

Community Health Needs Assessment

And

Community Health Strategic Plan

June 30, 2013

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EXECUTIVE SUMMARY

Magee-Womens Hospital of UPMC Plays a Major Role in its Community:

Magee-Womens Hospital of UPMC is a nonprofit, 380-bed acute-care women's teaching hospital located in Pittsburgh, Pennsylvania that serves both men and women. Situated in Oakland, a Pittsburgh, Pennsylvania, neighborhood in Allegheny County, the state-of-the-art hospital is one of the nation's top five hospitals specializing in gynecology care, and is a Bariatric Center of Excellence. More than half of all babies born in Allegheny County over the past year were delivered at Magee-Womens Hospital of UPMC.

Magee-Womens Hospital of UPMC maintains a historically strong connection with its community, and offers an array of community oriented programs and services to improve the health of local residents. One notable example is the Girls on the Run program, which is dedicated to promoting good choices for a lifetime of self-respect and healthy living for girls through a series of classes. These classes utilize warm-ups and workouts that encourage emotional, social, mental, spiritual, and physical well-being.

Magee-Womens Hospital of UPMC in the Community

One of the nation's top-five hospitals specializing in gynecology care

More than half of all babies born each year in Allegheny County are delivered at Magee-Womens Hospital of UPMC.

Bariatric Center of Excellence



Magee-Womens Hospital 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, Magee-Womens Hospital of UPMC 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 Magee-Womens Hospital of UPMC 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.

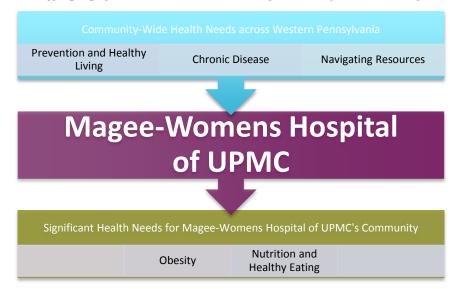
Through the CHNA process, Magee-Women's Hospital of UPMC identified significant health needs for its community. They are:

Topic	Importance to the Community
Obesity	Two-thirds of Allegheny County residents are overweight or obese
Nutrition and Healthy Eating	Obesity, a precursor to many chronic diseases, is a health issue that cuts across all populations, in all stages of life.

UPMC is Responding to the Community's Input

Western Pennsylvania has a diverse range of health needs. Key themes that emerged from the Magee-Womens Hospital of UPMC's 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. Magee-Womens Hospital of UPMC is planning a wide range of initiatives to support prevention and care for chronic disease.
- Navigating Available Resources: Many established health care programs in Magee-Womens Hospital of UPMC's
 community are often untapped due, in part, to social and logistical challenges faced among populations and
 individuals lacking social support systems.
- **Community Partnerships:** Magee-Womens Hospital of UPMC 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 women and infants.

Magee-Womens Hospital of UPMC is Improving Community Health in Measurable Ways:

On April 15, 2013, the Magee-Womens Hospital of UPMC 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.

Addressing Obesity and Promoting Nutrition and Healthy Eating

Goal:	Increase awareness of obesity prevention, nutrition, and healthy eating throughout the community, with a focus on diverse populations.			
Collaborating Partners:	La Leche League, Propel Schools, UPMC Health Plan, "Let's Move" Pittsburgh, Pittsburgh Steelers/NFL, Birth Circle of Pittsburgh, Phipps Conservatory and Botanical Gardens, Grow Pittsburgh, University of California at San Francisco, Carnegie Mellon University, The Berg Center, Girls on the Run			
Target Populations:	Patient Population Communities in Need Hospital Community			
	Pregnant Women and Families Cancer Patients Morbidly Obese	Low-income	Hospital Employees Providers	

- Magee-Womens Hospital of UPMC is promoting obesity awareness and healthy eating by engaging patients during teachable moments, such as during pregnancy or when obesity is having an effect on their daily lives:
 - » In partnership with Health Care Without Harm, the "Food Matters" calendar is provided to all women at their initial prenatal visit. The calendar provides pregnant women and families with tips on cooking and healthy eating, as well as information about the importance of physical activity.
 - » Cancer patients and survivors have access to free individual nutritional counseling through Magee-Womens Hospital of UPMC's Cancer Services Nutrition Education and Support program. Obesity prevention in morbidly obese patients is available through Body Changers, a program that creates a supportive community of likeminded individuals to promote health.
- Magee-Womens Hospital of UPMC is offering programs addressing obesity in low-income populations:
 - » Low income expectant mothers are empowered to choose health-promoting behaviors such as breastfeeding and healthy eating during and post pregnancy through the Centering Pregnancy program available at Magee-Womens Hospital of UPMC. The program is offered in partnership with the Birth Circle of Pittsburgh, a group of community doulas.
- Magee-Womens Hospital of UPMC is promoting healthy eating throughout the hospital community:
 - Patients, hospital staff, and others in the community benefit from Magee-Womens Hospital of UPMC's organic gardens. Food from the gardens is incorporated into meals created for both employees and patients. As venues for education on nutrition and the environment, the gardens provide opportunities to discuss the replacement of heavily processed foods with healthier foods.
 - » Providers are educated on wellness through an annual symposium which introduces new topics surrounding healthy foods and food systems, and strives to create environmentally literate providers.

COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT

I. Objectives of a Community Health Needs Assessment

CHNA Goals and Purpose:

In Fiscal Year 2013, Magee-Womens Hospital of UPMC 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.

Magee-Womens Hospital of UPMC 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 Magee-Womens Hospital of UPMC:

Magee-Womens Hospital of UPMC is a nonprofit, 380-bed acute care specialty womens hospital located in Allegheny County, Pennsylvania. It offers a full range of quality medical services to both women and men in the Pittsburgh region. The hospital provides area residents with access to medical, surgical, and behavioral health care, as well as cuttingedge medical services. In addition to being one of the nation's top five hospitals specializing in women and the leading hospital in Pittsburgh for gynecological care, Magee-Womens Hospital of UPMC is also a Bariatric Center of Excellence and offers other specialized services such as CT imaging, digital mammography, minimally invasive and robotic assisted surgery, and an on-site UPMC CancerCenter. During the Fiscal Year ended June 30, 2012, Magee-Womens Hospital of UPMC had a total of 23,442 admissions and observations, 22,602 emergency room visits, and 17,677 surgeries.

Magee-Womens Hospital of UPMC is a teaching hospital, with residency and fellowship programs in family practice, internal medicine, and many specialty areas. 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 hospital's reach extends across western Pennsylvania through specific ties with UPMC's network of hospitals, as well as with a wide range of local UPMC health care providers, clinics, and community outreach organizations.

Magee-Womens Hospital of UPMC in Your Community



Magee-Womens Hospital of UPMC is a full service womens hospital that provides care to both women and men.

Leading the Way in Women's Health

- Uncompensated care: \$3.1 million.
- Treats more than 1,700 seriously or critically ill babies in the Neonatal Intensive Care Unit, the largest of its kind in Pennsylvania.
- More than half of all babies born each year in Allegheny County are delivered at Magee-Womens Hospital of UPMC.

Playing a Vital Role in the Community

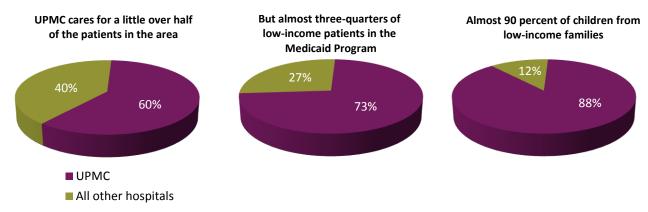
- 2,671 employees, with an economic impact of \$810 million.
- Major sponsor of the Susan G. Komen Race for the Cure, and the National Ovarian Cancer Coalition Walk to Break the Silence.
- A major sponsor of the American Heart Association's Go Red for Women.

Magee-Womens Hospital of UPMC's Community Service and Community Benefit Initiatives:

Magee-Womens Hospital of UPMC 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 Magee-Womens Hospital of UPMC'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, Magee-Womens Hospital of UPMC is committed to serving Medicare and Medicaid patients. In Fiscal Year 2012, these patients represented 41 percent of Magee-Womens Hospital of UPMC's patient population. Magee-Womens Hospital of UPMC 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

- Offering Community Health Improvement Programs and Donations: Magee-Womens Hospital of UPMC provides services to the community through outreach programs, including referral centers, screenings, educational classes, and funding of health professions education all of which benefit patients, patients' families, and the community. Through the 2012 Fiscal Year, the hospital offered more than 250 community health events and programs, including many health fairs and educational events focused on awareness, prevention, and management of chronic disease, such as the Go Red for Women luncheon where women receive education on heart disease, as well as screenings and the breast and ovarian cancer education series. Magee-Womens Hospital of UPMC also has many programs concentrated on expectant and new mothers and their families, like the prenatal email program which provides education on pre- and postnatal health as well as information on healthy lifestyles in general to more than 1,600 families, breastfeeding classes, prenatal yoga, sibling classes, and car seat safety, as well as many programs to support teen mothers. In addition to programs focused on health issues, Magee-Womens Hospital of UPMC also offers many programs which promote workforce development in the community, from formal intern and externship programs for medical professionals, to shadowing and mentoring high school students and others. The amount of Magee-Womens Hospital of UPMC's community services was \$6.2 million in Fiscal Year 2012.
- Anchoring the Local Economy: With deep roots in the community, where more than 500,000 babies have been born since Magee-Womens Hospital of UPMC opened its doors 100 years ago, 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, Magee-Womens Hospital of UPMC has paid more than \$134 million in salaries and benefits to its 2,671 employees in the most recent year and generated a total economic impact of \$810 million.
 Other community programs include:
 - » Conducting health education classes with the Pittsburgh Public Schools to educate teens on important health issues
 - » Development of the Center for Women with Disabilities to make health care more accessible to women with disabilities

II. Definition of the Magee-Womens Hospital of UPMC Community

For the purpose of this CHNA, the Magee-Womens Hospital of UPMC community is defined as Allegheny County. With 66 percent of patients treated at Magee-Womens Hospital of UPMC residing in Allegheny County, the hospital primarily serves residents of this geographic region. By concentrating on the county, Magee-Womens Hospital of UPMC 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 Magee-Womens Hospital of UPMC Live in Allegheny County

