

## **Community Health Needs Assessment**

And

**Community Health Strategic Plan** 

June 30, 2013

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#### **EXECUTIVE SUMMARY**

UPMC St. Margaret Plays a Major Role in its Community:

UPMC St. Margaret is a nonprofit, 249-bed acute-care teaching hospital located in Allegheny County, Pennsylvania, in the Borough of Aspinwall. This patient-centered hospital delivers a full range of quality medical services, including highly specialized medical and surgical treatment, to area residents.

UPMC St. Margaret 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. A notable example of community involvement is the UPMC St. Margaret Family Health Centers, which provide primary medical care, preventive health care, disease management, and health-related education in medically underserved neighborhoods. The hospital also hosts award-winning nursing education programs at the UPMC St. Margaret School of Nursing, which provide the foundation for productive careers.

**UPMC St. Margaret in the Community** 

The hospital provided \$10.2 million in charity care and unreimbursed amounts from programs for the poor in the most recent year.

Family Health Centers in Lawrenceville, Bloomfield-Garfield, and New Kensington deliver primary and preventive medical care, disease management, and health related education to traditionally underserved areas.



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

Socioeconomic characteristics that were assessed in the CHNA process reflect a trend in the growth of the aging population. Within the community there are areas with more seniors who are low-income and living alone. As the area's only geriatric evaluation and treatment center, offering comprehensive care and support for older patients and their families, UPMC St. Margaret is well equipped to care for this population.

Through this process, UPMC St. Margaret identified significant community health needs. They are:

- Senior Health and Caring for an Aging Population
- Preventive Health and Wellness
- Preventive Screenings
- End-of-Life Care

## UPMC is Responding to the Community's Input:

Western Pennsylvania has a diverse range of health needs. Key themes that emerged from the UPMC St. Margaret 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:

# Community-Wide Health Needs across Western Pennsylvania Prevention and Healthy Living Chronic Disease Navigating Resources UPMC St. Margaret Significant Health Needs for UPMC St Margarets's Community Senior Health and Caring for an Aging Population Preventive Health and Wellness Screenings End-of-Life Care

- **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 St. Margaret 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 St. Margaret'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 St. Margaret 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 St. Margaret Is Improving Community Health in Measurable Ways:

On May 28, 2013, the UPMC St. Margaret 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.

#### Focusing on Senior Health and Caring for an Aging Population

UPMC St. Margaret's Implementation Plan is focused on:

- · Reaching more community members and families
- Reaching the community members and families who can benefit from assistance
- Making a measureable impact

Topic	Goal	Collaborating Community Partners
Senior Health and Caring for an Aging Population	Offer programs focused on prevention, detection, and management of chronic conditions, including preventive screenings.  Raise awareness of hospital programs by leveraging partnerships with senior facilities in the community. Offer chronic disease education in subsidized senior high-rise buildings.	Local libraries and nursing homes, national advocacy groups, UPMC St. Margaret Foundation
Health Needs of Underserved Seniors	Offer free services to patients of the hospital, outpatient departments, the Geriatric Care Center, and UPMC St. Margaret Family Health Centers who are experiencing financial barriers to care.  Expand the <i>Living-at-Home</i> program from Lawrenceville to other parts of UPMC St. Margaret's service area to allow 100 additional seniors to live safely and independently in their homes for as long as possible.	Aging Institute of UPMC Senior Services, UPMC St. Margaret Foundation
Training Providers in Geriatric Care	Train health care providers and caregivers in geriatric care. Offer education and assistance to administrators and staff of area Skilled Nursing Facilities.	UPMC Health Plan, area skilled nursing facilities, nursing homes and senior high rises
End-of-Life Care	Enhance Palliative Care Program by leveraging partnership with UPMC Palliative and Supportive Institute.  Offer the "Nobody Dies Alone" program to provide support for patients at the end of their life with no family or friends.  Expand Advance Care Planning initiatives through the development of a partnership with independent and assisted living facilities in the area.	Assisted and independent living facilities, UPMC Palliative and Supportive Institute

#### Programs to Support Senior Health and Caring for an Aging Population:

- UPMC St. Margaret will offer free community programs to help with education, preventive screenings, and management techniques.
  - » A shuttle service for seniors is offered by UPMC St. Margaret to provide access to the hospital, educational programs, doctor's appointments, the grocery store, and the drug store.
  - » UPMC St. Margaret physicians will provide lectures and screenings at the hospital and within the community on topics such as diabetes prevention and management.
  - » Focused classes and support groups provide education and encouragement for individuals living with specific chronic conditions, such as diabetes, cancer, COPD, and Alzheimer's disease.

#### Addressing Health Needs of Underserved Seniors:

- UPMC St. Margaret has initiatives that assist underserved seniors in the community.
  - » By expanding the Living-at-Home program, seniors living in the UPMC St. Margaret service area can take advantage of care coordination for in-home care, and get referrals for a wide range of services designed to help more seniors live independently for as long as possible. Services include home-delivered meals, grocery shopping, housekeeping, and yard work.
  - » The UPMC St. Margaret Bed Fund provides financial assistance to patients for medications, medical equipment, medical supplies, family lodging, emergency housing, and transportation.
  - » The UPMC St. Margaret Family Health Centers offer free medication, medication management consultations with a pharmacist, home visits, outpatient behavioral health counseling, and free flu vaccinations.

