



Community Health Needs Assessment *And* Community Health Strategic Plan

June 30, 2016

TABLE OF CONTENTS

EXECUTIVE SUMMARY	Page 3
I. Objectives of a Community Health Needs Assessment	Page 9
II. Definition of the Children’s Hospital of Pittsburgh of UPMC Community	Page 10
III. Methods Used to Conduct the Community Health Needs Assessment	Page 11
IV. Results of the Community Health Needs Assessment and In-Depth Community Profile	Page 16
V. Overview of the Implementation Plan	Page 21
VI. Appendices	
Detailed Implementation Plan	Page 23
Detailed Community Health Needs Profile	Page 27
Input from Persons Representing the Broad Interests of the Community	Page 30
Concept Mapping Methodology	Page 35

EXECUTIVE SUMMARY

Children’s Hospital of Pittsburgh of UPMC Plays a Major Role in its Community:

Children’s Hospital of Pittsburgh of UPMC is a nonprofit, 315-bed acute-care teaching hospital located in Pittsburgh, Pennsylvania. The state-of-the-art facility — opened in 2009 — is a unique resource that provides compassionate medical care to the youngest and most vulnerable patients in Allegheny County and the region. Children’s Hospital of Pittsburgh of UPMC is renowned for its outstanding clinical services, research programs, and medical education, and for helping to establish standards of excellence in pediatric care. The hospital is nationally ranked in the top-10 children’s hospitals by *U.S. News & World Report*.

As a primary source of care for children and adolescents in western Pennsylvania, Children’s Hospital of Pittsburgh 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 hospital’s network of community-based family support facilities, the Family Care Connection Centers (FCC). FCCs, located in five low-income neighborhoods around the City of Pittsburgh, foster the development of young children in low-income, at-risk families by providing training and learning opportunities for both children and parents, strengthening each in their roles towards building a strong and successful family. For 2015, FCC’s served about 450 families with approximately 700 children.

Children’s Hospital of Pittsburgh of UPMC in the Community

Providing more than \$20 million in uncompensated care per year

More than 150,000 people were served through community benefit programs in Fiscal Year 2015.

UPMC cares for 86 percent of children from low-income families in Allegheny County – most of them at Children’s Hospital of Pittsburgh of UPMC.



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

Identifying the Community’s Significant Health Needs:

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

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

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

Addressing the Community's Significant Health Needs:

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

- **Childhood Obesity**
- **Preventive Health and Wellness**
- **Immunizations**

Three years later, when the Fiscal Year 2016 CHNA was conducted, Children's Hospital of Pittsburgh of UPMC affirmed the following significant health needs, and will continue to support immunization efforts as part of Preventive Health and Wellness:

- **Childhood Obesity**
- **Preventive Health and Wellness**
- **Behavioral Health**

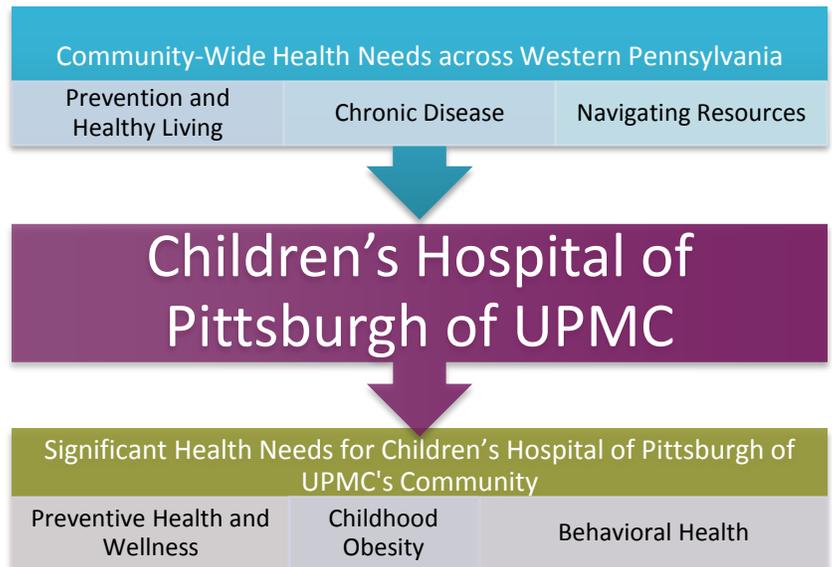
On June 7, 2016, the Children's Hospital of Pittsburgh of UPMC Board of Directors adopted an implementation plan to address the significant health needs identified in the Fiscal Year 2016 CHNA, and to set measurable targets for continued improvement. The plan drew support from an array of community partners, as well as from the larger UPMC system. This plan builds upon the Fiscal Year 2013 plan, recognizing that significant health issues will generally need more than two to three years to show meaningful improvement.

Topic	Importance to the Community
Childhood Obesity	Obesity is a risk factor for many chronic diseases, including heart disease, diabetes, and cancer. Being overweight and obese are prevalent among children both nationally and locally — almost one-third of students attending schools in Allegheny County are overweight or obese.
Preventive Health and Wellness	The foundations for good decision-making are developed when children and adolescents are in their formative years — especially as they relate to distinguishing between healthy and risk-taking behaviors, and chronic disease prevention.
Behavioral Health	Prevention, early diagnosis, and management of behavioral health issues can enhance the quality of life of those affected, including individuals, families, and communities.

Collective Impact Across Western Pennsylvania:

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

- **Focus on a Few High-Urgency Issues and Follow-Through:** The hospital is concentrating on a limited number of significant community health needs, and has developed concrete plans to chart measurable improvements.
- **Chronic Disease Prevention and Care:** Nearly two-thirds of deaths in the community are attributable to chronic disease. Children’s Hospital of Pittsburgh of UPMC is planning a wide range of prevention and chronic disease support activities.
- **Navigating Available Resources:** Established health care programs in Children’s Hospital of Pittsburgh 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:** Children’s Hospital of Pittsburgh 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 include population-focused health insurance products and comprehensive programs and resources targeted at areas including seniors and children.



PROGRESS REPORT 2013-2016: CHILDHOOD OBESITY

GOAL: Children's Hospital of Pittsburgh of UPMC is increasing awareness about healthy eating and physical activity.

STRATEGY:

The hospital is developing approaches to address childhood obesity, particularly in low-income neighborhoods.

To achieve this goal, Children's Hospital of Pittsburgh of UPMC is targeting families who use services at Family Care Connection (FCC) Centers. FCCs are support centers that foster the development of young children and are located in five low-income neighborhoods throughout Allegheny County, reaching about 450 families, including 700 children. In partnership with the FCC network, the hospital is helping increase knowledge of healthy lifestyle choices by:

- » Adapting weight management approaches to serve FCC community members' needs
- » Establishing policies at FCCs to promote healthy lifestyles among both FCC staff and FCC families
- » Educating FCC staff and FCC families about nutrition and physical activity

PROGRESS:

The hospital is promoting a healthy lifestyle culture at local FCCs.