County	Magee-Womens Hospital of UPMC %	Medical Surgical Discharges
Allegheny County	65.9%	14,484
All Other Regions	34.1%	7,492
Total Hospital Discharges	100%	21,976

Source: Pennsylvania Health Care Cost Containment Council, FY2012

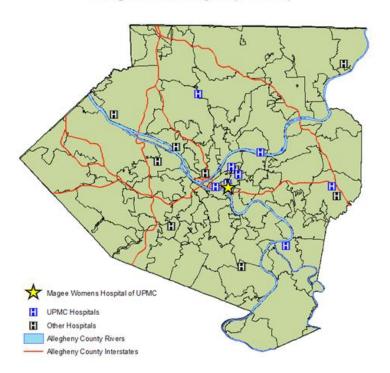
The hospital is situated centrally in the county, in the Oakland neighborhood of the City of Pittsburgh. While the county represents the basic geographic definition of Magee-Womens Hospital of UPMC's community, this CHNA also considered the seven county Pittsburgh Metropolitan Statistical Area, as well as specific populations within the defined community — such as minorities, low-income individuals, and those with distinct health needs.

Existing Healthcare Resources in the Area:

Magee-Womens Hospital of UPMC is one of 8 UPMC licensed hospitals and 16 total hospitals in Allegheny County. Magee-Womens Hospital of UPMC is the primary source of specialty care for women in Allegheny County as well as surrounding counties.

In the immediate service area, Magee-Womens Hospital of UPMC is supported by more than 750 UPMC outpatient offices, in addition to the seven other licensed UPMC hospitals and numerous other UPMC facilities located in the county. These facilities include 22 UPMC CancerCenters, nine UPMC Surgery and UPMC Outpatient Centers, 11 Senior Communities, five Urgent Care Centers, 30 Centers for Rehabilitation Services sites, 51 Imaging Centers, seven Magee-Womens Hospital of UPMC satellite offices, seven Children's Hospital of Pittsburgh of UPMC satellite offices, and more than 600 pediatric, primary, and specialty care doctor's offices.

Hospitals in Allegheny County



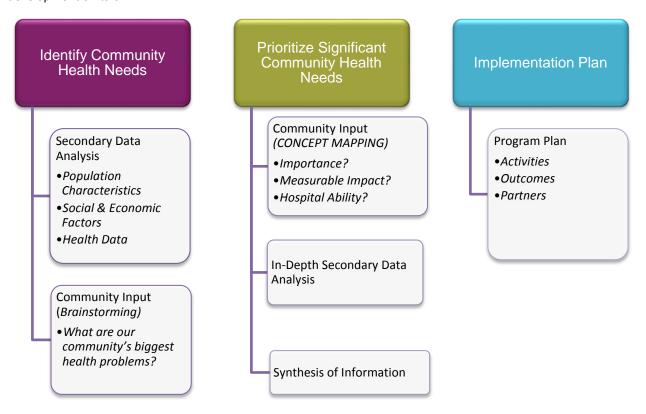
III. Methods Used to Conduct the Community Health Needs Assessment

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," 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,	
	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	Allegheny County Health
	Cancer	by neighborhood, county, state and nation.	Survey, 2009-2010;
	Mental Health		PA Department of Health Behavioral Risk Factors
	Asthma (Childhood)		Surveillance System; Birth, Death, and Other Vital
	Birth Outcomes		Statistics; Cancer Statistics;
Health Behaviors	Obesity (Childhood and Adult)		U.S. Centers for Disease
Data	Alcohol Use		Control and Prevention Behavioral Risk Factors
	Tobacco Use		Surveillance System;
	Sexually Transmitted Disease		National Center for Health Statistics.
Clinical Care Data	Immunization	2007 - 2009 data collected and compared by county, state and nation. 2011 County Health Rankings by County.	Allegheny County Health Survey, 2009-2010;
	Cancer Screening (breast/colorectal)		PA Department of Health Behavioral Risk Factors
	Primary Care Physician Data		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.
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:

In 2010, Allegheny County had a total population of 1,223,348 and a population density of 1,675.6 people per square mile. Women comprised about 52 percent of the total population. Other characteristics of this population in Allegheny County include:

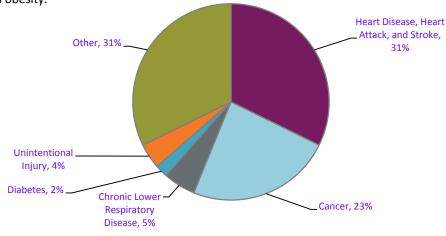
- Women were slightly older than men. Compared to men, women's median age was slightly higher and a higher percentage were 65+ or 85+ (see table below).
- Over one-third of women were of childbearing age (between 15-44 years of age).

Age Distribution of Allegheny County Population, By Gender - 2010				
	Women	Men	Total	
Median Age	43.3	39.3	41.3	
% <15	15.1%	17.1%	16.1%	
% 15-44	37.1%	40.2%	38.6%	
% 45-64	28.5%	28.6%	28.6%	
% 65+	19.3%	14.0%	16.8%	
% 65-74	8.4%	7.2%	7.8%	
% 75-84	7.0%	5.0%	6.1%	
% 85+	3.8%	1.8%	2.9%	

Source: U.S. Census

Chronic Disease and Mortality:

Nearly two-thirds of deaths in Allegheny County are attributable to chronic disease. One of the major risk factors for chronic disease is obesity.



