UPMC Northwest

Community Health Needs Assessment

And

Community Health Strategic Plan

June 30, 2013

TABLE OF CONTENTS

EXECUTIVE SUMMARY

UPMC Northwest Plays a Major Role in its Community:

UPMC Northwest is a nonprofit, 180-bed acute-care hospital located in Venango County, Pennsylvania. Operating from a campus in Seneca, Pennsylvania, the state-of-the-art facility is the only hospital in Venango County. The hospital delivers a full range of quality medical services, including highly specialized medical and surgical treatment, to the residents of Venango County and surrounding rural areas.

UPMC Northwest 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.

UPMC Northwest in the Community

UPMC Northwest is the only facility between Erie and Pittsburgh to be named an Advanced Primary Stroke Center

The hospital is the only facility in Venango County to offer inpatient behavioral health services

UPMC Northwest 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 Northwest 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 Northwest in a broad, systematic way. The process included face-to-face meetings with the hospital's Community Advisory Council, as well as use of an online survey tool.

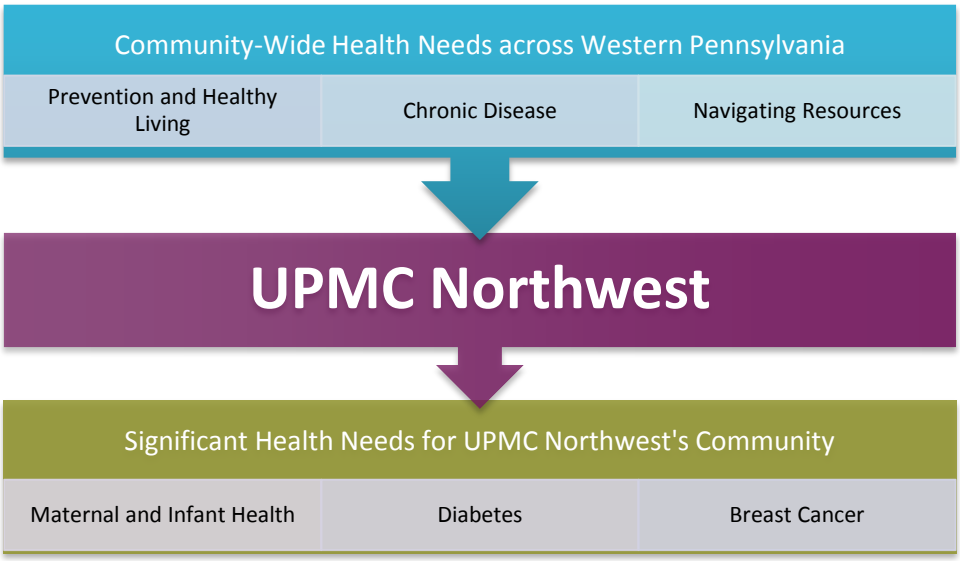
Through the CHNA process, UPMC Northwest identified significant health needs for its particular community. They are:

Topic	Importance to the Community
Maternal and Infant Health	The well-being of mothers and infants is important for a healthy community. Accessing prenatal care and engaging in healthy behaviors during pregnancy is associated with healthy birth outcomes.
Breast Cancer and Diabetes	Cancer and diabetes are leading causes of death in Venango County. Healthy behaviors, such as screenings and maintaining a healthy weight, can help reduce one's risk for these diseases.

UPMC is Responding to the Community's Input:

Western Pennsylvania has a diverse range of health needs. Key themes that emerged from the UPMC Northwest 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 Northwest 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 Northwest'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 Northwest 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, behavioral health, and children.

UPMC Northwest Is Improving Community Health in Measurable Ways:

On January 29, 2013, the UPMC Northwest 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.

Promoting Maternal and Infant Health

Goal: Offer community education and support programs to ensure adequate prenatal and postpartum care is accessible to low income and minority women.

Collaborating Partners: State health clinic, Adagio Health, community, Venango County Visiting Nurses Association

- **UPMC Northwest's Family Birthing Center provides Obstetrics and Gynecology services, as well as support classes related to breastfeeding, siblings, and infant care.**
  - » UPMC Northwest partners with Venango County's Visiting Nurses Association (VNA) to send nurses and social workers to meet with at-risk families in their homes, evaluate circumstances, and connect families to needed health and developmental services such as nutrition education, parenting skills, and child abuse prevention.
  - » The Pregnancy Management Program at UPMC Northwest partners with organizations such as Adagio and Healthy Beginnings to ensure low-income women have access to high-quality prenatal care, including nutrition counseling, home medical visits, transportation assistance, parenting classes, and substance abuse counseling.

Preventing and Managing Chronic Disease: Breast Cancer and Diabetes

Goal: Increase the number of individuals receiving education, screenings, and other services related to breast cancer and diabetes prevention and management.

Collaborating Partners: Community organizations, schools, Adagio Health, employee health nurses working in the community, telemedicine specialists, home health agencies, primary care offices, employers, state health offices, schools

- **UPMC Northwest's Breast Care Program provides residents in the Venango County area with state-of-the-art breast care that is convenient and close to home. A multi-disciplinary team works with the patient's primary care physician to coordinate care and treatment options.**
  - » The breast care navigator, a nurse specially trained to guide patients through the breast cancer diagnosis and treatment process, supports patients through their diagnosis and treatment and assists with scheduling procedures so that the patient can see various providers on the same day.
  - » In addition to clinical services, UPMC Northwest has many programs focused on prevention, education, and early detection of breast cancer in the form of educational lectures, pamphlets distributed in the community, and community outreach regarding the importance of mammograms.
- **UPMC Northwest is a UPMC Diabetes Center location, and provides comprehensive programs and education sessions to build knowledge and help prevent and manage diabetes.**
  - » The hospital will provide lifestyle classes, as well as clinical and self-management programs to help individuals living with diabetes to manage their condition. Topics include healthy eating, exercise, and coping with life stress.
  - » One-on-one and group counseling will cover topics such as blood glucose monitoring, insulin training, and medication management with a goal of preventing complications and maintaining independence.
  - » UPMC Northwest will continue its cutting edge telemedicine program for endocrinology, which provides access to state-of-the-art care, close to home.

COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT

I. Objectives of a Community Health Needs Assessment

CHNA Goals and Purpose:

In Fiscal Year 2013, UPMC Northwest 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 Northwest has many long-standing initiatives focused on 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 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 Northwest:

UPMC Northwest is a nonprofit, 180-bed acute-care hospital located in Venango County, Pennsylvania. Designated as a Level III regional trauma center, the hospital offers a full range of quality medical services to the people of the surrounding region. 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 telemedicine, behavioral health, CT imaging, MRI, stroke and diabetes care, and a UPMC CancerCenter. During the Fiscal Year ended June 30, 2012, UPMC Northwest had a total of 9,399 admissions and observations, 31,534 emergency room visits, and 5,419 surgeries.