#### Training Providers in Geriatric Care:

- UPMC St. Margaret's Geriatric Care Center is the area's only geriatric evaluation and treatment center to focus on the health needs of people over age 60. Along with specialized medical and psychiatric care, geriatric professionals help older adults and their families with health care decisions for daily living.
  - » A free educational series for administrators and staff of area skilled nursing facilities educates these providers on state-of-the-art clinical practices that enhance patient care and prevent unplanned readmissions to the hospital.
  - » A free speaker's bureau program presented by UPMC St. Margaret providers addresses issues facing the elderly population. Seniors living in area high-rise buildings will also soon benefit from this program.

#### End-of-Life Care:

- UPMC St. Margaret keeps patients as comfortable as possible at the end-of-life by minimizing physical, spiritual, and psychosocial pain.
  - » Palliative care consultations focus on developing treatment goals and advanced directives, providing psychological and spiritual counseling, developing discharge plans, and providing referrals to appropriate programs, including hospice. UPMC St. Margaret partners with the UPMC Palliative and Supportive Institute to provide effective palliative care.
  - » The Nobody Dies Alone program offers support from trained volunteers to patients in the hospital who have no family or friends to be with them at the end of their life.
  - » Free educational programs on advance care planning, presented in partnership with local assisted and independent living communities, focus on the purpose and importance of having a living will and power of attorney.

#### **COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT**

#### I. Objectives of a Community Health Needs Assessment

#### CHNA Goals and Purpose:

In Fiscal Year 2013, UPMC St. Margaret 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 St. Margaret 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 St. Margaret:

UPMC St. Margaret is a nonprofit, 249-bed acute-care hospital located in Allegheny County, Pennsylvania. It offers a full range of quality medical services to the community. The hospital provides area residents with access to medical, surgical, rehabilitation, and transitional care, as well as cutting-edge medical services not typically found at a local community hospital. Specialized services include CT imaging, digital mammography, minimally invasive surgery, and an on-site UPMC CancerCenter. During the Fiscal Year ended June 30, 2012, UPMC St. Margaret had a total of 17,891 admissions and observations, 41,519 emergency room visits, and 16,515 surgeries.

UPMC St. Margaret is a teaching hospital, with residency programs in family practice, internal medicine and a unique geriatric fellowship program. 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 St. Margaret in Your Community



UPMC St. Margaret is a patient centered hospital that provides residents of northeastern Allegheny County convenient access to the area's finest physicians and health services.

#### Clinical Excellence, When and Where It's Needed

- UPMC St. Margaret is the first UPMC hospital to attain ANCC Magnet Recognition®, the highest international recognition for nursing excellence and leadership.
- UPMC St. Margaret has a nationally recognized Electronic Medical Record (EMR) system to enhance patient care.

#### Reaching Out to Care for the Community

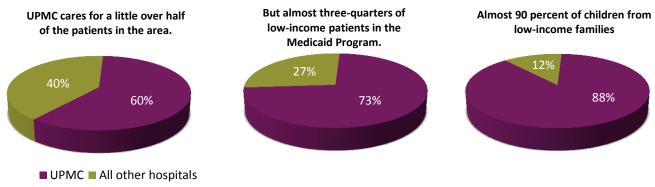
- In 2012, the hospital provided \$10.2 million in charity care and unreimbursed amounts from programs for the poor.
- 1,760 employees and a total economic impact of \$504 million.
- Award winning nursing education programs at the UPMC St. Margaret School of Nursing provide the foundation for productive careers.

#### UPMC St. Margaret's Community Service and Community Benefit Initiatives:

UPMC St. Margaret 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 St. Margaret'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 St. Margaret is committed to serving Medicare and Medicaid patients. In Fiscal Year 2012, these patients represented 57 percent of UPMC St. Margaret's patient population. UPMC St. Margaret 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: The award winning programs offered through the UPMC St. Margaret School of Nursing and the UPMC St. Margaret School of Practical Nursing provide training for jobs in health care. In addition, UPMC St. Margaret is western Pennsylvania's oldest and largest Family Practice residency program. More than 280 family physicians have graduated from the nationally ranked program since it began, and many of these physicians maintain practices in the Pittsburgh area.
- Offering Community Health Improvement Programs and Donations: UPMC St. Margaret 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 150 community health events, including diabetes classes and quarterly diabetes support groups, health screenings (asthma, obesity, skin cancer, etc.), breast and prostate exams, cancer support groups, and health education and information focused on seniors and their caregivers. The estimated cost of these programs, in addition to donations to allied nonprofit partner organizations that enhance UPMC St. Margaret's community services, was \$1.9 million in Fiscal Year 2012.
- Anchoring the Local Economy: With deep roots in the community dating back to 1898, 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 St. Margaret has paid \$97 million in salaries and benefits to its 1,760 employees 42 percent of whom live in the area and generated a total economic impact of \$504 million in 2012.