Source: Pennsylvania Department of Health, 2009

Significant Health Needs for Magee-Womens Hospital of UPMC's Community:

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

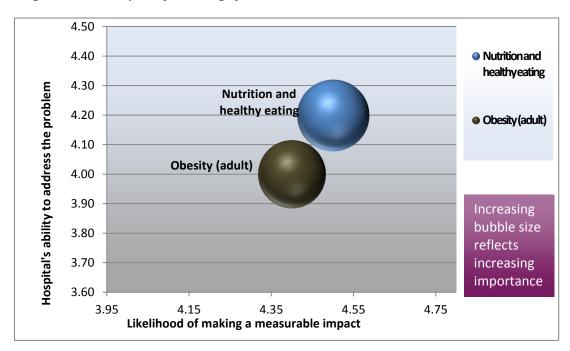
- Chronic Disease
- Prevention and Healthy Living
- Navigating Resources

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

- Obesity
- Nutrition and Healthy Eating

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.

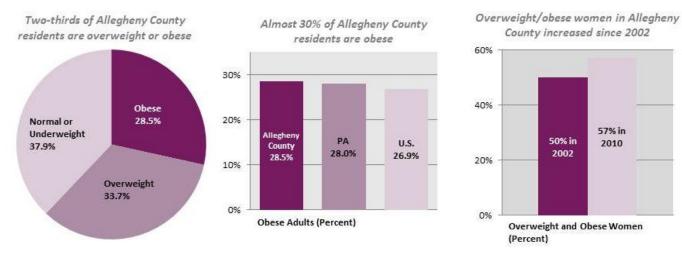




In-depth secondary data analysis reinforced that these health topics were areas of concern for the Magee Women's Hospital of UPMC community. The secondary data findings are illustrated below:

Obesity and Nutrition and Healthy Eating – Importance to the Community

- Nearly two-thirds of the Allegheny County population is overweight or obese, and almost 30 percent of the population is obese with a BMI of 30+.
- In 2009-2010, almost 60 percent of women in Allegheny County were overweight or obese.
- Obesity is an underlying factor associated with many chronic diseases, which account for almost two-thirds of all deaths in Allegheny County.



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

The prevalence of obesity is high. Obesity (body mass index >30) is a prevalent condition in the United States, costly, and an underlying risk factor for many chronic diseases, including diabetes, heart disease, stroke, and cancer. This is of relevance to Allegheny County and the Pittsburgh region where almost 30 percent of residents are obese, and two-thirds of deaths are due to chronic disease.

For women, overweight or obese data trends showed an increase. For women in Allegheny County, being overweight or obese showed a significant increase: 50 percent of women were overweight or obese in 2002, and 57 percent in 2009-2010.

Obesity prevalence is higher in some medically underserved populations, such as low-income individuals and underserved minorities, than others. Certain sub-populations are disproportionately affected by obesity in Allegheny County. Higher percentages of those aged 45-65 (34 percent), those with a high school education or less (31 percent), those with low income (less than \$15,000) (35 percent), and African-Americans (40 percent) were obese. For women specifically, similar patterns were observed, although African-American women reported higher obesity (44 percent).

Obesity is a preventable condition. Obesity is a complex condition that can be influenced by healthy eating and physical activity. A comprehensive and integrated approach is needed to curtail the obesity epidemic both locally and nationally. Thus, providing education and interventions that target particular groups (child-bearing women, pregnant women, those affected by chronic disease, families) and utilize health care providers as advocates for improving healthy eating are approaches that Magee-Womens Hospital of UPMC is already doing but can enhance in the future.

V. Overview of the Implementation Plan

Overview:

Magee-Womens Hospital of UPMC 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 April 15, 2013 the Magee-Womens Hospital of UPMC Board of Directors adopted an implementation plan to address the identified significant health need of obesity within many populations:

- Pregnant Women and Families
- Cancer Patients
- Morbidly Obese Patients
- Underserved Populations (low-income)
- Providers
- Hospital employees

High-Level Overview of Magee-Womens Hospital of UPMC Implementation Plan (Details are in Appendix A.)

Topic	Goal	Collaborating Community Partners
Patient Population: Pregnant Women and New Families, Cancer Patients and Morbidly Obese Patients	Promote breastfeeding and expand educational programs regarding nutrition and healthy eating, which include individual counseling and group classes — such as cooking classes among all patient populations. Encourage increased physical activity and provide information on bariatric surgery for those who are overweight and obese.	La Leche League Propel Schools UPMC Health Plan "Let's Move" Pittsburgh Pittsburgh Steelers/NFL
Underserved Population: Low- Income Individuals	Expand enrollment in Centering Pregnancy™ program, a model of group health that includes health assessment, education & support which targets women at risk for reduced prenatal care and initiation of breastfeeding due to low economic resources.	Birth Circle of Pittsburgh
Hospital Community: Providers, Hospital Staff	Increase participation and knowledge of healthy living with educational events which emphasis on nutrition and healthy lifestyles such as annual provider education, two organic gardens on Magee-Womens Hospital of UPMC's premises along with lunch and learn classes, cooking demonstrations and health fairs.	Phipps Conservatory and Botanical Gardens Grow Pittsburgh University of California at San Francisco Carnegie Mellon University The Berg Center Girls on the Run