UPMC Northwest is supported by an active medical staff representing many disciplines. The medical staff is augmented by specialists who travel to Venango County to hold regular office hours and provide inpatient consultations. 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. The medical staff is augmented by specialists who travel to Venango County from Pittsburgh to hold regular office hours and provide inpatient consultations.

***UPMC Northwest* in Your Community**

UPMC Northwest provides high quality, compassionate medical care to residents of Venango County and the surrounding areas.

Playing a Vital Role in the Community

- **729 employees, with an economic impact of $150 million**
- **UPMC CancerCenter at UPMC Northwest offers comprehensive radiation oncology services close to home**
- **Community screenings and lectures through the Diabetes Center at UPMC Northwest**
- **More than 650 residents screened for stroke risk**

UPMC Northwest's Community Service and Community Benefit Initiatives:

UPMC Northwest 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 Northwest'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 Northwest is committed to serving Medicare and Medicaid patients. In Fiscal Year 2012, these patients represented 66 percent of UPMC Northwest's patient population.
- **Offering Community Health Improvement Programs and Donations:** UPMC Northwest provides services to the community through outreach programs, including referral centers, screenings, and educational classes —all of which benefit patients, patients' families, and the community. Through the 2012 Fiscal Year, the hospital offered more than 500 community health events, including Especially for Women, an annual health and wellness program provided in affiliation with Magee-Women's Hospital of of UPMC, community screenings and lectures through the Diabetes Center at UPMC Northwest, free prostate cancer screenings, as well as screenings for stroke risk. The hospital also provided information and health education on topics such as chronic disease prevention in the hospital and throughout the community. The estimated cost of these programs, in addition to donations to allied nonprofit partner organizations that enhance UPMC Northwest's community services, was $3.4 million in Fiscal Year 2012.
- **Anchoring the Local Economy:** With deep roots in the community, 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 Northwest has paid more than $36.8 million in salaries and benefits to its 729 employees — 78 percent of whom live in the area — and generated a total economic impact of $150 million.

Other community programs include:

- **On-site training programs to prepare community members for careers in phlebotomy, radiation technology, and respiratory therapy**
- **Project Search, a year-long on-the-job training course for local students with cognitive disabilities**
- **Back-to-work training for unemployed, low-income individuals over the age of 55**

II. Definition of the UPMC Northwest Community

For the purpose of this CHNA, the UPMC Northwest community is defined as Venango County. With 74 percent of patients treated at UPMC Northwest residing in Venango County, the hospital primarily serves residents of this geographic region. By concentrating on the county, UPMC Northwest 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.

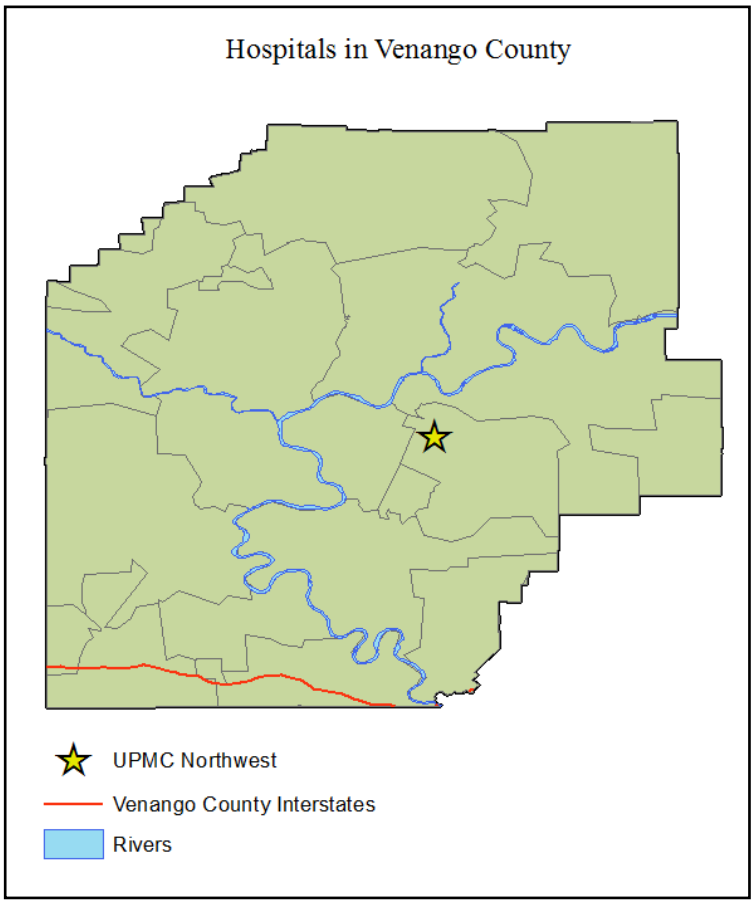
Most Patients Treated at UPMC Northwest Live in Venango County

County	UPMC Northwest %	Medical Surgical Discharges
Venango County	73.7%	4,512
All Other Regions	26.3%	1,606
Total Hospital Discharges	100%	6,118

Source: Pennsylvania Health Care Cost Containment Council, FY2012

The hospital is situated centrally in Venango County, Pennsylvania. This area is known for being rural, with only 81.5 persons per square mile as compared with 283.9 persons per square mile in Pennsylvania.

Existing Healthcare Resources in the Area:



UPMC Northwest is the only licensed hospital in Venango County.

In the immediate service area, UPMC Northwest is supported by 28 UPMC outpatient offices. These facilities include a UPMC CancerCenter, a UPMC Senior Living Facility, an Urgent Care Center, three Imaging Centers, and 23 primary and specialty care doctor's offices.

.