#### II. Definition of the UPMC St. Margaret Community

For the purpose of this CHNA, the UPMC St. Margaret community is defined as Allegheny County. With 72 percent of patients treated at UPMC St. Margaret residing in Allegheny County, the hospital primarily serves residents of this geographic region. By concentrating on the county, UPMC St. Margaret 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 St. Margaret Live in Allegheny County

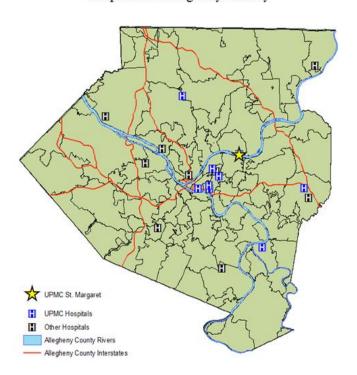
County	UPMC St. Margaret %	Medical Surgical Discharges	
Allegheny County	72.0%	9,989	
All Other Regions	28.0%	3,884	
Total Hospital Discharges	100%	13,873	

Source: Pennsylvania Health Care Cost Containment Council, FY2012

The hospital is situated in the northeastern region of the county, an area with a high population of elderly individuals. While the county represents the basic geographic definition of UPMC St. Margaret's community, this CHNA also considered specific focus areas within the hospital's immediate geographic "service area." The service area analysis was conducted to identify geographical areas within the county, as well as area with potentially higher concentrations of health needs — such as areas with high minority populations, low per-capita incomes, and areas with historically distinct health needs.

Existing Healthcare Resources in the Area:

#### Hospitals in Allegheny County



UPMC St. Margaret is one of eight UPMC licensed hospitals and 16 total hospitals in Allegheny County.

In the immediate service area, UPMC St. Margaret is supported by nearly 60 UPMC outpatient offices, in addition to 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.

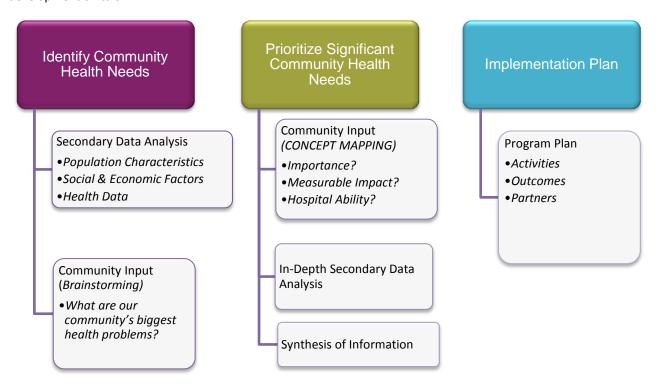
#### III. Methods Used to Conduct the Community Health Needs Assessment

#### 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	ic 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  Median Income/Home Values  Race/Ethnicity	2010 total population divided by area in square miles by county, state and nation.	
		By Zip Code, county, state and nation in 2010.	
		Percent for each item by Zip Code,	
	Insurance: Uninsured, Medicare, Medicaid	county, state and nation in 2010.  Note: Zip Code level data was not available for disabled.	
	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	Allegheny County Health Survey, 2009-2010;	
	Cancer	nation.	PA Department of Health	
	Mental Health		Behavioral Risk Factors Surveillance System; Birth,	
	Asthma (Childhood)		Death, and Other Vital Statistics; Cancer Statistics;	
	Birth Outcomes		U.S. Centers for Disease	
Health Behaviors Data	Obesity (Childhood and Adult)		Control and Prevention  Behavioral Risk Factors	
Data	Alcohol Use		Surveillance System;	
	Tobacco Use		National Center for Health Statistics.	
	Sexually Transmitted Disease		Statistics.	
Clinical Care Data	Immunization	by county, state and nation. 2011 County Health Rankings by County.  Survey, 2009-20: PA Department of Behavioral Risk F Surveillance Syst Death, and Othe Statistics; Cancer U.S. Centers for Control and Prev Behavioral Risk F Surveillance Syst Robert Wood Jol Foundation Cour Rankings;	Allegheny County Health Survey, 2009-2010;	
			PA Department of Health	
	Cancer Screening (breast/colorectal)		Surveillance System; Birth,	
	Primary Care Physician Data		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.	
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	Access to Healthy Foods	2011 County Health Rankings by County.	Robert Wood Johnson	
Data	Access to Recreational Facilities		Foundation County Health Rankings.	

#### 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 subpopulations 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:

**Sizable Elderly Population:** A notable characteristic of Allegheny County is the large percentage of elderly residents (65 years and older). Allegheny County has a large elderly population (17 percent), especially when compared to Pennsylvania (15 percent), and the United States (13 percent). In the UPMC St. Margaret service area, a higher percentage (19 percent) of residents are elderly, compared to Allegheny County. 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

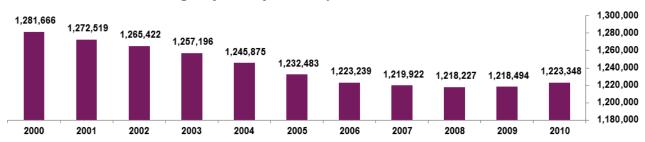
Age Distribution - 2010				
	Allegheny County	UPMC St. Margaret Service Area	Pennsylvania	United States
Median Age	41.3	44.8	40.1	37.2
% Children (<18)	19.8%	20.0%	22.0%	24.0%
% 18-64	63.4%	61.4%	62.6%	63.0%
% 20-49	39.2%	36.3%	39.0%	41.0%
% 50-64	21.3%	23.2%	20.6%	19.0%
% 65+	16.8%	18.6%	15.4%	13.0%
% 65-74	7.8%	8.5%	7.8%	7.0%
% 75-84	6.1%	6.9%	5.4%	4.3%
% 85+	2.9%	3.2%	2.4%	1.8%
% Elderly Living Alone	13.1%	14.2%	11.4%	9.4%

Source: U.S. Census

**Total Population Decline in Allegheny County but Aging Population Increasing:** In 2010, Allegheny County had a total population of 1,223,348. The population density of Allegheny County at the time was 1,675.6 people per square mile. Between 2000 and 2010, the county's total population decreased from 1.28 million to 1.22 million, representing a five-percent decline (see figure below). At the same time, the county's most elderly population increased significantly (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).