Adapting weight management approaches for FCC community members' unique needs

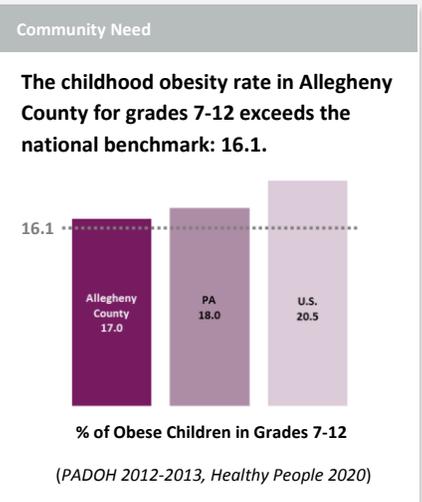
The hospital is adapting its *Healthy Habits 4 Life*, a clinically-based program to help promote obesity prevention in FCCs. *Healthy Habits 4 Life* is a family-centered program that provides a framework for children and families to work together to develop and maintain healthy lifestyles. Nutrition education and physical activity have been incorporated into FCC programming, such as Kindergarten Readiness classes, parenting support groups, and FCC staff training.

Providing an environment that supports healthy lifestyles among the FCC community

Several new efforts encourage healthy eating and physical activity within the FCC environment. New guidelines about healthier meals and snacks served at FCC programs and events have not only improved in-center foods, but also model choosing low-salt, low-fat, and sugar-free options, such as grilled instead of fried chicken, and water or milk in place of soda. In addition, FCC families can now meet with health coaches and behavioral therapists for support. Finally, FCC families participated in a survey to assess their needs, and the findings helped launch additional efforts, including: a monthly newsletter; new classes; and walking groups.

Engaging FCC families to embrace healthier eating and learn about community resources

The hospital is providing evidence-based nutrition education that aligns with FCC families' needs. For example, the hospital created a budget-conscious recipe book to support healthy food purchases at local stores, and developed approaches to integrate healthy lifestyle education into home visits. In addition, the hospital is engaging with community organizations, such as the Allegheny County Health Department and the Greater Pittsburgh Community Food Bank, to increase awareness about food assistance programs.



PROGRESS REPORT 2013-2016: PREVENTIVE HEALTH AND WELLNESS

GOAL: Children’s Hospital of Pittsburgh of UPMC is building relationships with schools to enhance preventive health and wellness.

STRATEGY:

The hospital is helping to promote preventive health and wellness efforts in school settings.

To achieve this goal, Children’s Hospital of Pittsburgh of UPMC is targeting children, their families, and their schools. Children’s Hospital of Pittsburgh of UPMC is establishing new partnerships with Pittsburgh Public Schools (PPS) and other community organizations to build healthier in-school and out-of-school environments. Efforts include:

- » Increasing the number of schools that partner with the Healthy Schools Program (HSP)
- » Developing Wellness Committees for each school
- » Partnering with community organizations to promote preventive health and wellness in school-aged children

PROGRESS:

The hospital is helping to implement healthy initiatives in schools.

Launching the Healthy Schools Program at 19 Pittsburgh Public Schools

During the last three years, the hospital has developed partnerships with the Pittsburgh Public School District, and is now implementing the Healthy Schools Program (HSP) in 19 schools. The HSP is a national, evidence-based program to support healthy living among school-aged children. To implement this initiative, Children’s Hospital of Pittsburgh of UPMC has provided trainings and technical assistance to school staff. The hospital is helping each school form Wellness Committees and using the Center for Disease Control and Prevention’s School Health Index to assess school environments and develop action plans to promote healthy eating, active living, and a positive school climate.

Integrating smarter lunchroom strategies in schools

The hospital is also helping all 54 Pittsburgh Public Schools implement healthier food options for students, from improving the visibility of fruits and vegetables to encouraging drinking white versus flavored milk. Since implementation of the program, increases have been demonstrated in students drinking white milk and choosing vegetables.

Kids in Pittsburgh are more active during out of school time environments

The hospital has teamed up with the Pittsburgh Parks Conservancy to create a fun, dynamic way to “prescribe” park use to local youth. In addition, the hospital and fitUnited of United Way of Allegheny County are partnering to help create healthier out of school time environments. A total of 12 after-school sites are participating in the Healthy Out of School Time (HOST) initiative.

Community Need

UPMC cares for **9 out of 10** children from low-income families in Allegheny County – most of them at Children’s Hospital of Pittsburgh of UPMC.



(SOURCE, PHC4, Fiscal Year 2015)

The number of schools in the Healthy Schools Program continues to increase.



PROGRESS REPORT 2013-2016: IMMUNIZATIONS AND VACCINATIONS

GOAL: Children's Hospital of Pittsburgh of UPMC is promoting awareness about the importance of immunizations.

STRATEGY:

The hospital is leading efforts to educate community members about immunizations.



To achieve this goal, Children's Hospital of Pittsburgh of UPMC is targeting families and caregivers of school-aged children. The hospital created and implemented new initiatives to educate community members about immunizations and vaccinations. Hospital efforts include:

- » Increasing awareness and understanding about the importance of immunizations
- » Using a Care Mobile to deliver immunizations to underserved neighborhoods

PROGRESS:

Children's Hospital of Pittsburgh of UPMC is making a measurable impact in its community.

Take Care and Immunize campaign video earned more than **365,000** views

The hospital developed and launched a public awareness campaign to reinforce the importance of vaccinating children, and to assure the community that vaccines are safe. This comprehensive immunization awareness initiative reached community members through various types of messaging, including television, radio, and social media. The campaign also maintains a dedicated website that provides resources about the benefits and safety of vaccines.

Reaching more than **23,000** community members on social media

In response to national news about a measles outbreak, the hospital rapidly assembled and promoted evidence-based materials about the importance of getting immunized against measles. This quick response reached more than 23,000 individuals through social media, demonstrating the effectiveness of the hospital's new immunization campaign.

Providing **1,676** immunizations to help keep kids in school

The Children's Hospital of Pittsburgh of UPMC's Ronald McDonald Care Mobile is a state-of-the-art pediatric primary care center on wheels. Health care providers from Children's Hospital of Pittsburgh of UPMC provide care to children who are unable to visit a doctor regularly. During Fiscal Years 2014 and 2015, the Care Mobile administered 1,676 immunizations to 622 patients, helping ensure that school-aged children are up-to-date on their vaccinations.

COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT

I. Objectives of a Community Health Needs Assessment

CHNA Goals and Purpose:

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

Children’s Hospital of Pittsburgh of UPMC has many long-standing initiatives focused on improving the health of its community. UPMC approached this CHNA process as an opportunity to evaluate and assess needs through a formalized, rigorous, and structured process to ensure that health improvement efforts and resources are aligned with community health priorities. Goals of the CHNA were to:

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

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

Description of Children’s Hospital of Pittsburgh of UPMC:

Children’s Hospital of Pittsburgh of UPMC is a nonprofit, 315-bed acute-care children’s hospital in Allegheny County, Pennsylvania. It offers a full range of quality pediatric and adolescent medical services to the people of the western Pennsylvania region. The hospital provides area residents with access to medical, surgical, behavioral health, and transitional care, as well as specialized services such as CT imaging and minimally invasive surgery. During the Fiscal Year ended June 30, 2015, Children’s Hospital of Pittsburgh of UPMC had a total of 20,725 admissions and observations, 79,980 emergency room visits, and 19,975 surgeries.

In addition, Children’s Hospital of Pittsburgh of UPMC provides the Family Care Connection Centers with general and specialized social services, as well as community benefit programs, such as educational programs, that reached more than 150,000 individuals in Fiscal Year 2015.

Children’s Hospital of Pittsburgh of UPMC is a teaching hospital, with residency programs in specialized pediatric areas. It is also part of UPMC, one of the country’s leading Integrated Delivery and Finance Systems (IDFS), which positions the hospital to share its expertise within the larger organization.

VITAL STATISTICS	JOB AND STRENGTHENING THE LOCAL ECONOMY
Fiscal Year 2015	
Licensed Beds 315	Children's Hospital of Pittsburgh of UPMC Employees 3,043
Hospital Patients 20,725	Community Benefits Contributions \$71 million
Emergency Dept. Visits 79,980	Free and Reduced Cost Care \$21 million
Total Surgeries 19,975	\$1.1 billion Total Economic Impact of Hospital Operations
Affiliated Physicians 609	

II. Definition of the Children’s Hospital of Pittsburgh of UPMC Community

For the purpose of this CHNA, the Children’s Hospital of Pittsburgh of UPMC community is defined as Allegheny County. Nearly 37 percent of patients treated at Children’s Hospital of Pittsburgh of UPMC reside in Allegheny County. By concentrating on the county, Children’s Hospital of Pittsburgh of UPMC can consider the needs of its patients, and do so in a way that allows accurate measurement using available secondary data sources.

Where Patients Treated at Children’s Hospital of Pittsburgh of UPMC Live

County	Children’s Hospital of Pittsburgh of UPMC %	Medical Surgical Discharges
Allegheny County	36.8%	4,526
All Other Regions	63.2%	7,775
Total Hospital Discharges	100%	12,301

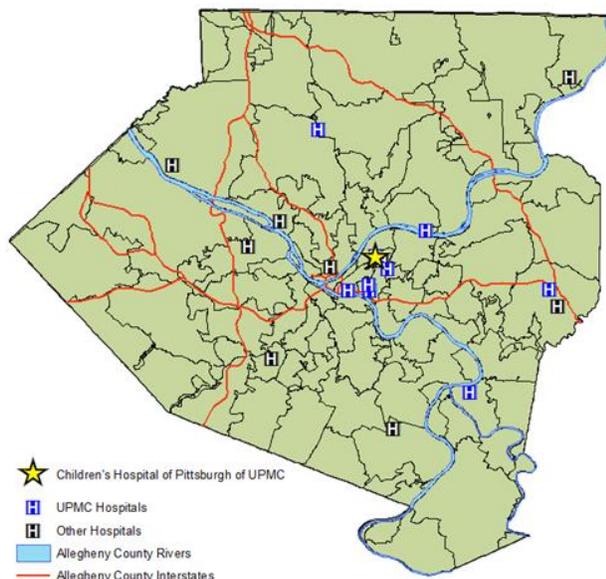
Source: Pennsylvania Health Care Cost Containment Council, Fiscal Year 2015

The hospital is situated centrally in the county, in the Lawrenceville neighborhood of the City of Pittsburgh. While the county represents the basic geographic definition of Children’s Hospital of Pittsburgh of UPMC’s community, the hospital has a broader reach throughout the seven county Pittsburgh Metropolitan Statistical Area (MSA) as the region’s largest specialty children’s hospital. This CHNA also considered characteristics of the MSA, as well as specific populations within the defined community — such as minorities, low-income families, and those with distinct health needs.

Existing Healthcare Resources in the Area:

Children’s Hospital of Pittsburgh of UPMC is one of eight UPMC licensed hospitals and 16 total hospitals in Allegheny County. It is also the largest children’s hospital, and therefore the primary source of inpatient care for children in Allegheny County as well as surrounding counties.

Hospitals in Allegheny County



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

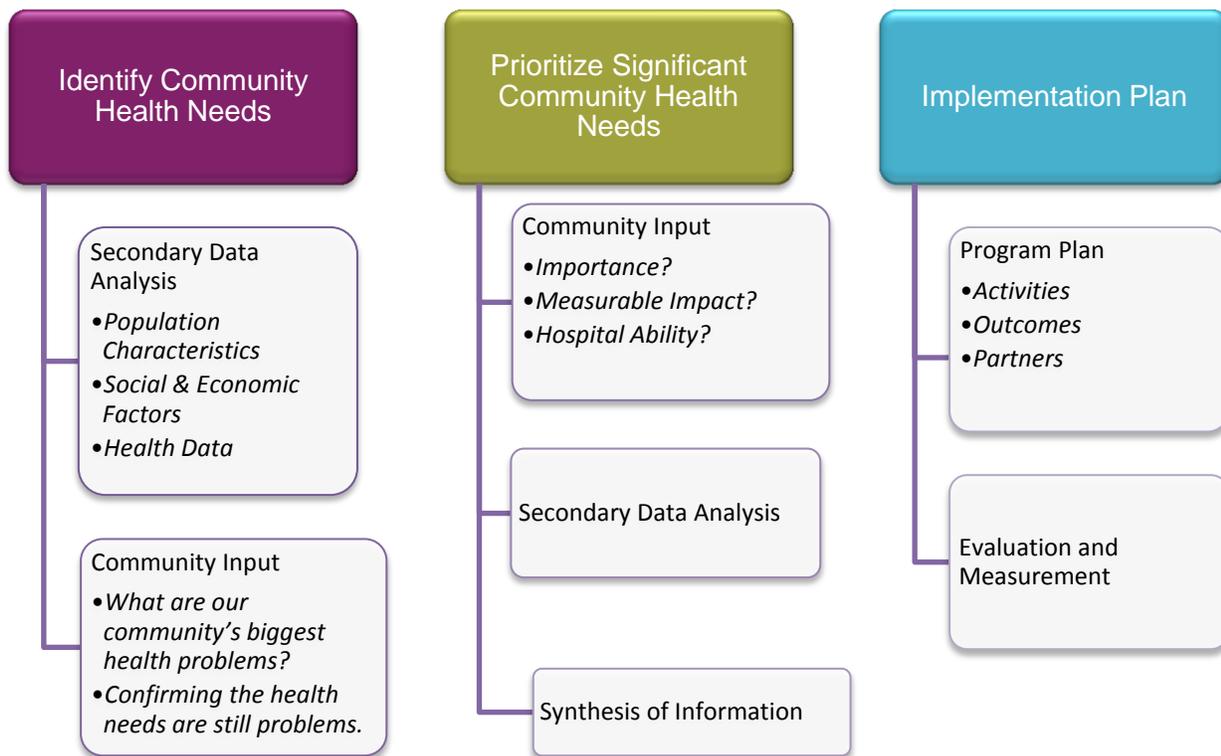
III. Methods Used to Conduct the Community Health Needs Assessment