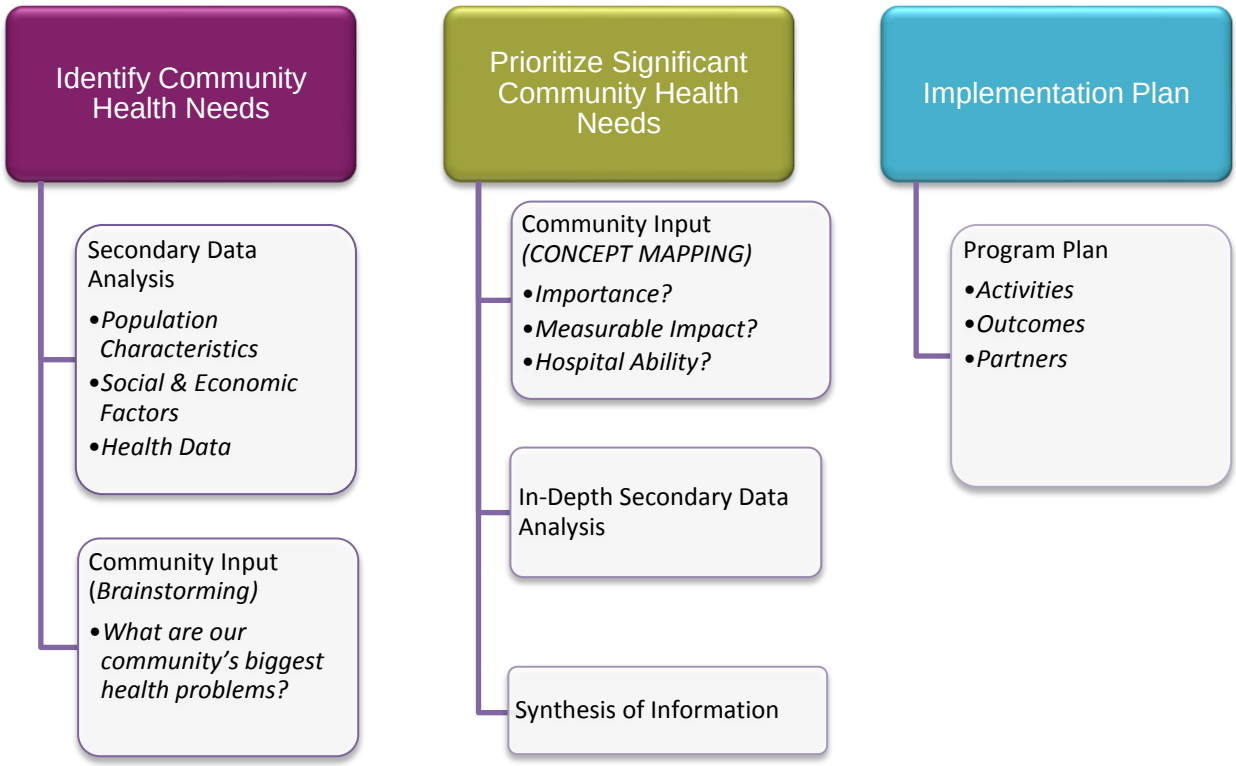
III. Methods Used to Conduct the Community Health Needs Assessment

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, 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.	PA Department of Health Behavioral Risk Factors Surveillance System;Birth, Death, and Other Vital Statistics; Cancer Statistics; US 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.	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 those 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:

Parts of Venango County are Rural: With a population of 54,984, and a population density of 81.5 residents per square mile, Venango County is a rural area.

Sizable Elderly Population with High Social Needs: A notable characteristic of Venango County is the large and increasing percentage of elderly residents (age 65 and over). Venango County has a large elderly population (18 percent) compared to Pennsylvania (15 percent) and the United States (13 percent). 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).

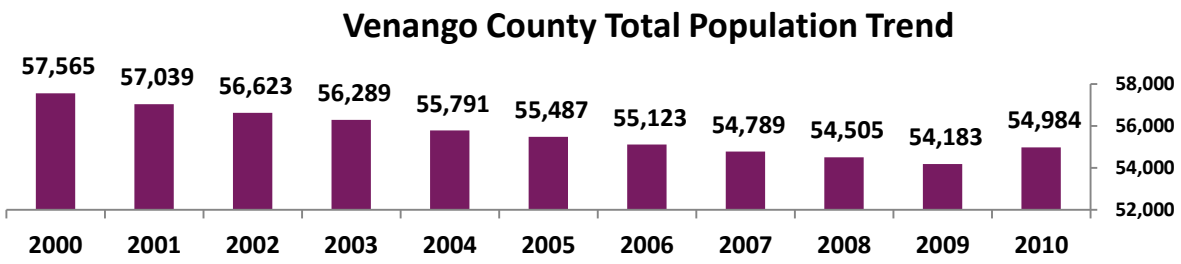
Venango County Has a Sizable Elderly Population

	Venango County	Pennsylvania	National
Median Age	44.3	40.1	37.2
% Children (<18)	21.5%	22.0%	24.0%
% 18-64	60.5%	62.6%	63.0%
% 20-49	34.5%	39.0%	41.0%
% 50-64	23.6%	20.6%	19.0%
% 65+	18.0%	15.4%	13.0%
% 65-74	9.4%	7.8%	7.0%
% 75-84	6.3%	5.4%	4.3%
% 85+	2.3%	2.4%	1.8%
% Elderly Living Alone	12.0%	11.4%	9.4%

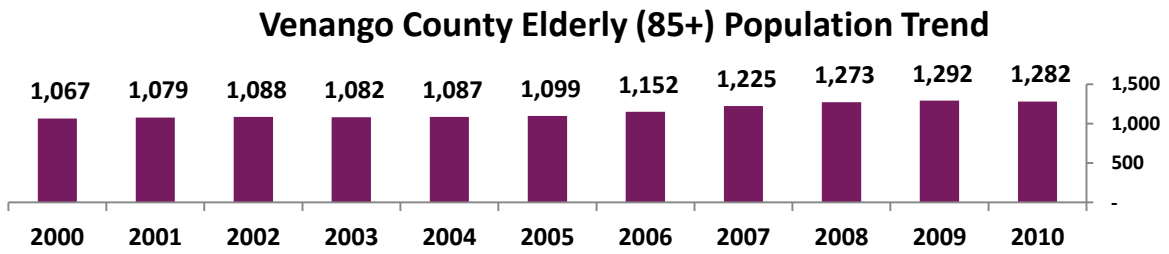
Source: U.S. Census

Total Population Decreased in Venango County but Aging Population Increasing: Although the population has decreased since 2000, the county's most elderly (age 85 and over) population increased significantly (see figure below).

Venango County's Total Population Has Seen a 5 Percent Decrease From 2000 to 2010.



However, the Most Elderly Population in Venango County (age 85 and over) Has Seen a 20 Percent Increase From 2000 to 2010.



Source: U.S. Census

Medically Underserved Areas in Venango County: When compared to the Commonwealth of Pennsylvania and the nation, the overall population of Venango County faces some economic challenges. Venango County tends to have a:

- **Lower median household income**
- **Higher percentage of residents in poverty**

Social and Economic Population Demographics			
	Venango County	Pennsylvania	National
Median Household Income	$40,734	$49,288	$50,046
% in Poverty (among families)	15.8%	13.4%	15.3%
% with No High School Diploma (among those 25+)	12.3%	11.6%	14.4%
% Unemployed (among total labor force)	8.5%	9.6%	10.8%
Racial Groups			
% White	97.1%	81.9%	72.4%
% African American	1.0%	10.8%	12.6%
% Other Race	1.9%	7.3%	15.0%

Source: U.S. Census

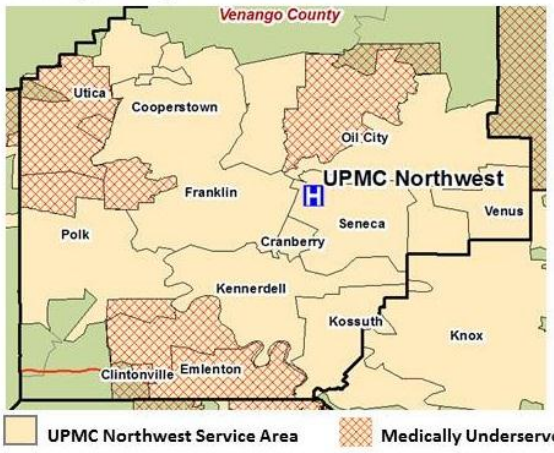
Federally Designated Medical Underserved Areas: In addition, areas in Venango County are federally designated as Medically Underserved Areas (MUA) (see figure below).