VI. APPENDICES

APPENDIX A: Detailed Community Health Needs Assessment Implementation Plans

Priority Health Issue: Addressing Obesity in Many Populations

As the area's only women's hospital, Magee-Womens Hospital of UPMC plays a significant role in the health and wellness of women in the western Pennsylvania region. Based on results of the hospital's Community Health Needs Assessment (CHNA), the following implementation plan provides a population-based approach to addressing improvements in obesity, diet, and nutrition for community residents. It also leverages the hospital's unique role as a provider of health care for women in all stages of life.

Magee-Womens Hospital of UPMC has a robust suite of programs that address obesity across many populations:

Patient Population		Underserved Population	Hospital Comr	nunity	
Pregnant Women/New Families	Cancer Patients	Morbidly Obese	Low Income	Hospital Staff	Providers

Promoting Obesity Prevention in Pregnant Women and Families

Magee-Womens Hospital of UPMC delivers over 50 percent of babies born in Allegheny County, and correspondingly plays a large role in the health and well-being of pregnant women and childbearing families. Being overweight or obese during pregnancy can cause complications for both mother and child. An overweight or obese pregnant woman is more likely to experience miscarriage, still birth, high blood pressure/preeclampsia, gestational diabetes, and complications during labor and birth. Some of these problems, like preeclampsia, can increase the chances of preterm birth. Other problems that can affect the baby of an overweight or obese mother are birth defects — including neural tube defects (NTDs), injury due to the baby being large, death after birth, and obesity during childhood. In addition, helping new mothers return to their pre-pregnancy weight helps reduce the risk of developing diabetes and other related chronic diseases, such as cardiovascular disease.

Encouraging breastfeeding is one of the strategies that Magee-Womens Hospital of UPMC will use to help promote obesity prevention and healthy eating in new mothers and their families. The strategy is also supported by the Institute of Medicine, the Centers for Disease Control and Prevention, the American Academy of Pediatrics, and the American College of Obstetricians and Gynecologists. Infants that breastfeed are less likely to become obese during childhood. This strategy is most effective when breast milk is the exclusive form of nourishment for the infant for the first six months of life. Preconception counseling about healthy behaviors is also associated with an increase in knowledge, as well as changes in attitudes and behaviors about weight gain, physical activity, and nutrition during pregnancy. If a woman is planning to become pregnant and is overweight or obese, it may be extremely helpful to change behaviors towards food and physical activity — and to shed excess weight — before becoming pregnant to avoid the heightened risk of health issues. Magee-Womens Hospital of UPMC offers pre-conception counseling classes, as well as an educational newsletter to address attitudes and behaviors regarding nutrition and encourage exercise and a healthy lifestyle. In addition, Magee-Womens Hospital of UPMC distributes a calendar containing healthy tips and educational information to reinforce this effort.

Obesity: Pregnant Women and Families					
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners	
Breastfeeding Classes & Baby Friendly Initiative	Disseminate consistent, evidence-based breastfeeding information to childbearing families and health professionals (information is disseminated by nursing staff, lactation consultants, and childbirth educators and recognized by World Health Organization and United Nationals Children's Fund). Offer breastfeeding class or online program (Emmi, an online tool that provides complex medical information in easy to understand format) to expectant mothers. Provide breastfeeding education class to RNs. Allow medical and nursing students to shadow lactation consultants. Continue process of achieving a Baby Friendly designation (the hospital is in the Discovery Phase of the 4 D pathway to designation) from UNICEF and the World Health Organization. Utilize multi-disciplinary task force to implement the Ten Steps to Successful Breastfeeding.	Provide evidence-based information to mothers.	Expectant mothers.	La Leche League, Propel Schools, UPMC Health Plan, UPMC fourth year medical students; Robert Morris University; Shadyside Hospital School of Nursing; St. Margaret's School of Nursing; and Carlow University.	
Prenatal Class and Email and Postpartum Class	Provide information about optimal nutrition, healthy food systems, and food security through classes and emails. Advertise classes in the prenatal invitation that is given to all patients at their initial prenatal visit, as well as on Magee-Womens Hospital of UPMC website, Facebook, and flyers distributed during classes. Inform patients about the prenatal email on their initial prenatal visit Send education emails to expectant mothers.	Track number of participants. Conduct and track success of programs through class evaluations.	Expectant mothers and families.		
Group Prenatal Care (Outpatient Clinic Department)	Provide clinical care, information and peer support offered in a group setting (8-12 pregnant mothers). Program is facilitated by a provider.	Provide program.	Expectant mothers.		