Overview:

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

Framework for Conducting the CHNA:

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



Secondary Data Sources and Analysis:

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

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

Publicly Available Data and Sources Used for Community Health Needs Assessment

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

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

Information Gaps Impacting Ability to Assess Needs Described:

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

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

Community Input:

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

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

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

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

The full community input survey process consisted of multiple stages:

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

Synthesis of Information and Development of Implementation Plan:

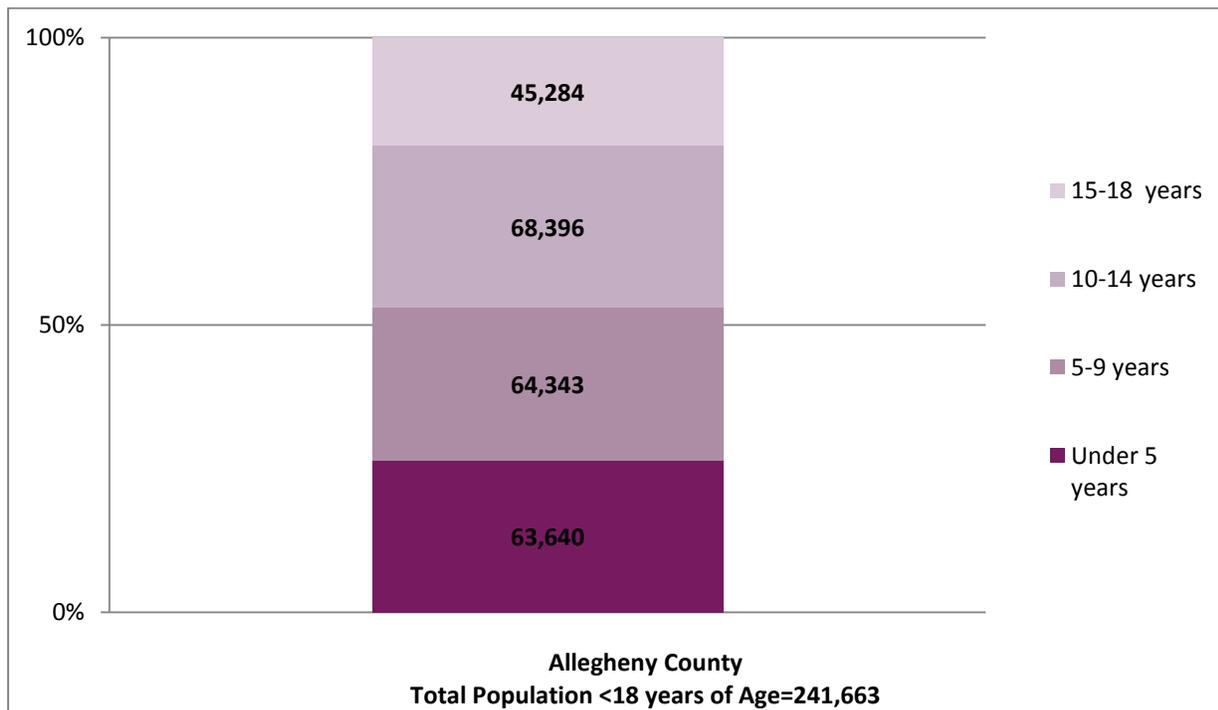
In the final phase of the process, the community input survey results were summarized by experts from Pitt Public Health and merged with results gathered from the analysis of publicly available data. Through this process, UPMC hospital leadership identified a set of significant health needs that are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

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

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

Characteristics of the Community:

More than half of the under-18-years-of-age population in Allegheny County was younger than 10 years of age: In 2010, about 20 percent, or about 240,000 residents in Allegheny County, were less than 18 years of age—similar to the percentage in the Pittsburgh region, but slightly lower than state (22 percent) and national (24 percent) figures. More than half of this age group (52 percent) were younger children, or those less than 10 years of age (see figure below).



Source: U.S. Census

A significant number of children are medically underserved:

- **Although Allegheny County is economically stable, there are concentrations of medically underserved individuals — especially children.**
 - » 15 percent of children in Allegheny County live in poverty
 - » 25 percent of children in Allegheny County live in households receiving public assistance
 - » 28 percent of children in Allegheny County are covered by Medicaid, and an additional 12,220 children in Allegheny County are covered by Pennsylvania’s Children’s Health Insurance Program (CHIP)
- **Children’s Hospital of Pittsburgh of UPMC is the primary health care provider for children living in Allegheny County across all of these demographic categories.**

Social and Economic Population Demographics				
	Allegheny County	Pittsburgh MSA	Pennsylvania	National
Percent Children (<18) in Poverty*	15.1%	16.8%	19.1%	21.6%
Percent Children Living in Households that Receive Public Assistance*	25.4%	26.6%	26.0%	26.7%