The following factors are considered in the determination of MUAs:

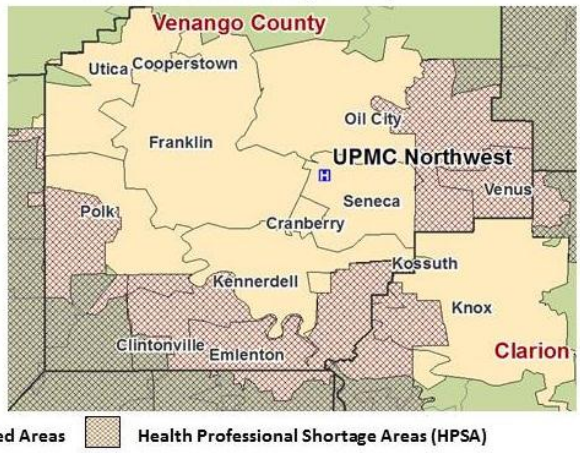
- **A high percentage of individuals living below the poverty level**
- **High percentages of individuals over age 65**
- **High infant mortality**
- **Lower primary care provider to population ratios**

Federally Designated Health Professional Shortage Areas: Parts of Venango County are also federally designated as a Health Professional Shortage Area. The designation is based on the ratio of the population to the number of primary care providers. The ratio of the providers to population in Venango County is 1:1,557 which was lower than the ratio for Pennsylvania, 1:1,067.

Federally Designated Medically Underserved Areas in Venango County



Federally Designated Health Professional Shortage Areas in Venango County

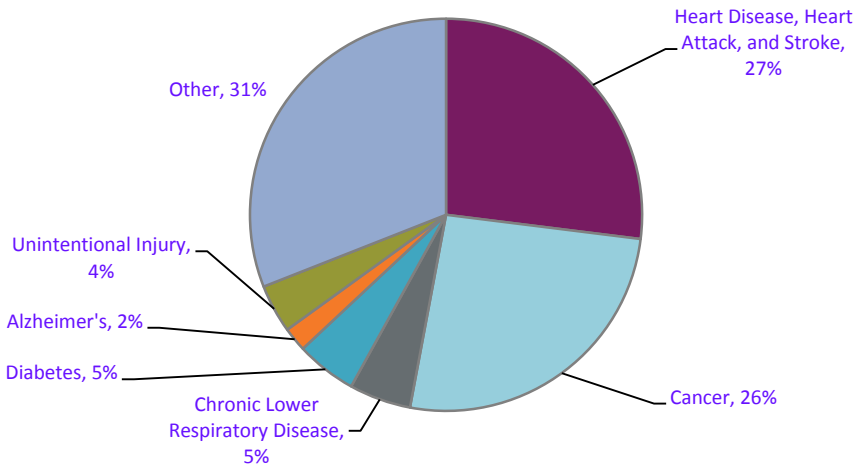


UPMC Northwest Service Area | Medically Underserved Areas | Health Professional Shortage Areas (HPSA)

Source: Health Resources and Services Administration

Chronic Disease and Mortality:

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



Source: Pennsylvania Department of Health, 2009

Significant Health Needs for UPMC Northwest'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:

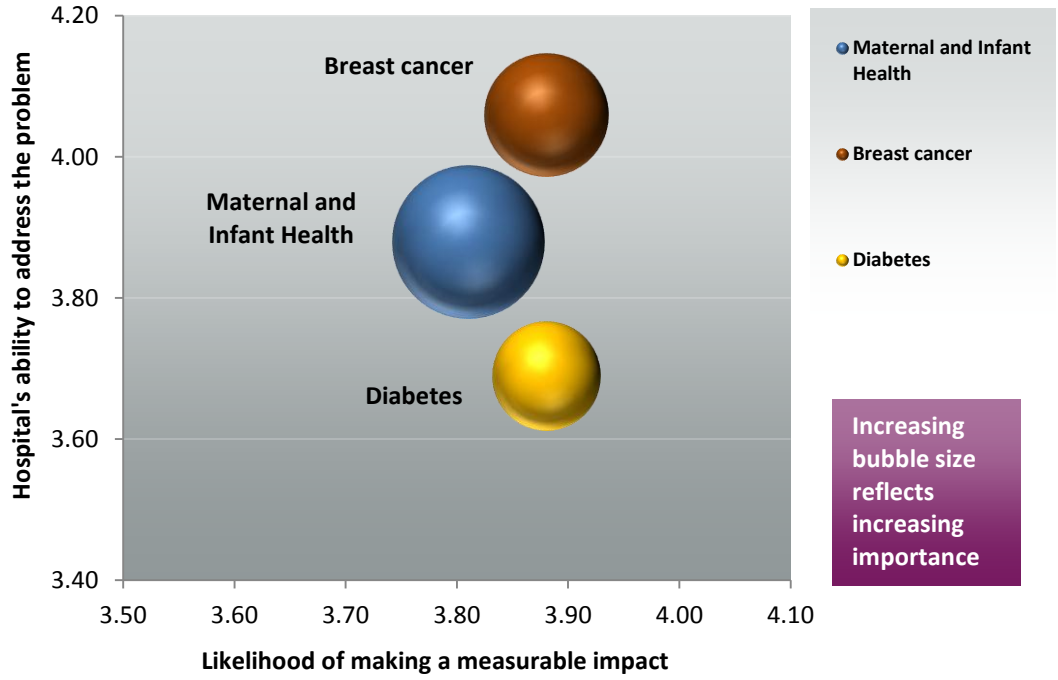
- **Chronic Disease**
- **Prevention and Healthy Living**
- **Navigating Resources**

For UPMC Northwest 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:

- **Maternal and Infant Health**
- **Breast Cancer**
- **Diabetes**

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.