Obesity: Pregnant Wome	en and Families			
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Food Matters Calendar 2012	Provide The Food Matters Calendar to expectant mothers and families. The calendar is a tool created by Magee-Womens Hospital of UPMC educators, Physicians for Social Responsibility, and Health Care Without Harm that allows nursing staff to teach effectively in short periods of time, while providing clients with easy-to-use, understandable resources on healthy and affordable foods. The calendar is given to patients at initial prenatal appointment. Each month, the calendar covers topics such as breastfeeding, the importance of organic and local produce to reduce pesticide exposure, the importance of hormone-free dairy products, growing a kitchen garden, and shopping on the periphery of the supermarket.	Provide the Food Matters Calendar. Provide education on healthy lifestyles. Promote families cooking and eating together.	Outpatient Clinic Patients. Expectant mothers and families.	"Let's Move Pittsburgh."

Promoting Obesity Prevention Among Low-Income Families

Due to the additional risk factors associated with poverty, low-income individuals are particularly at risk for becoming overweight and obese. Low-income individuals and families are subject to the same influences as other Americans (sedentary lifestyles, large portion sizes, etc.), but face additional challenges in adopting healthy lifestyles, such as lack of resources and access to healthy foods, fewer opportunities for physical activity, cycles of food deprivation where overeating occurs when food becomes available, high stress levels and the use of food as a coping mechanism, and limited access to health care services and education about healthy choices.

Magee-Womens Hospital of UPMC is addressing these issues through a unique program called "Centering Pregnancy," which focuses on pregnant women and families that are lower income. Due to a lack of resources and more limited access to care and educational resources, low-income women are at risk for reduced prenatal care and decreased initiation of breastfeeding.

Obesity: Low-Inco	Obesity: Low-Income Families					
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners		
Centering Pregnancy™	Conduct health assessment during prenatal visit to identify expectant mothers at risk for reduced prenatal care and decreased initiation of breastfeeding due to low economic resources. Beginning at 16-18 weeks gestation, provide prenatal education and support to at-risk expectant mothers through group sessions facilitated by providers. Offer the program in the following locations: Since 2009: Wilkinsburg Neighborhood Health Center Since 2011: Main Outpatient Clinic	Expand program membership.	At-risk expectant mothers.	Birth Circle of Pittsburgh (Community Doulas).		
	2013: Mt. Oliver Neighborhood Center					

Promoting Healthy Eating in Cancer Patients

Obesity can play a significant role in the incidence, progression, and reoccurrence of many different cancers. Specifically, obesity is associated with an increased risk for breast cancer, colorectal cancer, and endometrial cancer, and is associated with higher cancer mortality rates. In addition to the increased risk of developing cancer, the survival rate of obese individuals is lower once a cancer is detected. Multiple factors contribute to the unfavorable survival rates for obese cancer patients, including higher likelihoods of comorbid conditions and unfavorable tumor characteristics. Another issue which may contribute to lower survival rates for overweight and obese cancer patients is under-dosing of chemotherapy. When a cancer patient goes into remission, obesity may also increase the risk of recurrence. A recent study published in the Journal of Cancer noted that women who were obese at the time of breast cancer diagnosis had a 30 percent higher risk of recurrence, and a nearly 50 percent higher risk of death than those who were normal weight at time of diagnosis.

Magee-Womens Hospital of UPMC has a number of programs to aid in addressing obesity in cancer patients, including individual nutritional counseling sessions for patients, changes in dietary post-operative hospital food orders, educational patient discharge materials, cooking classes, educational lectures, and support for survivors.

Obesity in Cancer I	Patients			
Program	Activities	Outcomes	Target	Partners
	- Additional Control of the Control	Explore external funding so that program can continue to be provided for free. Reduce or maintain readmission rates. Improve or maintain patient satisfaction scores.	Population	r artificis
Women's Cancer Services- Nutrition Education and Support Program	Provide free services including individual nutrition counseling sessions two days/week, a nutrition counselor who makes rounds in the Women's Cancer Center, a nutrition counselor who is available to survivorship clinic patients, nutrition counseling services for lymphedema patients, and a dietitian hotline available Monday through Friday, 2-3pm.	that program can continue to	Cancer patients and survivors.	Magee- Womens Hospital of UPMC Dietary Services, private funder.
Dietary Interventions & Education (gynecologic surgery inpatients)	Provide low-fiber dietary post-operative orders and low fiber diet education to gynecologic surgery inpatients. Offer improved educational materials including pictorial low-fiber diet guide provided by PCS to patients at discharge.		Gynecologic surgery cancer patients.	Dietary Services, UPP, Gynecologic Oncology Nursing Services.
Cooking and Healthy Eating Classes	Provide annual Cooking with the Steelers class for breast cancer patients/survivors. Offer cooking demonstrations and nutrition education classes as part of the monthly Breast and Ovarian Cancer Education Series and the semi-annual Women's Cancer Survivorship Workshops. Provide Wellness for Women Wednesday's pilot program, a community education series on breast health offered March, April, May, and June 2013. Additional topics to include nutrition, exercise, and mammography.		Cancer patients and survivors.	Pittsburgh Steelers/NFL, Dietary Services.

Obesity in Morbidly Obese Patients

Individuals who are morbidly obese are at significantly higher risk for many chronic conditions, including heart disease, stroke, diabetes, cancer, diseases of the lungs, and premature death. Morbid obesity is defined as having a BMI of 40+, which represents about 5 percent of the national population. Due to the fact that the risk factors for chronic disease and premature death are so high in the population, it is critical for these individuals to adopt healthier lifestyle choices.