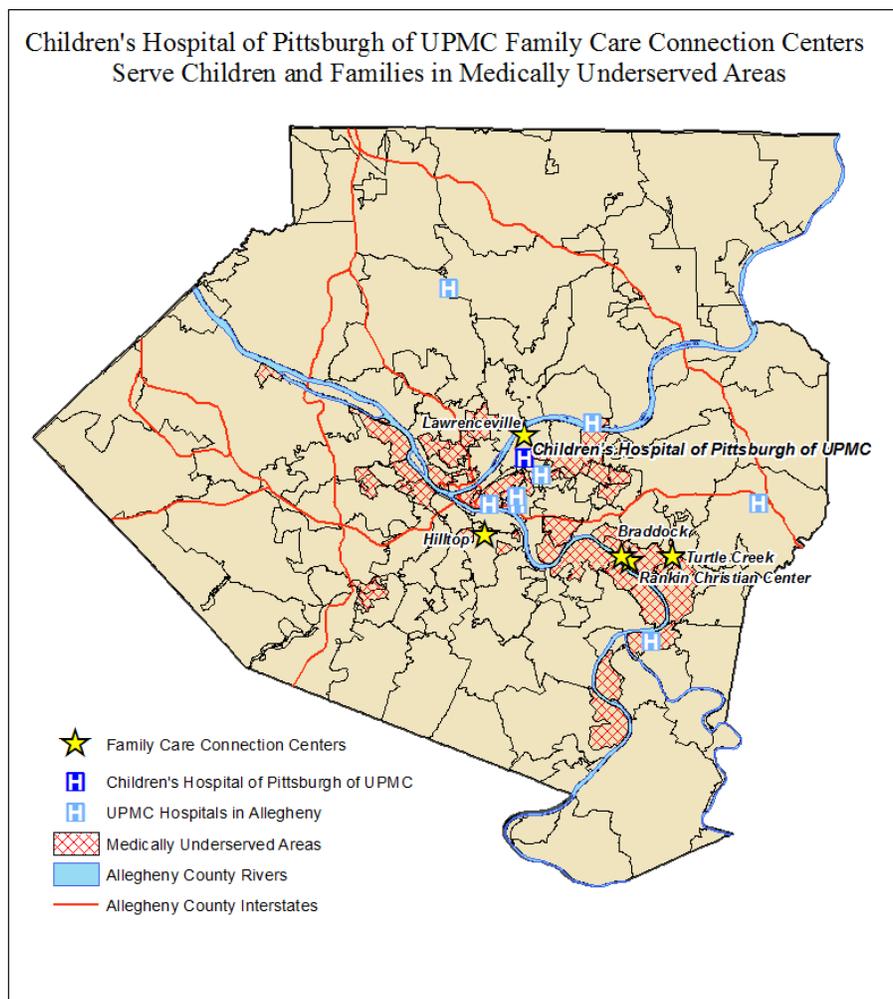
*Among children in households. Source: U.S. Census

Many of the neighborhoods surrounding Children's Hospital of Pittsburgh of UPMC are federally designated as Medically Underserved Areas (MUAs).

The following factors are considered in the determination of MUAs:

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

Children's Family Care Connection Centers provide services to families in many of these neighborhoods (see map).



Source: Health Resources and Services Administration, 2015

Significant Health Needs for Children's Hospital of Pittsburgh of UPMC's Community:

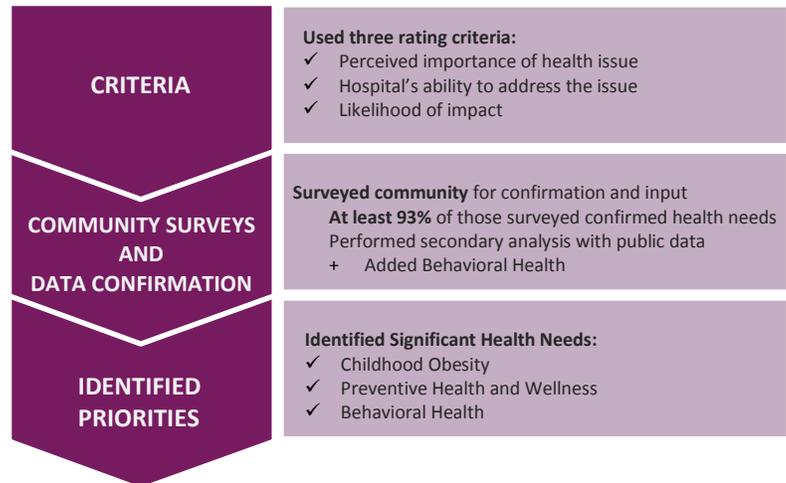
Concept mapping input was deployed across all UPMC hospital communities within western Pennsylvania and yielded three overarching themes to contextualize the health care needs of the community:

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

For Children's Hospital of Pittsburgh 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:

- **Childhood Obesity**
- **Preventive Health and Wellness**
- **Behavioral Health**

Prioritizing Community Health Needs



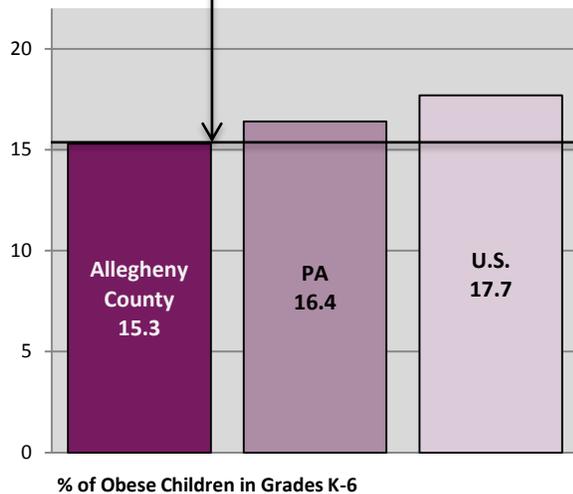
Children's Hospital of Pittsburgh of UPMC Significant Health Needs:

In-depth secondary data analysis reinforced that these health topics were areas of concern for the Children's Hospital of Pittsburgh of UPMC community.

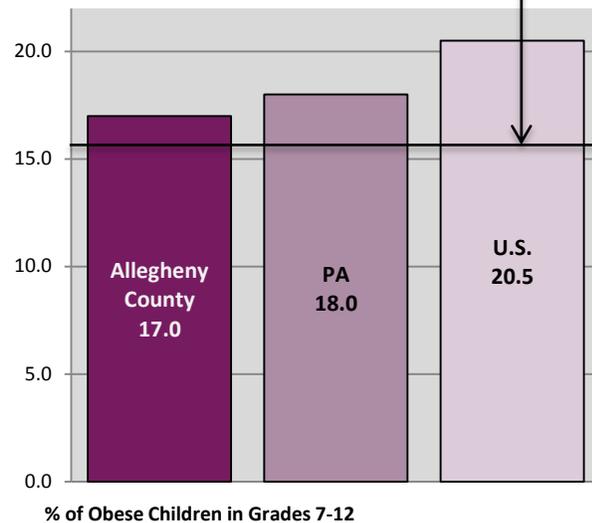
Childhood Obesity – Importance to the Community:

- **Obesity is a risk factor for many adult chronic diseases, including heart disease, diabetes, and cancer.**
- **Being overweight and obese are prevalent among children both nationally and locally—almost one-third of students attending schools in Allegheny County were overweight or obese.**
- **Childhood obesity in children grades 7 through 12 exceeds benchmarks.**

Childhood Obesity Rate in Allegheny County for Grades K-6 is Below the State, Nation, and Benchmark: 15.7



Childhood Obesity Rate in Allegheny County for Grades 7-12 Exceeds National Benchmark: 16.1



Sources: Pennsylvania Department of Health, 2012-2013; Healthy People 2020

Childhood obesity is a concern in Allegheny County and across the Pittsburgh region: Childhood obesity is a prevalent condition both locally and nationally. In Allegheny County, during the 2012-2013 school year, 15 percent of school-aged children in grades K through 6, and 17 percent of children in grades 7 through 12, were obese. In the same year, nearly 33 percent of children in Allegheny County in both age groups were overweight or obese. Obesity rates for older children in Allegheny County exceeded national benchmarks.