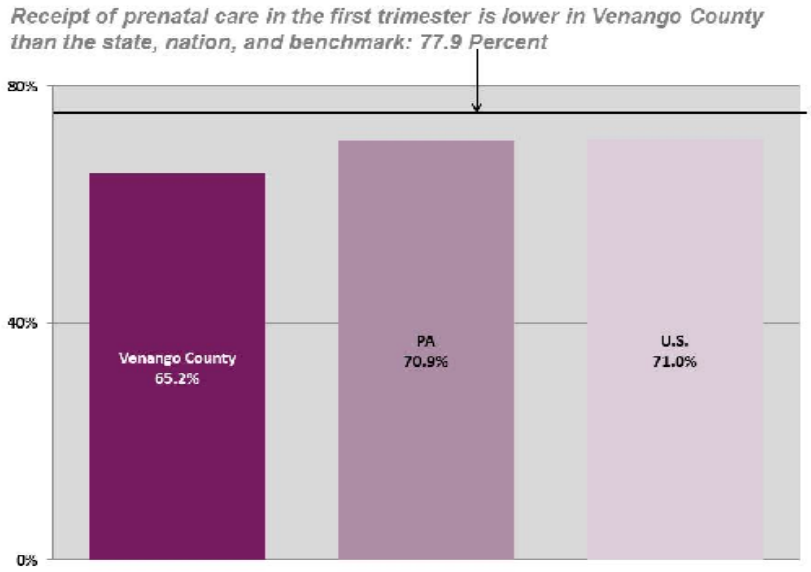
UPMC Northwest Significant Health Needs



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

Maternal and Infant Health – Importance to the Community

- **The well-being of mothers and infants is important for a healthy community.**
- **Accessing prenatal care and engaging in healthy behaviors during pregnancy is associated with healthy birth outcomes.**
- **Smoking during pregnancy, which is associated with poorer birth outcomes, was higher in Venango County as compared to the state.**



Sources: Pennsylvania Department of Health, 2007-2009; National Center for Health Statistics, 2011; Healthy People, 2020

Healthy babies and healthy mothers are integral to a healthy community: The health of mothers and infants is integral to the health of families, the community, and the next generation. Over 3,000 infants were born in Venango County in 2009.

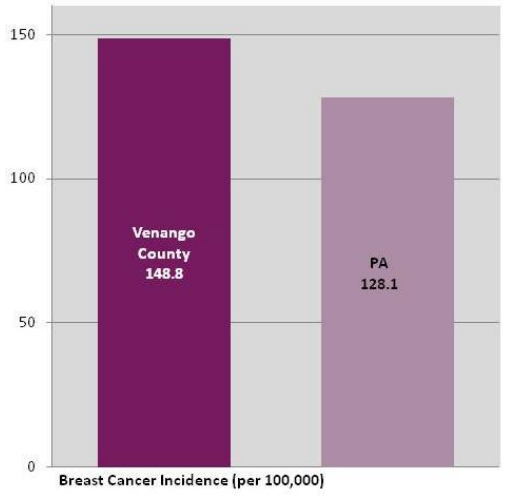
Accessing prenatal care and engaging in healthy behaviors during pregnancy is associated with healthy birth outcomes: Starting prenatal care early during pregnancy, especially in the first trimester, can help drive healthy birth outcomes. Prenatal care during the first trimester was lower in Venango County (64 percent), compared to the state and the nation (each were 71 percent). In addition, healthy behaviors during pregnancy were lower: 67 percent of pregnant women were non-smokers in Venango County, compared to 83 percent in Pennsylvania.

Characteristics of pregnant women in Venango County reflect higher levels of socioeconomic disadvantage: Studies have shown that poorer socioeconomic status is associated with adverse birth outcomes. Reflective of the socioeconomic characteristics of Venango County, a higher percentage of pregnant women in Venango County were covered by Medicaid (49 percent) or recipients of Women, Infants, and Children (WIC) (60 percent), a federal-state program that provides food supplements and other services to low-income pregnant and postpartum women, infants, and children up to age five. In comparison, Pennsylvania data show that 32 percent of pregnant women were covered by Medicaid, and 39 percent were WIC recipients.

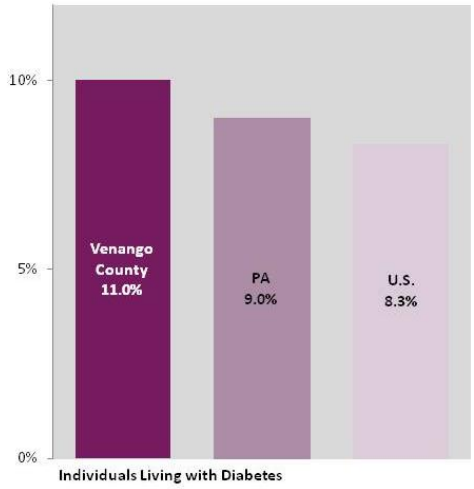
Cancer and Diabetes – Importance to the Community

- **Cancer and diabetes are leading causes of death in Venango County, as well as in the state and nation.**
- **In Venango County, 31 percent of deaths are due to cancer or diabetes.**
- **Healthy behaviors, such as screenings and maintaining a healthy weight, can help reduce one's risk for these diseases.**

There is an opportunity to promote breast cancer screening in Venango County, where breast cancer incidence is slightly higher than the state.



Diabetes is an important health issue in Venango County



Sources: Pennsylvania Department of Health, 2007-2009; U.S. Centers for Disease Control and Prevention, 2009.

Cancer and diabetes affect many people: Both cancer and diabetes are leading causes of death in the United States and in Venango County. In Venango County, almost 200 individuals died of cancer or diabetes in 2009, which contributed to 31 percent of total deaths. In addition, cancer and diabetes rates were higher in Venango County, compared to the state and the nation.

Healthy behaviors which can help reduce one's risk for these diseases, are lower in some sub-populations within Venango County: Although early detection of diabetes can help delay progression or worsening of the disease, almost one-third of people with diabetes have not been diagnosed. Maintaining a healthy weight can also help reduce both cancer and diabetes risk. In Venango County, a high percentage of residents were overweight or obese (68 percent), and a disproportionately higher percentage was observed in men (75 percent), those ages 45-64 (73 percent), and those earning less than $25,000 to $50,000 (72-74 percent). Due to small sample sizes, data are not reported by racial groups, other than White.

