adult) (%)	28.5	28.0	26.9	30.6
Childhood Obesity (Grades K-6) (%)	15.9	16.8	17.4	15.7
Childhood Obesity (Grades 7-12) (%)	15.0	18.2	17.9	16.1
Excessive Alcohol Use (%)	33.0	17.0	15.8	24.4
Current Tobacco Use (%)	23.0	20.0	17.9	12.0
STDs (Gonorrhea per 100,000)* (%)	175.3	103.8	285	257
Clinical Care (%)				
Immunization: Ever had a Pneumonia Vaccination (65+) (%)	78	70	68.6	90
Cancer Screening				
Mammography (%)	59.0	63.0	75.0	81.1
Colorectal Screening (%)	66.0	63.0	65.0	70.5
Primary Care Physician: Population (Ratio)	1:638	1:1,067	NA	NA
Receive Prenatal Care in First Trimester (%)	87.1	70.9	71.0	77.9
Physical Environment				
Access to Healthy Foods (%)	66	57	NA	NA
Access to Recreational Facilities	16	12	NA	NA

Sources:

Allegheny County Data: Allegheny County Health Survey 2009-2010 ; Pennsylvania Department of Health, 2007-2009; Robert Wood Johnson County Health Rankings, 2011

Pennsylvania Data: Pennsylvania Department of Health, 2009; Robert Wood Johnson County Health Rankings, 2011

U.S. Data: U.S. Centers for Disease Control and Prevention, 2009. Healthy People, 2020; National Center for Health Statistics. 2011.

**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: Concept Mapping Methodology

Overview:

UPMC McKeesport, 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 their 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 issues.

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 UMPC McKeesport:

UPMC McKeesport 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 McKeesport 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 list 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 McKeesport community.

The UPMC McKeesport 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 health care 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 McKeesport 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?

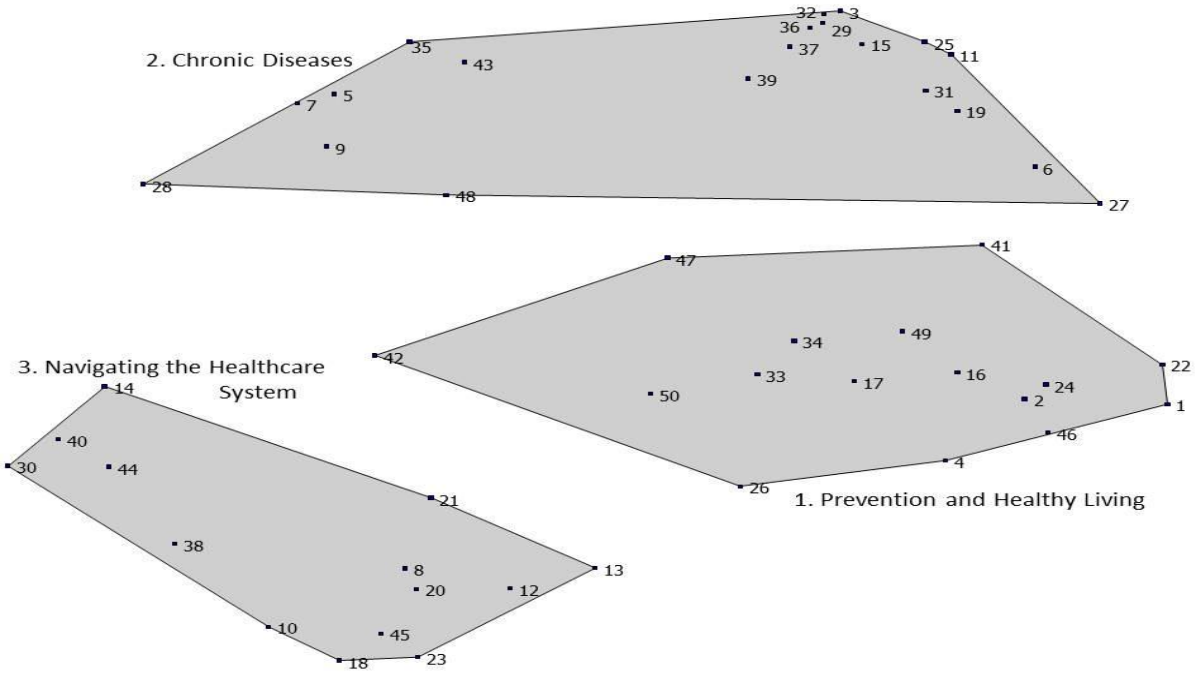
(1 = no ability; 5 = great ability)

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, the 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, measureable 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 McKeesport. UPMC McKeesport 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.