Childhood obesity is higher in some sub-populations, especially underserved minorities, more so than others:

Publicly available local data on childhood obesity for sub-populations is limited. National data, however, demonstrated that racial/ethnic groups had higher percentages of obesity. In 2013, 15.7 percent of African-American children, 15.1 percent of Hispanic children, and 13.1 percent of White children were obese.

Childhood obesity can be prevented through healthy eating and physical activity: Local data on healthy eating and physical activity are limited for children. However, national data show that, for high school students, 7 percent did not eat vegetables, 5 percent did not eat fruit, and 15 percent were not physically active. More so, data showed differences between racial groups. A low percentage of White high school students did not eat vegetables (5 percent), fruit (5 percent), and did not engage in physical activity (13 percent). In comparison, a higher percentage of African-American high school students did not eat vegetables (11 percent), fruit (7 percent), and did not engage in any physical activity (22 percent). Children's Hospital of Pittsburgh of UPMC has many obesity prevention activities, and by focusing efforts on younger age groups and their families, including underserved minorities, the hospital may take a leading role in curbing obesity rates in Allegheny County.

Preventive Health and Wellness – Importance to the Community – Setting the Stage for Good Health Habits:

Childhood and adolescence are favorable ages to develop healthy behaviors: The foundations for good decision-making are being developed when children and adolescents are in their formative years — particularly as they relate to distinguishing between healthy and risk-taking behaviors and chronic disease prevention. Prevention and healthy behaviors are important factors in producing individuals who are healthier at all stages of life. When these behaviors are learned at a young age, it is more likely they will become lifelong habits. Through preventive health and wellness education during childhood, there is the potential to arm children with the education needed to avoid certain chronic diseases and/or injuries, which are causes of death for more than two-thirds of adults currently. Children’s Hospital of Pittsburgh of UPMC continues to support preventive health and wellness programs, including childhood immunizations, injury prevention, literacy, vision and dental, and asthma prevention and management.

Behavioral Health – Importance to the Community:

- **Behavioral health includes mental health (state of well-being) and mental illness (diagnosable mental disorders).**
- **More than 18 percent of U.S. adults have a mental illness. In addition, millions of U.S. children and adolescents live with a mental disorder.**
- **In Allegheny County, about 36.4 percent of children and adolescents in grades 6 through 12 “felt depressed or sad most days in the past 12 months.”**
- **Prevention and early diagnosis of behavioral health issues may decrease the risk for or mitigate the worsening of other chronic diseases. Management of existing behavioral health issues can increase the quality of life for those living with these issues.**

Behavioral health affects many individuals: National data suggest that more than 18 percent of U.S. adults have a mental illness. In addition, millions of U.S. children and adolescents live with a mental disorder, including depression (2.1 percent), behavioral or conduct problems (3.5 percent), or illicit drug use disorder in the past year (4.7 percent). Although data on the prevalence of mental illness is unavailable at the local level, about 36.4 percent of children and adolescents in Allegheny County reported feeling depressed most days in the past year, 26 percent felt very sad or hopeless for at least two weeks, and 17.1 percent considered suicide. Overall, Children’s Hospital of Pittsburgh of UPMC, in collaboration with Western Psychiatric Institute and Clinic of UPMC, has several initiatives to address the behavioral health care needs of children and adolescents in western Pennsylvania.

V. Overview of the Implementation Plan

Overview:

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

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

Adoption of the Implementation Plan:

On June 7, 2016 the Children’s Hospital of Pittsburgh of UPMC Board of Directors adopted an implementation plan to address the significant health needs identified:

- **Childhood Obesity**
- **Preventive Health and Wellness**
- **Behavioral Health**

A high-level overview of the Children’s Hospital of Pittsburgh of UPMC implementation plan is illustrated in the figure below and details are found in Appendix A:

Children’s Hospital of Pittsburgh of UPMC Implementation Plan

Topic	Programs	Anticipated Impact	
		Goal-Year 3	Planned Collaborations
Childhood Obesity	Obesity Prevention Initiatives through Early Care and Family Support Centers	Improve quality of food served at family support and early child care environments Improve staff knowledge of healthy eating and physical activity Increase opportunities for and scope of nutrition education and structured physical activity Institute/enhance organizational policies and site environments to support healthy eating and physical activity	Allegheny County Department of Human Services, Allegheny County Health Department, Office of Child Development at University of Pittsburgh, Family Support Center Network, Allegheny Intermediate Unit, Social Service Providers (e.g., Just Harvest), Greater Pittsburgh Community Food Bank, fitUnited/United Way of Allegheny County, Lawrenceville United Women for a Healthy Environment, Penn State Cooperative Extension, Venture Outdoors, Grow Pittsburgh, City of Pittsburgh Citiparks, University of Pittsburgh School of Public Health, University of Pittsburgh Department of Sports Medicine and Nutrition, University of Pittsburgh School of Social Work, Children’s Hospital of Pittsburgh of UPMC: Family Care Connections, CareMobile, Community Education, Nutrition, Weight Management, Walmart Foundation, UPMC Health Plan, Farm Truck Foods, 412 Food Rescue