V. Overview of the Implementation Plan

Overview:

UPMC Northwest 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 January 29, 2013, the UPMC Northwest Board of Directors adopted an implementation plan to address the identified significant health needs:

- **Maternal and Infant Health**
- **Breast Cancer**
- **Diabetes**

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

High-Level Overview of UPMC Northwest Implementation Plan

Topic	Goal	Collaborating Community Partners
Maternal and Infant Health	Offer education and support programs to ensure adequate prenatal and postpartum care are accessible to low income/minority women, and increase the number of participants in these programs.	State Health Clinic Adagio Health Community Venango County VNA
Breast Cancer	Increase number of individuals receiving a screening mammography through the hospital's screening mammography initiative and breast navigator programs which guide patients through the cancer diagnosis and treatment process and serves as the primary link between patient and breast care team.	Community Organizations Schools Adagio Health
Diabetes	Increase participation in diabetes education to build knowledge about management of diabetes. Provide lifestyle classes, clinical and self-management programs for those living with diabetes, as well as a telemedicine program for endocrinology, which provides access to state-of-the-art care close to home.	Community agencies Employee health nurses in work community Telemedicine specialists Home health agencies Primary care offices Employers State health offices Schools

VI. APPENDICES

APPENDIX A: Detailed Community Health Needs Assessment Implementation Plans

Priority Health Issue: Addressing Maternal and Infant Health

Maternal and infant health is an important priority to UPMC Northwest's community: Although Venango County fares better than the state and nation in infant mortality, maternal and infant health programs are still critically important in this area. As Venango County's only hospital, UPMC Northwest has the only maternity department, which is used by the majority of expectant mothers in Venango County, as well as by women from surrounding counties who come to UPMC Northwest for prenatal care and to have their babies. Among these women, there are specific populations, such as lower income individuals, who may experience poor birth outcomes including infant mortality or low birth weight. Access to health care services during pregnancy, along with the provision of prenatal and postpartum care, greatly improves health outcomes for women and infants.

UPMC Northwest is addressing this issue: UPMC Northwest is addressing this issue through its Family Birthing Center and Obstetrics and Gynecology services, as well as through support classes related to breastfeeding, siblings, and infant care. There are also a number of programs offered in conjunction with community partners. These programs include a pregnancy management program for low-income women and postpartum home visits through the Visiting Nurses Association (VNA).

UPMC Northwest plans to do more to focus on this priority: In addition to the maternal and infant care services already offered at UPMC Northwest, additional breastfeeding counselors will become certified so that more women in the community can be served through that program. UPMC Northwest is also striving to promote breastfeeding as the preferred method of feeding at birth. Other existing programs will be offered to more individuals, and program progress will be tracked.

Maternal and Infant Health				
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Prenatal Health Initiatives and Community Partnerships	Partnership with Adagio Health clinic, which provides prenatal care for low income women (clinic team includes physicians, nurse practitioners, nurses, registered dietitians, and office assistants). Program includes: • Nutrition counseling • Home medical visits • Transportation assistance • Parenting classes • Substance abuse counseling Provide prenatal services that meet women's psychosocial needs in addition to rendering traditional medical/obstetric services (the program expands maternity services that can be reimbursed by Pennsylvania's Medical Assistance Program). Provide health care coverage (including full scope of medical services coverage) to underinsured or uninsured pregnant women and infants. Coverage for pregnant woman eligible for and receiving Medical Assistance is continued for 60 days after the birth.	• Document program results and number of women delivering at UPMC Northwest who have utilized these services	Low income and minority women.	State Health Clinic, Adagio Health, Community, Venango County VNA.
Hospital Based Educational Programs	**Prepared Childbirth Class (PCB):** Provide education to women and families on birth of baby between 35-36 weeks (4 week class, 1 night/week). Refresher classes available for individuals who have already had a baby. **Infant Care Class (ICC):** Teach safety and wellbeing when having a baby in the household (infant resuscitation, safe practices, etc.). **Breastfeeding Class:** Provide education and reassurance regarding breastfeeding. **Sibling Classes:** Educate children about having a new baby in the household.	• Offer programs and track participation.	Low income women and families. Minorities. General population. Pregnant adolescents.	State Health Clinic, Adagio Health, Community, Venango County VNA.
Venango County VNA Maternal and Infant Program	Provide nurses, social workers, or other trained home visitors to meet with at-risk families in their homes. Evaluate families' circumstances. Connect families to the appropriate services (including health care, developmental services for children, early education, parenting skills, child abuse prevention, and nutrition education or assistance). Certified breastfeeding counselors assess families' adaption to parenthood and offer lactation support via phone or in person.	• Increase number of certified breastfeeding counselors. • Increase number of women served through program. • Increase number of women who choose breastfeeding as the preferred method of feeding at birth.	Low income women and families. Minorities. General population. Pregnant adolescents.	State Health Clinic, Adagio Health, Community, Venango County VNA, ABC Pregnancy Center, Children and Youth of Venango County.

Priority Health Issue: Addressing Breast Cancer

Breast cancer is an important priority in UPMC Northwest's community: Cancer is the second leading cause of death in Venango County, the state, and nation. For women, lung and breast cancers are the most common causes of cancer deaths. Although there are risk factors that cannot be avoided, such as age and family history, there are many behaviors that may be changed to reduce the likelihood of breast cancer. These behaviors include tobacco and alcohol use, weight status, nutrition, and physical activity. Early detection is an important factor in reducing deaths due to breast cancer, as the disease is highly treatable in early stages. Through education, recommended screenings, and identification of cancer in early stages, outcomes related to breast cancer can be greatly improved.

UPMC Northwest is addressing this issue: UPMC Northwest is addressing this health issue through its Breast Care Program, which provides residents in the Venango County area with state-of-the-art care close to home. This program follows guidelines established by the National Accreditation Program for Breast Cancer Centers (NAPBC), and aims to create a seamless experience for patients, beginning with a streamlined referral process. The multidisciplinary breast care team includes board-certified radiologists, an interventional radiologist, general surgeons, pathologists, medical and radiation oncologists, and a fellowship-trained breast surgeon. This team works closely with the patient's primary care physician to coordinate the best care and treatment options available. The team also includes a breast care navigator who serves as the primary link between the patient and breast care team and guides the patient through the diagnosis and treatment process.

UPMC Northwest plans to do more to focus on this priority: In addition to the robust suite of breast care services already offered, UPMC Northwest plans to enhance educational and screening efforts by targeting different populations through various events.

Breast Cancer				
Program	**Activities**	**Outcomes** **Goal-Year 3**	**Target Population**	**Partners**
Screening Mammography Initiative	Participate in Especially for Women Symposium. Perform PIXI Screenings (bone density screenings). Distribute pamphlets to promote awareness of the need for mammography screening. Distribute bookmarks as a reminder for breast screenings with locations/hours as well as education information. Increase outreach activities to bring women in for mammography. Participate in Adagio Health mammogram voucher program to provide access for uninsured and underinsured women.	• Increase the number of individuals having a screening mammography performed. • Increase the number of educational materials and bookmark reminders handed out.	Low income females 40 years+. Women age 40+. Minorities. General population.	Community organizations, Schools, Adagio Health.

Breast Cancer				
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Breast Navigator	One registered nurse is designated as the breast care navigator. Work with Imaging Services to identify those with positive diagnostic mammograms. Assist in scheduling procedures and interventions to ensure that patient can receive multidisciplinary treatment in a single appointment, instead of having to schedule many different appointments with different types of providers. Implement patient report cards for patients with a positive result to explain further testing that will be needed.	• Maintain efforts to provide 100 percent of test results within the same day and streamline appointments for patient so that they are seeing a team of different specialists on the same day, rather than having to make many appointments.	Low income females 40 years+. Women age 40+. Minorities. General population. Any individual that is diagnosed with breast cancer.	Community organizations, Schools, Adagio Health.