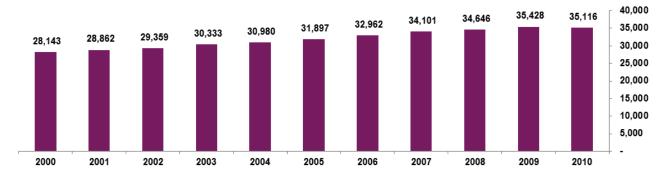
#### Allegheny County's total population has seen a 5 percent decrease from 2000 to 2010

#### **Allegheny County Total Population Trend**



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

#### Allegheny County Elderly (85+) Population Trend



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)

#### Characteristics of UPMC St. Margaret's Service Area:

**UPMC St. Margaret's service area has a higher frail and homebound elderly population:** Although population demographics for the general population residing in UPMC St. Margaret's community are similar Allegheny County (see following table), the UPMC St. Margaret service area includes a larger elderly population. In addition, more than half of seniors in the UPMC St. Margaret service area were concentrated in the New Kensington, Etna, Sharpsburg, and Blawnox areas of Allegheny County that are noted for having a high percentage of seniors living alone and living below the poverty level (see following figure and map).

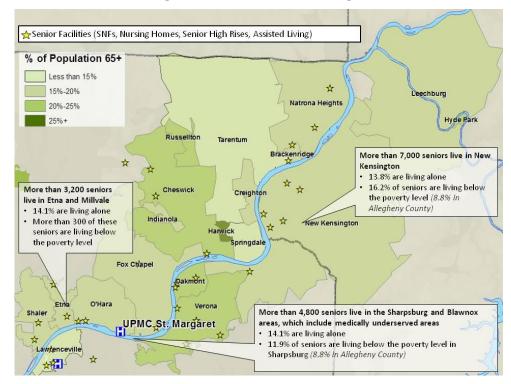
Social and Economic Population Demographics				
	Allegheny County	UPMC St. Margaret Service Area		
Median Household Income	\$45,362	\$44,970		
% in Poverty (among families)	8.7%	7.8%		
% with No High School Diploma (among those 25+)	8.4%	9.1%		
% Unemployed (among total labor force)	7.2%	6.0%		
Racial Groups				
% White	81.5%	89.8%		
% African-American	13.2%	6.8%		
% Other Race	5.3%	3.4%		

Source: U.S. Census

In addition, areas in Sharpsburg and Blawnox Zip Codes are federally designated as medically underserved areas. The following factors are considered in the determination of MUAs:

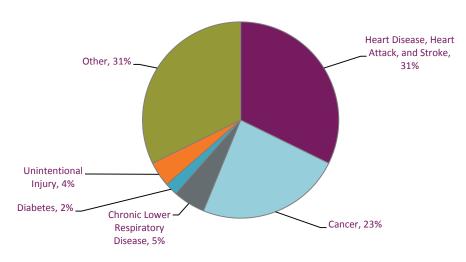
- A high percentage of individuals living below the poverty level
- High percentages of individuals over age 65
- High infant mortality
- Lower primary care provider to population ratios

More than 31,000 seniors aged 65+ live in the UPMC St. Margaret Service Area



#### 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 St. Margaret's Community:

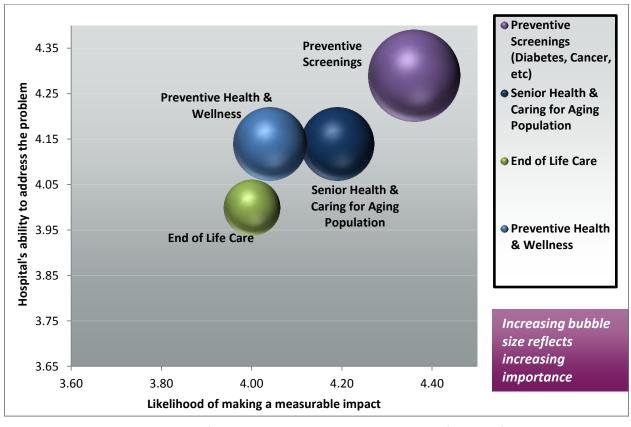
Concept mapping input was deployed across all UPMC hospital communities within western Pennsylvania and yielded three overarching themes to contextualize the health care needs of areas served by UPMC hospitals:

- Chronic Disease
- Prevention and Healthy Living
- Navigating Resources

For UPMC St. Margaret's community, the assessment identified the following 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:

- Senior Health and Caring for an Aging Population
- Preventive Health and Wellness
- Preventive Screenings
- End-of-Life Care

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 St. Margaret Significant Health Needs** 

In-depth secondary data analysis reinforced that these health topics were areas of concern for the UPMC St. Margaret community. For purposes of this assessment, senior health and caring for an aging population is the overarching umbrella for these topics. The secondary data findings are illustrated below:

#### Senior Health Concerns – Importance to the Community

- The UPMC St. Margaret service area has a larger percentage of seniors ages 65+, most elderly (85+), and seniors living alone compared to the county, state, and nation.
- As individuals age, the risk for comorbid health conditions increases. In addition, preventing falls and improving health literacy related to medication compliance, for example, are important for the elderly.