<p>Preventive Health and Wellness</p>	<p>Preventive Health and Wellness Other Community-Focused Preventive Health and Wellness Programs and Services</p>	<p>Increase number of schools participating in Healthy Schools Program (HSP)</p> <p>Expand scope of the Healthy Schools Program to include evaluation of Health Services and Counseling/Psychological Services, and increase referrals to clinically-based services</p> <p>Increase number of out of school programs participating in Healthy Out of School (HOST) program</p> <p>Increase number of schools/out of school programs who are eligible for national recognition for achieving best practices</p> <p>Increase opportunities for youth engagement</p> <p>Expand scope of Children's Hospital of Pittsburgh of UPMC University, a youth mentorship program</p> <p>Continue to support existing efforts and explore ways to integrate additional preventive health and wellness services into the community-based initiatives</p>	<p>Pittsburgh Public School District, fitUnited/United Way of Allegheny County, Grow Pittsburgh, Let's Move Pittsburgh, Allegheny County Health Department, Allegheny Intermediate Unit, Children's Community Pediatrics, Pittsburgh Parks Conservancy, A+ Schools, Lawrenceville United, Chatham University, Out of School Time providers (e.g., YMCA, Boys and Girls Club, etc), Community Development Organizations, Venture Outdoors, City of Pittsburgh, Citiparks, P3R, Pittsburgh Marathon, Action for Healthy Kids, Greater Pittsburgh Community Food Bank, Western Psychiatric Institute and Clinic of UPMC, Children's Hospital of Pittsburgh of UPMC: CareMobile, Community Education, Injury Prevention, Nutrition, Weight Management, Adolescent Medicine, Nursing Triage, Child Advocacy, Dental, Behavioral Health, UPMC Health Plan</p>
<p>Behavioral Health</p>	<p>Pediatric Behavioral Health Services – Prevention, Early Identification and Treatment</p>	<p>To improve access to and quality of behavioral services, primarily in community settings</p>	<p>Western Psychiatric Institute and Clinic of UPMC, Children's Community Pediatrics, Managed care organizations, Children's Family Care Connection Centers/Allegheny County Family Support Center Network, Allegheny County Department of Human Services, Pittsburgh Public Schools, Children's Hospital of Pittsburgh of UPMC: Behavioral Health, Child Advocacy, Subspecialties (e.g., Hematology-Oncology, Pulmonary Medicine, Endocrinology), Community-Based Mental Health Agencies</p>

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

VI. APPENDICES

APPENDIX A: Detailed Implementation Plan

Priority Health Issue: Addressing Childhood Obesity

Childhood obesity is a priority in the Children’s Hospital of Pittsburgh of UPMC community: Childhood obesity is a national epidemic, having more than doubled in children and quadrupled in adolescents in the past 30 years. Childhood obesity can have both immediate and long-term effects on health and wellbeing. Obese youth are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure, as well as an increased risk for diabetes. Children and adolescents who are obese are likely to be obese as adults, and are therefore more at risk for adult health problems such as heart disease, type 2 diabetes, stroke, and several types of cancer.

Children’s Hospital of Pittsburgh of UPMC is leveraging UPMC and community resources to address childhood obesity: Children’s Hospital of Pittsburgh of UPMC currently operates a multidisciplinary center devoted to the treatment and prevention of being overweight and obese in children. More than 700 new patients are seen every year, as well as those children already in the program. In addition to operating their weight management center, Children’s Hospital of Pittsburgh of UPMC plans to leverage their existing partnership with the Family Care Connection Centers, as well as with other community organizations to meet the needs of overweight and obese children.

Childhood Obesity				
Program	Intended Actions	Anticipated Impact	Target Population	Planned Collaborations
		Goal-Year 3		
Obesity Prevention Initiatives through Early Care and Family Support Centers	<p>Provide standardized recommendations for nutritious snacks, meals, and drinks to encourage purchase and service of nutritious foods and beverages that are culturally appropriate</p> <p>Offer staff opportunities to learn about healthy eating and physical activity using effective training models and evidence-based content</p> <p>Provide evidence-based nutrition education that aligns with interests and needs of caregivers and children</p> <p>Aid centers in creating organizational policies and site environments that encourage families to enjoy healthy eating and activity</p>	<p>Improve quality of food served at family support and early child care environments</p> <p>Improve staff knowledge of healthy eating and physical activity</p> <p>Increase opportunities for and scope of nutrition education and structured physical activity</p> <p>Institute/enhance organizational policies and site environments to support healthy eating and physical activity</p>	Low-income families with children ages 0-5 who utilize the Family Care Connection Centers/ Family Support Centers, a network of centers located in underserved neighborhoods throughout Allegheny County, which provide general and specialized social services to families	Allegheny County Department of Human Services, Allegheny County Health Department, Office of Child Development at University of Pittsburgh, Family Support Center Network, Allegheny Intermediate Unit, Social Service Providers (e.g., Just Harvest), Greater Pittsburgh Community Food Bank, fitUnited/United Way of Allegheny County, Lawrenceville United Women for a Healthy Environment, Penn State Cooperative Extension, Venture Outdoors, Grow Pittsburgh, City of Pittsburgh Citiparks, University of Pittsburgh School of Public Health, University of Pittsburgh Department of Sports Medicine and Nutrition, University of Pittsburgh School of Social Work, Children’s Hospital of Pittsburgh of UPMC: Family Care Connections, CareMobile, Community Education, Nutrition, Weight Management, Walmart Foundation, UPMC Health Plan, Farm Truck Foods, and 412 Food Rescue

Priority Health Issue: Addressing Preventive Health and Wellness

Preventive health and wellness is a priority in the Children’s Hospital of Pittsburgh of UPMC community: Prevention and healthy behaviors are important factors in producing individuals who are healthier at all stages of life. When these behaviors are learned at a young age, it is more likely that they will become lifelong habits. Through preventive health and wellness education during childhood, there is the potential to help children avoid certain types of chronic disease and/or injury, which are causes of death for more than two-thirds of adults.

Children’s Hospital of Pittsburgh of UPMC is leveraging UPMC and community resources to address preventive health and wellness: Children’s Hospital of Pittsburgh of UPMC has an established collaboration with Pittsburgh Public Schools to promote preventive health and wellness in the school setting. Efforts will continue to expand the initiative into other schools and enhance efforts at current schools, such as coordinating healthy out-of-school programming. Additional hospital efforts include support of youth mentorship and engagement opportunities and continued support of an extensive suite of prevention programs, such as immunizations through the Ronald McDonald CareMobile and injury prevention programs. In addition, Children’s Hospital of Pittsburgh of UPMC programs are complemented by UPMC Insurance Services’ efforts in many clinical areas, including pediatric primary care and well-visit programs, screenings, and preventive care efforts for health plan members that are managed through practice-based, member-focused, and provider-focused incentives.