Priority Health Issue: Addressing Diabetes

Diabetes is an important priority in UPMC Northwest's community: Diabetes is the 5th leading cause of death in Venango County, where there is a much larger percentage of people living with diabetes (11.0 percent) than the state (9.0 percent) and nation (8.3 percent). Diabetes can be prevented through increases in 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 quality of life.

UPMC Northwest is addressing this issue: UPMC Northwest offers programs and education to build knowledge and help prevent diabetes. Initiatives include lifestyle classes, as well as clinical and self-management programs for those living with diabetes. UPMC Northwest is a UPMC Diabetes Center location and provides comprehensive education to those who have diabetes. In addition, UPMC Northwest also offers an endocrinology telemedicine program which provides access to state-of-the-art care close to home.

UPMC Northwest plans to do more to focus on this priority: In addition to the diabetes prevention and management services already offered, UPMC Northwest plans to expand their group lifestyle classes and partner with the local YMCA to encourage individuals to increase their levels of physical activity. Disease self-management efforts will also be expanded, as will clinical initiatives related to diabetes management. In addition, UPMC Northwest will explore the possibility of re-establishing their population registry program for diabetes, which would facilitate better tracking of diabetes patients and their outcomes.

Diabetes				
Program	**Activities**	**Outcomes** **Goal-Year 3**	**Target Population**	**Partners**
Group Lifestyle Classes	Offer 12 week program that meets for one hour per week. Provide educational lecture topics about diabetes prevention (nutrition, exercise, etc.). Monitor participants' weight and lab work at beginning and end of program. Provide support to participants so they can maintain healthy habits after classes end. Present information about diabetes risk factors and prevention at health fairs and education events. Apply for grant funding to support group lifestyle balance programs.	• Increase recruitment and retention in the program. • Improvement in participants' weight loss/lab work. • Expand program into the community setting.	Adults who are obese, have pre-diabetes or metabolic syndrome.	Community agencies, YMCA/ YWCA, employers.
Diabetes Self-Management Education	Provide education on healthy lifestyles, diabetes self-management, and personal goal setting (provided by an ADA registered dietician and RN in process of becoming registered). Monitor HbA1c levels and personal goals through follow-up six months after initial self-management class. Program is recognized by the American Diabetes Association.	• Achieve Certified Diabetes Educator status for RN educator. • Document HbA1c among participants. • Increase participation in program.	Adults with diabetes and their families.	Employee health nurses in work community, primary care physician offices.
Endocrinology Telemedicine Program	Provide teleconsultations at the Teleconsultation Center at UPMC Northwest. Document participants' HbA1c levels.	• Increase the number of referrals for diabetes teleconsultations. • Increase participation in program.	Individuals with uncontrolled diabetes.	Telemedicine specialists, IT vendors, third party insurers, primary care practices.

Diabetes				
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Nurse-Driven Insulin Adjustment	Provide telephone calls from a nurse to patients that have seen an endocrinologist. Calls are made to check on patients between appointments with endocrinologist. Monitor patients' self-reported blood sugar levels. Provide insulin adjustment information if necessary. Engage home health nurses in the process for nurse-driven insulin adjustment protocols.	• Increase the number of primary care practices utilizing nurse-driven protocols for glucose management. • Decrease the number of endocrinology patients with uncontrolled diabetes.	Individuals with chronically elevated blood sugar levels who are difficult to treat.	Primary care practices, home health agencies.
Reestablish Diabetes Population Registry	Assess feasibility of reestablishing program in which primary care practice doctors submit information such as lab work and weight to be manually entered in a diabetes registry. Evaluate and establish capabilities for data mining and reporting. If program is reestablished, populate the registry. Analyze population trending and disease management. Provide a population profile to each practice that submits information.	• Complete assessment of feasibility of reestablishing program.	Individuals with diabetes.	Primary care offices, employers, state health offices, schools.

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 considered in the development of this plan. 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.

	Process Outcomes (Hospital/Partner Delivery of Services)	Health Impact Outcomes (Changes in Population Health)
Perinatal Care and Support	Increase— • **Increase number of women and families receiving prenatal care and support** • **Increase community partnerships for prenatal services** • **Increase referrals for allied services for most vulnerable mothers**	Decrease— • **Prevalence of low birth weight and pre-term birth** • **Infant mortality**
Cancer Prevention and Education	Increase— • **Mammograms to un- and underinsured**	Decrease— • **Initial physician contact for patients with advanced disease** • **Breast cancer mortality**
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** • **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**

APPENDIX B: Detailed Community Health Needs Profile

Population Demographics:

Characteristics	Venango County	Pennsylvania	United States
Area (sq. miles)	674.28	44,742.70	3,531,905.43
Density (persons per square mile)	81.5	283.9	87.4
Total Population, 2010	54,984	12,702,379	308,745,538
Total Population, 2000	57,565	12,281,054	281,424,600
Population Change ('00-'10)	-2,581	421,325	27,320,938
Population % Change ('00-'10)	-4.5%	3.4%	9.7%
Age			
Median Age	44.3	40.1	37.2
%<18	21.5%	22.0%	24.0%
%18-44	29.3%	34.3%	36.5%
%45-64	31.2%	28.1%	26.4%
% >65+	18.0%	15.4%	13.0%
% >85+	2.3%	2.4%	1.8%
Gender			
% Male	48.9%	48.7%	49.2%
% Female	51.1%	51.3%	50.8%
Race/Ethnicity			
% White*	97.1%	81.9%	72.4%
% African American*	1.0%	10.8%	12.6%
% American Indian and Alaska Native*	0.2%	0.2%	0.9%
% Asian*	0.4%	2.7%	4.8%
% Native Hawaiian/Other Pacific Islander*	0.0%	0.0%	0.2%
% Hispanic or Latino**	0.9%	5.7%	16.3%
Disability	17.3%	13.1%	11.9%

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

Source: US Census, 2010

Social and Economic Factors:

Characteristics	Venango County	Pennsylvania	United States
Income, Median Household	$40,734	$49,288	$50,046
Home Value, Median	$79,000	$165,500	$179,900
% No High School Diploma*	12.3%	11.6%	14.4%
% Unemployed**	8.5%	9.6%	10.8%
% of People in Poverty	15.8%	13.4%	15.3%
% Elderly Living Alone	12.0%	11.4%	9.4%
% Female-headed households with own children <18	6.1%	6.5%	7.2%
Health Insurance			
% Uninsured	9.0	10.2	15.5
% Medicaid	17.8	13.1	14.4
% Medicare	12.2	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 Venango County, Pennsylvania and the United States (rates per 100,000 population):