	St. Margaret Service Area	Allegheny County	PA	National
% 65+	18.6%	16.8%	15.4%	13.0%
% 85+	3.2%	2.9%	2.4%	1.8%
% Elderly Living Alone	14.2%	13.1%	11.4%	9.4%

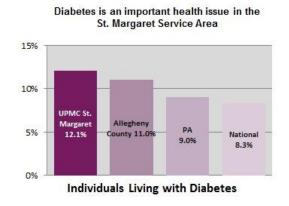
Source: U.S. Census 2010

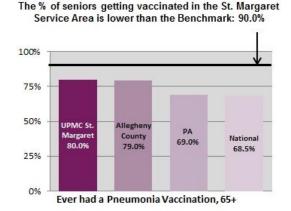
Increasing trends in the aging population, increasing need for aging-related services: According to national data, the aging population is predicted to more than double by 2030, which has consequences on health care and aging services. These issues are especially important for the UPMC St. Margaret service area, where a sizable percentage of elderly live. UPMC St. Margaret has many existing hospital-based and community-based programs addressing elderly concerns.

Navigating resources, including medication management and compliance, can be difficult, especially when family members live far away: Older adults rely on family members for support with health care problems, such as medication management and compliance. However, as community members commented in focus groups, tapping into health care services is more challenging for older adults whose family members no longer live in close proximity. U.S. Census data support this — a higher percentage of elderly are living alone (14 percent) in the UPMC St. Margaret service area compared to the county (13 percent), the state (11 percent), and the nation (9 percent). Providing support to the aging population, especially those who are living alone, is instrumental in maintaining their quality of life.

Chronic Disease Prevention and Management: Preventive Health and Wellness and Preventive Screenings — Importance to the Community

- Preventive screenings can help identify some of the leading causes of death such as heart disease, cancer, and diabetes — in early stages when treatment is likely to work best.
- 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.





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

A higher percentage of older individuals experience diabetes, cancer, and influenza/pneumonia: Health issues affect seniors more so than other age groups. National data show that almost four out of five older adults have one chronic condition. In Allegheny County, a higher percentage of older residents experienced diabetes (22 percent), cancer (27 percent), and a majority of influenza and pneumonia deaths (88 percent).

Preventive health and wellness, including preventive screenings, is key: Early detection of diabetes and cancer, and immunizing against influenza and pneumonia are cost-effective efforts in disease prevention, especially for older adults. Allegheny County Health Survey data show that although older adults are participating in these prevention efforts, more can be done. For diabetes, many individuals are undiagnosed, and only about 65 percent of older adults reported receiving a test for diabetes in the past three years. Although colorectal cancer screening in older adults (73 percent) exceeded the national benchmark of 70.5 percent, breast cancer screening was 60 percent in older women, much lower than the benchmark of 81.1 percent. The percentages of older adults receiving influenza and pneumonia immunizations (72 percent and 78 percent, respectively) were much lower than the national benchmark of 90 percent.

#### End-of-Life Care — Importance to the Community

Nationally, most patients in hospice care have a primary diagnosis that includes chronic disease — cancer, heart disease/stroke, and dementia. The majority of individuals in hospice care are age 65+, and one-third are age 85+. There is a large elderly population in Allegheny County with chronic diseases who can benefit from end-of-life care coordination and hospice programs.

#### V. Overview of the Implementation Plan

#### Overview:

UPMC St. Margaret 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 May 28, 2013, the UPMC St. Margaret Board of Directors adopted an implementation plan to address the identified significant health needs — specifically within the senior population:

- . Senior Health and Caring for the Aging Population
- Preventive Health and Wellness
- Preventive Screenings
- End-of-Life Care

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

High-Level Overview of UPMC St. Margaret Implementation Plan

Topic	Goal	Collaborating Community Partners
Senior Health and Caring for an Aging Population	Offer programs focused on prevention, detection, and management of chronic conditions, including preventive screenings.  Raise awareness of hospital programs by leveraging partnerships with senior facilities in the community. Offer chronic disease education in subsidized senior high-rise buildings.	Local libraries and nursing homes, national advocacy groups, St. Margaret Foundation
Health Needs of Underserved Seniors	Offer free services to patients of the hospital, outpatient departments, the Geriatric Care Center, and UPMC St. Margaret Family Health Centers who are experiencing financial barriers to care.  Expand the <i>Living-at-Home</i> program from Lawrenceville to other parts of UPMC St. Margaret's service area to allow 100 additional seniors to live safely and independently in their homes for as long as possible.	Aging Institute of UPMC Senior Services, St. Margaret Foundation
Training Providers in Geriatric Care	Train health care providers and caregivers in geriatric care. Offer education and assistance to administrators and staff of area Skilled Nursing Facilities.	UPMC Health Plan, area skilled nursing facilities, nursing homes and senior high rises
End-of-Life Care	Enhance Palliative Care Program by leveraging partnership with UPMC Palliative and Supportive Institute.  Offer the "Nobody Dies Alone" program to provide support for patients at the end of their life with no family or friends.  Expand Advance Care Planning initiatives through the development of a partnership with independent and assisted living facilities in the area.	Assisted and independent living facilities, UPMC Palliative and Supportive Institute

#### **VI. APPENDICES**

#### APPENDIX A: Detailed Community Health Needs Assessment Implementation Plans

UPMC St. Margaret plans to focus on the following issues identified through its Community Health Needs Assessment (CHNA). These priority areas will be addressed by continuing to strengthen existing UPMC partnerships, as well as by attempting to reach more seniors in the community with these programs.