Magee-Womens Hospital of UPMC is addressing obesity at many different levels. For the morbidly obese patient, the hospital has one of the largest weight loss surgery programs in the country, offering individualized attention and support throughout the entire weight loss journey. For individuals who are obese (BMI between 30 and 39.9), or those who are not interested or are not candidates for bariatric surgery, there are clinical options and community programs to help these individuals lose weight. These initiatives focus on emotional support, exercise, and diet changes necessary to achieve success with long-term weight loss.

Obesity in Morbid	y Obese Patients			
Program	Activities	Outcomes	Target Population	Partners
		Goal-Year 3		
Body Changers	Provide program which is designed to help patients maintain weight loss and increase fitness. Offer monthly memberships at different levels, including one that is free. Program includes educational seminars (Mind over Body: group sessions with Behaviorist), monthly E-newsletter, Destination Education (includes group walks /bike rides), yoga classes, weekly exercise class, cooking demonstrations (includes a tour of the Magee-Womens Hospital of UPMC Gardens), social activities, and Vibrant Veggie Shopping Tours (shopping tour in supermarket with focus on produce, fruits and vegetables, including a tour of the fresh fruit and vegetable section. The chef and registered dietitian then provide a demonstration on how to prepare several seasonal fruits and vegetables). Distribute information about the program to people interested in bariatric surgery, at Health Fairs, and through program website and Facebook page. Collaborate with organizations including the YMCA, JCC, UPMC Health Plan, and United Way (physicians and other health care professionals were invited to the kick-off event).	Expand program.	Bariatric patients. Individuals interested in bariatric surgery. General community. Low-income populations.	UPP Plastic Surgery, Internal Medicine, Magee- Womens Hospital of UPMC Bariatrics.
Bariatric Lifestyle Program	Offer pre-surgical and post-surgical program to patients interested in Bariatric Surgery (Lifestyle program helps people implement the changes which will aid in long-term weight loss success after surgery). Pre-surgical Month Program: Offer series of six consecutive monthly meetings. Meetings include completion of an educational module, weight documentation, monthly goal setting, nutrition assessment, and psychological evaluation. Post-surgical: Provide support groups and diet support behaviorist sessions.	Expand program Explore development of comprehensive medical weight management program to include individualized weight loss plans for patients. Explore potential to offer program to patients who are obese but not candidates for bariatric surgery, patients who experienced weight regain after bariatric surgery, and other patient populations, including patients receiving pregnant women, postpartum women, patients with PCOS, etc.	Bariatric patients and those interested in bariatric surgery.	Internal Medicine.

Educating Providers to Promote Obesity Prevention

Health care providers can support obesity prevention and serve as role models in various ways. Patients depend on health care providers to provide information, which makes "educating the educators" central to efforts to address obesity. For health care providers to act as advocates for their patients, they must be educated about all of the components and risk factors related to obesity so they can best communicate this information to patients.

Magee-Womens Hospital of UPMC is helping to support provider education through an annual education initiative which introduces new topics surrounding healthy foods and food systems. The goal is to create environmentally literate providers. Environmental factors do have impacts on health and this is an area of importance that few people may be aware of. In addition, the hospital promotes the importance of measuring BMI and providing education surrounding what BMI means and how it can be improved as a standard part of an appointment with a patient.

Obesity: Provider Education					
Drogram	Activities	Outcomes		Dorthors	
Program	Activities	Goal-Year 3	Target Population	Partners	
Food Matters Symposium for Health Care Providers 10,000 Tables	Provide annual education with an emphasis on healthy foods and food systems to create environmentally literate health care providers. Begin program with physician grand rounds. Program includes lectures by providers and researchers who study environmental factors of health.	Increase number of attendees each year. Positive evaluations. Implement clinically what has been learned.	Providers.	Phipps Conservatory and Botanical Gardens, Grow Pittsburgh, University of California at San Francisco, Carnegie Mellon University, The Berg Center.	
Girls on the Run	Provide program which encourages girls to be healthy and confident using an experience-based curriculum which integrates running. Two races are conducted annually.	Increase or maintain number of participants.	Girls from third to eighth grade.	Girls on the Run International.	

Promoting Obesity Prevention in Employees

Magee-Womens Hospital of UPMC has several innovative initiatives such as the development of two organic gardens on the hospital's grounds. The food from the gardens is incorporated into the meals created for both employees and patients. The gardens also serve as venues for education on nutrition and the environment. Replacing heavily processed foods with fresh produce and organic food, along with adopting organic living strategies, helps to prevent obesity.