APPENDIX D: Community Participants

To ensure the CHNA was conducted in a rigorous manner reflecting best practices, UPMC sought support and expertise from individuals and organizations with expertise in public health. UPMC engaged with the University of Pittsburgh Graduate School of Public Health (Pitt Public Health) to:

- **Develop a framework to itemize and prioritize community health needs based on review and analysis of secondary data on community health**
- **Obtain community input on health needs and perceived health care priorities through a consistent, structured process**
- **Develop implementation strategies that leverage best practices in evidence-based community health improvement**
- **Establish evaluation and measurement criteria to monitor results of implemented efforts**

The following individuals from Pitt Public Health participated in the CHNA process:

- **Steven M. Albert, PhD, MPH, Professor and Chair – Department of Behavioral and Community Health Sciences, Pittsburgh, PA**
- **Jessica G. Burke, PhD, MHS, Associate Professor - Department of Behavioral and Community Health Sciences, Pittsburgh, PA**
- **Donna Almario Doebler, DrPH, MS, MPH, Visiting Assistant Professor - Department of Behavioral and Community Health Sciences, Pittsburgh, PA**
- **Jennifer Jones, MPH, Project Assistant - Department of Behavioral and Community Health Sciences, Pittsburgh, PA**

In addition, local and state public health department input and data were obtained and utilized in this community health assessment. UPMC sought input from the Allegheny County Health Department through meetings facilitated by Pitt Public Health, and relied on publically available Pennsylvania Department of Health reports and additional local health department information accessed via telephone conversations and special data requests.

Community input was garnered from a community advisory council, formed to represent the communities and constituencies served by the hospital. Council participants included representatives of medically underserved, low-income and minority populations, consumer advocates, nonprofit organizations, academic experts, local government officials, community-based organizations, and health care providers.

The Community Advisory Council met between June 2012 and November 2012 and completed an online survey during August and September 2012. Their activities were facilitated by faculty from Pitt Public Health (see Appendix C).

UPMC McKeesport Community Advisory Council included representatives from the following organizations:

- **Alliance for Infants and Toddlers, Pittsburgh, PA**
- **Council Member, White Oak Borough, White Oak, PA**
- **Elizabeth Township Emergency Medical Services, Elizabeth, PA**
- **Human Services Center, Turtle Creek, PA**
- **Mayor's Office, City of McKeesport, PA**
- **Mayor's Office, Borough of White Oak, PA**
- **McKeesport Ambulance Rescue Services, McKeesport, PA**
- **McKeesport Hospital Foundation, McKeesport, PA**

- **McKeesport Kane Nursing Home**
- **Office of State Senator James R. Brewster, Senate District 45**
- **Program Development, UPMC Health Plan**
- **Riverside Care Center, McKeesport, PA**
- **State Health Improvement Partnership (SHIP) Duquesne, PA**
- **State Health Improvement Partnership (SHIP) Braddock, PA**
- **YMCA McKeesport, McKeesport, PA**

The UPMC McKeesport Community Advisory Council was also supported by members of the hospital's Board of Directors, physicians, and hospital leadership.

A focus group, also comprised of individuals and organizations representing the broad interests of the community - including representatives from medically underserved, low-income and minority populations - met in August 2012. This meeting included a discussion facilitated by Pitt Public Health faculty to identify important health needs in UPMC's communities. Participants included representatives from the following organizations:

- **Addison Behavioral Care, Pittsburgh, PA**
- **Allegheny County Area Agency on Aging, Pittsburgh, PA**
- **Consumer Health Coalition, Pittsburgh, PA**
- **Disabilities Resource Committee, UPMC Community Provider Services, Pittsburgh, PA**
- **Greater Pittsburgh Community Food Bank, Duquesne, PA**
- **LEAD Pittsburgh, Pittsburgh, PA**
- **Office of Inclusion and Diversity, UPMC, Pittsburgh, PA**
- **Pennsylvania Health Access Network, Pittsburgh, PA**
- **Refugee Services, Jewish Family & Children's Services, Pittsburgh, PA**
- **Three Rivers Center for Independent Living, Pittsburgh, PA**
- **United Way of Allegheny County, Pittsburgh, PA**
- **UPMC Board Diversity and Inclusion Committee, Pittsburgh, PA**
- **UPMC Health Plan, Pittsburgh, PA**
- **Urban League of Pittsburgh, Pittsburgh, PA**
- **VA Pittsburgh Healthcare System, Pittsburgh, PA**
- **Women's Shelter of Greater Pittsburgh, Pittsburgh, PA**
- **YMCA of Greater Pittsburgh, Pittsburgh, PA**
- **YWCA of Greater Pittsburgh, Pittsburgh, PA**

UPMC also invited representatives of the following to participate:

- **Allegheny Conference on Community Development**
- **HI-HOPE (Hazelwood Initiative)**
- **Kingsley Association**
- **Pennsylvania Psychological Association**
- **PERSAD**
- **Salvation Army of Western Pennsylvania**
- **SHIP (State Health Improvement Program) – Clairton**
- **The Pennsylvania Health Law Project**