Priority Health Issue: Preventive Health and Screenings

Preventive health and screenings are priorities in UPMC St. Margaret's community: More than two-thirds of deaths in Allegheny County result from chronic disease. Many of these deaths occur in the senior population. As individuals age, the incidences of chronic diseases such as cancer, dementia, heart disease, and stroke begin to increase. Additionally, older individuals frequently suffer from two or more of these conditions — such as diabetes and heart disease — at the same time. This situation, known as comorbidity, makes successful treatment of these diseases even more difficult.

**UPMC St. Margaret is addressing this issue:** UPMC St. Margaret has a strong set of programs focused on the prevention and management of chronic disease. Many of these programs are designed specifically for seniors.

**UPMC St. Margaret plans to do more to focus on this priority:** UPMC St. Margaret plans to expand its existing programs focused on preventive health and screenings by increasing the number of seniors utilizing these programs. One way UPMC St. Margaret plans to increase participation is to leverage current relationships with area nursing homes/SNFs to promote these programs. UPMC St. Margaret also plans to establish partnerships with area hospice organizations, senior high rises, and assisted/independent living facilities.

Senior Health and Caring for an Aging Population: Preventive Health and Screenings					
Program	Activities	Outcomes  Goal-Year 3	Target Population	Partners	
Alive and Well	Provide speakers, including UPMC St. Margaret physicians and health care professionals, to educate participants on a variety of health-related topics at local community libraries. Topics include: skin cancer, vascular health, orthopaedics, arthritis, depression, heart disease, stroke, and diabetes.	<ul> <li>Increase average number of participants at events.</li> <li>Incorporate feedback from program evaluations.</li> </ul>	Area residents/ seniors. Low-income seniors.	Oakmont Carnegie Library, Cooper-Siegel Community Library, Natrona Heights Community Library.	
Living Healthy with Arthritis	Hold presentations in which UPMC St. Margaret rheumatologists and orthopedic surgeons discuss the latest treatment options for arthritis.	<ul> <li>Increase average number of participants at events.</li> <li>Incorporate feedback from program evaluations.</li> </ul>	Area residents/ seniors. Low-income seniors.	Arthritis Foundation.	

Program	Activities	Outcomes ————————————————————————————————————	Target Population	Partners
Free Immunizations	Provide free flu vaccinations to area residents age 65 and older.	Increase average number of participants at events.	Area residents/ seniors. Low-income seniors.	
Free Shuttle for Seniors	Provide transportation to the grocery store, doctor's offices, pharmacy, hospital, funeral homes, and discount stores. The shuttle route is along Freeport Rd, and many residents of Blawnox Commons — a senior high rise — use the shuttle.	Increase average number of participants.	Area residents/ seniors. Low-income seniors.	North Hills Communit Outreach.
Cardiac Risk Screening	Conduct free blood pressure and BMI screenings for community members.  Provide education on proper blood pressure guidelines.  Identify individuals with abnormal blood pressure readings and encourage them to discuss their results with their family doctor.	Increase number of participants.	Area residents/ seniors.	Area Shop N Saves.
Chronic Disease Classes and Support Groups	Provide classes and support for diabetes, COPD, weight management, cancer (Look Good, Feel Better), Alzheimer's disease and other dementias.  Provide education for specific conditions.  Provide a support network for people affected by chronic disease.	Maintain or increase participation.	Individuals suffering from chronic disease and their families/caregivers.	Geriatric Care Center, The Alzheimer's Association, National Cosmetology Association, The Personal Care Products Council Foundation.
Skin Cancer Screening	Provide annual free skin cancer screenings and instruction on how to identify signs and symptoms of skin cancer.  Refer patients with suspicious lesions for biopsies.	<ul> <li>Increase number of participants.</li> <li>Track the number of participants referred for biopsy.</li> </ul>	Area residents/ seniors.	American Cancer Society, UPMC St. Margaret Dermatology.
Smoking Cessation	Provide a series of eight smoking cessation sessions.  Provide vouchers for nicotine replacement patches to attendees.	Maintain or increase participation.	Seniors.	American Lung Association.

#### Priority Health Issue: Senior Health and Caring for an Aging Population

The health needs of seniors are a priority in UPMC St. Margaret's community: Seniors are a diverse group, but on the whole they are more vulnerable than other age groups, particularly in terms of health and income limitations. Low-income seniors in particular are some of the most vulnerable individuals as they often require specialized care and are at a higher risk for comorbid conditions. Low-income seniors may not be able to afford care and may have difficulty navigating the health care system, managing their medications, or performing daily activities on their own.