Obesity in Employ	ees			
Program	Activities	Outcomes Goal-Year 3	Target Population	Partners
Magee-Womens Hospital of UPMC Organic Gardens	Provide ongoing maintenance to gardens which serve as a venue for education and nutrition. Incorporate organic vegetables and herbs in both patient and staff meals. Offer healthy choices including produce from the gardens at Magee-Womens Hospital of UPMC cafeteria. Provide information about pesticide exposures and health, growing gardens at home, and healthy eating through signage in the gardens.	Expand participation in lunch and learn program. Improve survey results. Expand volume of harvest (coordinate seeding and minimize waste).	Patients. Staff. Community.	Phipps Conservatory and Botanical Gardens.
Women's Health Expo	Staff table at Women's Expo at Monroeville Expo Mart. Provide information on importance of healthy lifestyle, bariatric surgery, and BMI as it relates to medical and surgical management of obesity.	Provide referral services when an individual's BMI measurement indicates obesity.	General Community. Women.	
Go Red for Women Event	Staff a table and distribute information regarding nutrition and the importance of maintaining a healthy lifestyle at the Go Red for Women Event sponsored by the American Heart Association. Provide participants with BMI screening.	Begin to offer referral services when an individual's BMI measurement indicates obesity.	General Community. Women.	
Cooking Demonstrations	Provide cooking demonstrations including step- by step preparation of a quick, easy, and healthy meal. Discuss nutritional value of the meal, obstacles to preparing healthy meals, and tips for healthy shopping.	Develop a follow up survey tool to determine if the class improved participants eating behaviors.	General Community.	

Outcomes and Evaluation of Hospital Implementation Plans:

UPMC engaged with researchers from Pitt Public Health at the University of Pittsburgh 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)
Obesity Post-Pregnancy	Increase— • Breastfeeding, healthier diets, exercise after birth • Postpartum visits	Decrease— • Persistent weight gain following birth

APPENDIX B: Detailed Community Health Needs Profile

Population Demographics:

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

^{*}Reported as single race; **Reported as any race

Source: US Census, 2010

Social and Economic Factors:

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

^{*}Based on those ≥25 years of age; **Based on those ≥16 years and in the civilian labor force Source: US Census, 2010

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

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

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

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

Characteristics	Allegheny County	Pennsylvania	United States	Healthy People 2020
Morbidity				
Diabetes (%)	11.0	9.0	8.0	NA
Mental Health (Mental health not good ≥1 day in past month) (%)	38.0	35.0	NA	NA
Low Birthweight (% of live births)	8.1	8.4	8.2	7.8
Health Behaviors				
Obesity (Adult) (%)	28.5	28.0	26.9	30.6
Childhood Obesity (Grades K-6) (%)	15.9	16.8	17.4	15.7
Childhood Obesity (Grades 7-12) (%)	15.0	18.2	17.9	16.1
Excessive Alcohol Use (%)	33.0	17.0	15.8	24.4
Current Tobacco Use (%)	23.0	20.0	17.9	12.0
STDs(Gonorrhea per 100,000)*	175.3	103.8	285	257
Clinical Care (%)				
Immunization: Ever had a Pneumonia Vaccination, 65+ (%)	78	70	68.6	90
Cancer Screening				
Mammography (%)	59.0	63.0	75.0	81.1
Colorectal Screening (%)	66.0	63.0	65.0	70.5
Primary Care Physician: Population (Ratio)	1:638	1:1,067	NA	NA
Receive Prenatal Care in First Trimester (%)	87.1	70.9	71.0	77.9
Physical Environment				_
Access to Healthy Foods (%)	66	57	NA	NA
Access to Recreational Facilities	16	12	NA	NA

Sources:

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

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

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

*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:

Magee-Womens Hospital of UPMC, 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 Magee-Womens Hospital of UPMC:

Magee-Womens Hospital of UPMC 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 Magee-Womens Hospital of UPMC 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 Magee-Womens Hospital of UPMC community.

The Magee-Womens Hospital of UPMC 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 Magee-Womens Hospital of UPMC 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:

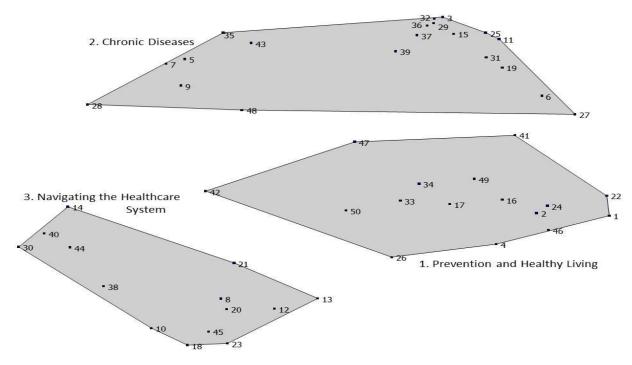
Does the Hospital have the ability to address this problem? (1 = no ability; 5 = great ability)

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 Health Care 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 Magee-Womens Hospital of UPMC. Magee-Womens Hospital of UPMC 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).

Magee-Womens Hospital of UPMC's Community Advisory Council included representatives from the following organizations:

- Adagio Health Care, Pittsburgh, PA
- Magee-Womens Hospital Foundation, Pittsburgh, PA
- Phipps Conservatory, Pittsburgh, PA
- Superior Court of PA, Judge, Pittsburgh, PA
- Susan G. Komen Race for the Cure, Pittsburgh Affiliate, Pittsburgh, PA
- U.S. District Court, Judge, Pittsburgh, PA
- · WellWoman Media, Pittsburgh, PA

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

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

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

UPMC also invited representatives from the following organizations to participate:

- Allegheny Conference on Community Development
- Duquesne University
- Heritage Community Initiatives
- HI-HOPE (Hazelwood Initiative)
- Kingsley Association
- Pennsylvania Psychological Association
- PERSAD
- Salvation Army of Western Pennsylvania
- The Pennsylvania Health Law Project