Causes of Death	Venango 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	21.2	25.9	24.6
Malignant Neoplasms	26.4	23.1	23.3
Chronic Lower Respiratory Diseases	5.4	5.2	5.6
Cerebrovascular Diseases	5.9	5.5	5.3
Unintentional Injuries	4.3	4.4	4.8
Alzheimer's Disease	2.1	2.9	2.8
Diabetes Mellitus	4.6	2.6	2.2
Influenza and Pneumonia	1.3	2.0	2.0
Nephritis, Nephrotic Syndrome and nephrosis	2.4	2.4	1.5
Intentional Self-Harm (Suicide)	0.8	1.3	1.5

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

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

Characteristics	Venango County	Pennsylvania	United States	Healthy People 2020
Morbidity				
Diabetes (%)	10.0	9.0	8.0	NA
Mental Health (Mental health not good ≥1 day in past month) (%)	32.0	35.0	NA	NA
Low Birthweight (% of live births)	7.0	8.4	8.2	7.8
Health Behaviors				
Obesity (Adult) (%)	31.0	28.0	26.9	30.6
Excessive Alcohol Use (%)	12.0	17.0	15.8	24.4
Current Tobacco Use (%)	22.0	20.0	17.9	12.0
STDs(Gonorrhea per 100,000)*	NA	103.8	285	257
Clinical Care (%)				
Immunization: Ever had a Pneumonia Vaccination, 65+ (%)	70	70	68.6	90
Cancer Screening				
Mammography (%)	NA	63.0	75.0	81.1
Colorectal Screening (%)	NA	63.0	65.0	70.5
Primary Care Physician: Population (Ratio)	1:1,557	1:1,067	NA	NA
Receive Prenatal Care in First Trimester (%)	64.4	70.9	71.0	77.9
Physical Environment				
Access to Healthy Foods (%)	73	57	NA	NA
Access to Recreational Facilities	7	12	NA	NA

Sources:

Venango County Data: Pennsylvania Department of Health, 2007-2009. Data from Behavioral Risk Factor Surveillance System includes Venango County, Mercer County, Crawford County, Lawrence County; 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 Northwest, 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 Northwest:

UPMC Northwest 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 Northwest 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 Northwest community.

The UPMC Northwest 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 Northwest 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)

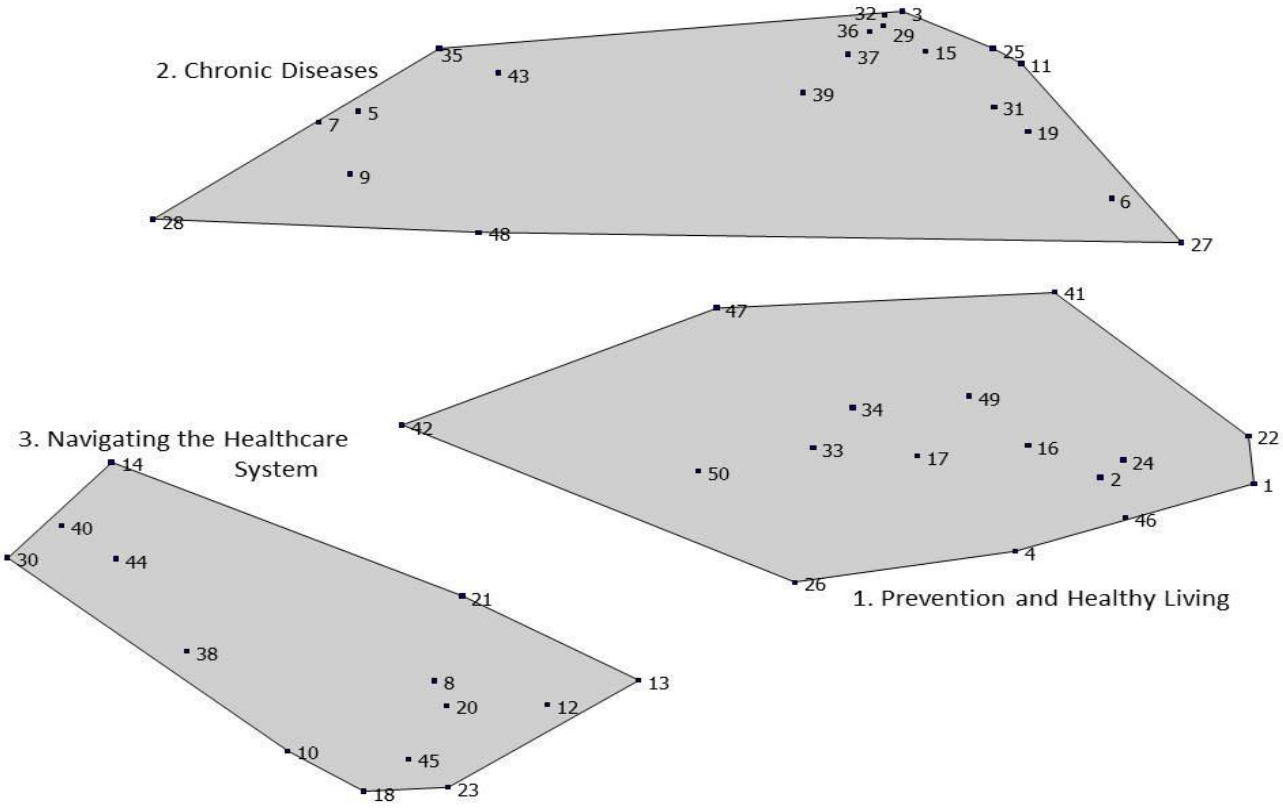
Hospital Ability to Address:
Does the Hospital have the ability to address this problem?
(1 = no ability; 5 = great ability)

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 Northwest. UPMC Northwest 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 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 Northwest's Community Advisory Council included representatives from the following organizations:

- **Adagio Health, Seneca, PA**
- **Central Electric Co-operative, Parker, PA**
- **Child Development Centers, Inc., Oil City, PA**
- **Community Ambulance Services, Franklin, PA**
- **Dale Woodward Law Firm, Franklin, PA**
- **Daugherty Brothers Real Estate, Oil City, PA**
- **May & Company, Oil City, PA**
- **Nicholaus, Stifel & Co., Franklin, PA**
- **Office of the County Administrator, Venango County, Franklin, PA**

- **PA Career Link, Venango County, Oil City, PA**
- **Pathways Adolescent Center, Oil City, PA**
- **Shaffner Trucking, Meadville, PA**
- **Sugar Valley Lodge, Franklin, PA**
- **Venango County Area Agency on Aging, Franklin, PA**
- **Venango County Mental Health and Developmental Services, Franklin, PA**
- **Venango County Commissioners, Franklin, PA**
- **Visiting Nurses Association of Venango County, Oil City, PA**

The UPMC Northwest Community 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**
- **Center for Inclusion, UPMC, 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**
- **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**
- **The Pennsylvania Health Law Project**