**UPMC St. Margaret is addressing this issue:** UPMC St. Margaret has programs in place to address the health needs of seniors, including those with low incomes. Specialized care for geriatric populations and provider training and education on the health needs of the elderly are provided through the Geriatric Care Center. Free services include the provision of medication, medical equipment and medical supplies, family lodging, emergency housing, and transportation. These services are funded through the St. Margaret Foundation. The UPMC St. Margaret Family Health Centers, which are located in underserved neighborhoods, provide free medication and medication management consultations with pharmacists, home visits, outpatient behavioral health counseling, and free immunizations for low-income seniors. UPMC St. Margaret also partners with the Aging Institute of UPMC Senior Services to provide the Living-at-Home program for low-income seniors. This program provides care coordination and help with daily activities such as meal delivery, grocery shopping, housekeeping, and yard work.

**UPMC St.** Margaret plans to do more to focus on this priority: UPMC St. Margaret plans to continue to offer the robust suite of programs that is currently available to seniors. They will also leverage their partnership with the Aging Institute of UPMC Senior Services to expand the Living-at-Home program to other locations in their service area.

Senior Health and Ca	Senior Health and Caring for an Aging Population: Low-Income Seniors				
Program	Activities	Outcomes  Goal-Year 3	Target Population	Partners	
Bed Fund	Provide assistance with medications, medical equipment, medical supplies, family lodging, emergency housing and transportation.	Track patients utilizing program.	Patients of the hospital, outpatient departments, the Geriatric Care Center, and physician offices.	St. Margaret Foundation.	
UPMC St. Margaret Family Health Centers	Provide primary medical care, preventive health care, disease management, and health-related education.  Provide free medication program, medication management consultation with pharmacist, home visits, outpatient behavioral health counseling, outpatient social work intervention, Adagio program, and free flu vaccinations to area residents age 65 and older.	Increase number of patients receiving services.	Uninsured and underinsured.	Falk Clinic, Adagio Health, St. Margaret Foundation.	
Living-at-Home	Provide coordination for ongoing inhome care for older adults.  Make referrals to a range of services including home-delivered meals, grocery shopping, housekeeping, and yard work.  Develop care plan for each individual and recommend services to provide any needed care (care plan developed by nurse and social worker).	Offer program in Lawrenceville.     Explore potential to expand to other parts of the service area such as New Kensington, Blawnox, and Sharpsburg, and community high rises.	Low-income seniors over 70 who reside in Lawrenceville.	Aging Institute of UPMC Senior Services.	

Senior Health and Caring for an Aging Population: Training Providers						
	A satisfaction	Outcomes	T D	Partners		
Program	Activities	Goal-Year 3	Target Population			
Geriatric Care Center	Provide specialized medical and psychiatric care, including comprehensive evaluation and treatment.  Assist older adults and their families in making health care decisions to meet the patient's daily needs.  Geriatric team includes a physician, psychiatrist, neuropsychologist, registered nurse, clinical pharmacist, and licensed clinical social worker.	Maintain or increase number of patients using the geriatric care center.	Patients age 60 and older.			
Coordinating Transitions Together	Provide all-day, free educational program on enhanced care of patients, prevention of unplanned readmissions to the hospital, and safe transition of patients from the acute hospital setting to the Skilled Nursing Facility (SNF).  Offer program annually.	Increase or maintain participation.	Administrators, nurses, social workers and other health professionals working in SNFs in Southwestern Pennsylvania.			
Long Term Care Initiatives	Implement a series of long term care initiatives focused on sharing clinical information, developing, maintaining and enhancing relationships and interaction between the hospital and SNFs, providing ongoing educational opportunities to the SNFs and reducing unplanned hospital readmissions.  Hold monthly meetings with administrators/staff of 30+ nursing homes/SNFs.  Utilize meeting to educate participants about other programs and initiatives offered by UPMC St. Margaret.	Maintain or decrease readmission rates.	SNFs within service area of UPMC St. Margaret.	More than 35 SNFs		
Interact II Program	Provide INTERACT II (Interventions to Reduce Acute Care Transfers) program to manage acute changes in a patient's condition.  Develop clinical and educational tools and strategies for use in every day practice in SNFs.  Tools focus on early communication of changes in the patient's condition, advance care planning and care paths for specific diagnosis.  Five facilities currently participate in program.	Reduce or maintain unplanned readmission rates.	Patients receiving care in SNFs.	UPMC Seneca Place, Harmar Village Care Center, The Willows of Presbyterian Senior Care, Concordia Rebecca Residence and Consulate Health Care of Cheswick		

	Activities	Outcomes	Tayaat Dayalatian	Dautuaua
Program		Goal-Year 3	Target Population	Partners
Speaker's Bureau	Offer free educational presentations to local SNFs to provide training to the nursing and health professional staff at the facility.  Topics include: Advance Care Planning, Management of COPD, Management of CHF, Diabetes, Geriatric Fractures, Management of Dementia, DVT Prevention, Infectious Diseases and POLST.	<ul> <li>Offer program to providers.</li> <li>Modify the program so that it can be shared on a consumer level in senior high rises and local churches.</li> </ul>	Nurses, nursing aides and other health care professionals at local SNFs.	Senior high rises Local Churches
Geriatric Fellowship Program	Provide fellowship program so that fellows develop the knowledge and skill required to provide high-quality, evidence-based care to geriatric patients in various health care settings.	Maintain or increase number of residents in the fellowship.	Residents.	UPMC St. Margaret Family Medicine Program
Powerful Tools for Caregivers	Offer six-week class designed to help patients develop self-care tools to reduce personal stress, change negative self-talk, communicate needs to family members and health care providers, communicate more effectively, recognize messages in their emotions, and make tough caregiving decisions regarding placement, driving, and finances.	Hold additional classes in various community settings to reach additional underserved communities.	Adult children of aging parents and well spouses functioning in the caregiving role in the community.	UPMC Health Plan, Geriatric Care Center, community agencies to be identified

#### Priority Health Issue: End-of-Life Care

**End-of-life care is a priority in UPMC St. Margaret's community:** The majority of individuals in hospice are age 65 and older, and one-third are age 85 and older. The percentage of seniors (ages 65 and older) in the UPMC St. Margaret service area — 18.6 percent — is even higher than in Allegheny County — 16.8 percent.

**UPMC St. Margaret is addressing this issue:** UPMC St. Margaret works with patients and their families to ensure that patients are kept as comfortable as possible during the end of their lives. Care is provided to decrease or eliminate symptoms of physical, spiritual, and psychosocial pain and suffering. Palliative care services offered in the hospital include pain management, a palliative care consultation to develop treatment goals and advanced directives, psychological and spiritual counseling, and assistance with discharge planning and referrals, including referrals to hospice. UPMC St. Margaret volunteers also provide emotional support to patients who do not have family or friends with them at the end-of-life.

**UPMC St.** Margaret plans to do more to focus on this priority: UPMC St. Margaret plans to increase participation in programs such as their advance care planning program. The goal of this program is to increase awareness of end-of-life issues, and actions individuals and families can take to prepare for the end of life such as creating a living will and designating power of attorney.

End-of-Life Care				
Programs	Activities	Outcomes  Goal-Year 3	Target Population	Partners
Advance Care Planning Education	Provide presentation about purpose and importance of having a living will and power of attorney.  Review the Five Wishes booklet.  Provide direction on how to complete the forms and what to do with them once complete.	<ul> <li>Increase number of participants.</li> <li>Incorporate feedback from survey into program.</li> </ul>	Elderly residents of Allegheny County.	Assisted and independent living facilities
Palliative Care Program	Provide services through physicians, nurse practitioners and social workers. Services include pain management, symptom management, emotional support, counseling, and education.	<ul><li>Track number of patients.</li><li>Monitor metrics on a quarterly basis.</li></ul>		UPMC Palliative and Supportive Institute
No One Dies Alone	Coordinate volunteers to spend time with dying patients who have no family or friends to be with them at end of life, in the hospital 24 hours a day.  Volunteers provide support and comfort to dying patients through hand holding, comforting words, reading, music etc.	Track number of patients.	Patients at UPMC St Margaret who are dying and have no family or friends to be with them at the end of life.	

#### 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.

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
End-of-Life Care	Increase—  • Use of palliative care and hospice services  • Advance directives for admitted patients  • Physician discussion of end-of-life planning  • Access to outpatient palliative care	Decrease—  • Unwanted aggressive interventions at end-of-life  • Uncontrolled pain or discomfort at end-of-life  • Exclusion of patients and families in end-of-life planning

#### **APPENDIX B: Detailed Community Health Needs Profile**

Population Demographics:

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

<sup>\*</sup>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

<sup>\*</sup>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 (65+) Vaccinate, 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.

<sup>\*</sup>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 St. Margaret, 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 UPMC St. Margaret:

UPMC St. Margaret 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 St. Margaret 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 St. Margaret community.

The UPMC St. Margaret 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 St. Margaret 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:**

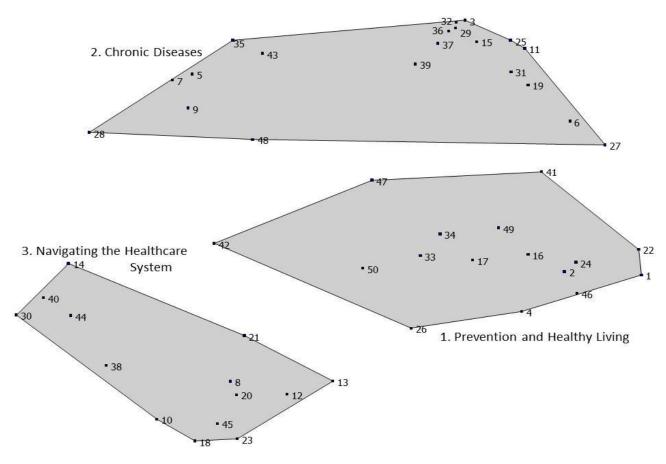
Does the Hospital have the ability to address this problem? (1 = no ability; 5 = great ability)

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

- Allegheny Valley Chamber of Commerce, Natrona Heights, PA
- Bloomfield-Garfield Corporation, Pittsburgh, PA
- Lawrenceville United, Pittsburgh, PA
- New Kensington Family Health Center, New Kensington, PA
- North Hills Community Outreach, Pittsburgh, PA
- Pittsburgh Public Schools, Pittsburgh, PA
- Presbyterian Senior Care, Oakmont, PA
- St. Scholastica Church, Pittsburgh, PA
- St. Margaret Foundation, Pittsburgh, PA

The UPMC St. Margaret 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 the following organizations to participate:

- Allegheny Conference on Community Development
- HI-HOPE (Hazelwood Initiative)
- Kingsley Association
- New Kensington Mayor's Office
- Pennsylvania Psychological Association
- PERSAD
- Salvation Army of Western Pennsylvania
- The Pennsylvania Health Law Project