Preventive Health and Wellness				
Program	Intended Actions	Anticipated Impact Goal-Year 3	Target Population	Planned Collaborations
Preventive Health and Wellness Other Community-Focused Preventive Health and Wellness Programs and Services	<p>In partnership with the Alliance for a Healthier Generation, partner with local schools and community organizations to expand and support participation in nationally recognized and evidence-based HSP and HOST programs</p> <p>Support Children’s Hospital of Pittsburgh of UPMC University, a youth mentorship program designed to help middle school students at a local public school learn about careers in health care, increase self-esteem, and gain marketable skills</p> <p>Support youth engagement opportunities</p> <p>Continue to support other hospital programs (immunizations provided via the CareMobile, injury prevention (e.g., Hard Head program and Safety Center), Literacy program, Dental services, Vision services, Asthma support line</p>	<p>Increase number of schools participating in Healthy Schools Program (HSP)</p> <p>Increase number of out-of-school programs participating in Healthy Out of School (HOST) program</p> <p>Expand scope of the Healthy Schools Program to include evaluation of Health Services and Counseling</p> <p>Increase access to behavioral health services, and increase referrals to clinically-based services</p> <p>Expand scope of Children’s Hospital of Pittsburgh of UPMC University, a youth mentorship program</p> <p>Increase opportunities for youth engagement</p> <p>Continue to support existing efforts and explore ways to integrate additional related efforts into community-based initiatives</p>	School-age children, grades K-12	<p>Pittsburgh Public School District, fitUnited/United Way of Allegheny County, Grow Pittsburgh, Let’s Move Pittsburgh, Allegheny County Health Department, Allegheny Intermediate Unit, Children’s Community Pediatrics, Pittsburgh Parks Conservancy, A+ Schools, Lawrenceville United, Chatham University, Out of School Time providers (e.g., YMCA, Boys and Girls Club, etc), Community Development Organizations, Venture Outdoors, City of Pittsburgh, Citiparks, P3R, Pittsburgh Marathon, Action for Healthy Kids, Greater Pittsburgh Community Food Bank, Western Psychiatric Institute and Clinic of UPMC, Children’s Hospital of Pittsburgh of UPMC: CareMobile, Community Education, Injury Prevention, Nutrition, Weight Management, Adolescent Medicine, Nursing Triage, Child Advocacy, Dental, Behavioral Health, UPMC Health Plan</p>

Priority Health Issue: Addressing Behavioral Health

Behavioral health is a priority in the Children’s Hospital of Pittsburgh of UPMC community: The behavioral health needs of children and adolescent continue to grow, and early identification and treatment of those conditions is important. As national trends demonstrate, a large percentage of children and adolescents experience depression, behavioral problems, or drug use. Local data suggest a high percentage experience poor states of mental health. In addition, the care of children with chronic conditions can be complicated by underlying behavioral issues. Early identification and treatment of behavioral issues is important in managing conditions, minimizing escalation and the need for advanced care, and in reducing overall health care costs.

Children’s Hospital of Pittsburgh of UPMC is leveraging UPMC and community resources to address preventive health and wellness: Children’s Hospital of Pittsburgh of UPMC, in partnership with Western Psychiatric, has several programs in place that aim to improve access and coordination of behavioral health care services offered to the community. Efforts include continuing to expand the co-location of behavioral health services at other Children’s Community Pediatric practices, expand the co-location of behavioral health services into subspecialty practices to improve the care of children and adolescents with co-morbid conditions, and embedding dedicated behavioral health therapists at FCCs. The dedicated behavioral health therapist provides direct care to children of low-income families receiving services at the sites, coordinates care, and encourages utilization of parent-child interaction therapy (PCIT). In addition, to enhance its efforts with the Healthy Schools Initiative, the hospital will begin to explore efforts to understand behavioral health care needs in the school settings. Finally, the hospital will implement a new behavioral health telephone consult service to support remotely-based providers across the state who have limited access to psychiatry services. Consults will help providers identify and establish appropriate courses of treatment/referral for behavioral health issues that affect their pediatric patient populations.

Behavioral Health				
Program	Intended Actions	Anticipated Impact Goal-Year 3	Target Population	Planned Collaborations
Pediatric Behavioral Health Services – Prevention, Early Identification, and Treatment	<p>Continue to expand Children’s Hospital and Western Psychiatric Child Psychiatry Co-Location Project-</p> <p>Expansion of behavioral health providers into subspecialty practices to help patients with chronic disease, such as cancer, diabetes, and asthma</p> <p>Embed behavioral health model in the Family Care Connection Centers via a behavioral health therapist</p> <p>Explore behavioral health service need in schools through expansion of the Healthy Schools Initiative</p> <p>Implement pediatric psychiatry telephone consult service</p>	<p>Improve access to behavioral services, primarily in community settings</p>	<p>Providers and children, adolescents, emerging adults, and families receiving care at community-based medical offices, schools, and Family Support Centers</p>	<p>Western Psychiatric Institute and Clinic of UPMC, Children’s Community Pediatrics, managed care organizations, Children’s Family Care Connection Centers/Allegheny County Family Support Center Network, Allegheny County Department of Human Services, Pittsburgh Public Schools, Children’s Hospital of Pittsburgh of UPMC: Behavioral Health, Child Advocacy, Subspecialties (e.g., Hematology-Oncology, Pulmonary Medicine, Endocrinology), Community-Based Mental Health Agencies</p>

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.

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%
% Under 5	5.20%	5.70%	6.50%
% 5-9	5.30%	5.90%	6.60%
% 10-14	5.60%	6.20%	6.70%
% 15-18	3.70%	4.20%	4.20%
% 18-44	34.9%	34.3%	36.5%
% 45-64	28.5%	28.1%	26.4%
% >65+	16.8%	15.4%	13.0%
% >85+	2.9%	2.4%	1.8%
Gender			
% Male	47.9%	48.7%	49.2%
% Female	52.1%	51.3%	50.8%
Race/Ethnicity			
% White*	81.5%	81.9%	72.4%
% African-American*	13.2%	10.8%	12.6%
% American Indian and Alaska Native*	0.1%	0.2%	0.9%
% Asian*	2.8%	2.7%	4.8%
% Native Hawaiian/Other Pacific Islander*	0.0%	0.0%	0.2%
% Hispanic or Latino**	1.6%	5.7%	16.3%
Disability	12.8%	13.1%	11.9%

*Reported as single race; **Reported as any race; Source: US Census, 2010

Social and Economic Factors:

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

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

Source: US Census, 2010

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

Characteristics	Allegheny County	Pennsylvania	United States	Healthy People 2020
Morbidity				
Diabetes (%)	11.0	10.0	8.7	NA
Mental Health (Mental health not good ≥1 day in past month) (%)	43.0	35.0	NA	NA
Low Birthweight (% of live births)	7.6	8.1	8.0	7.8
Health Behaviors				
Obesity (Adult) (%)	28.5	30.0	29.4	30.5
Childhood Obesity (Grades K-6) (%)	15.3	16.4	17.7	15.7
Childhood Obesity (Grades 7-12) (%)	17.0	18.0	20.5	16.1
Excessive Alcohol Use (%)	33.0	17.0	16.8	24.4
Current Tobacco Use (%)	23.0	21.0	19.0	12.0
STDs (Gonorrhea per 100,000)*	251.5	150.5	250.6	251.9
Clinical Care				
Immunization: Ever had a Pneumonia Vaccination (65+) (%)	78.0	69.0	69.5	90.0
Cancer Screening				

Mammography (%)	59.0	60.0	74.0	81.1
Colorectal Screening (%)	66.0	69.0	67.3	70.5
Primary Care Physician: Population (PCP Physicians/100K Population)	108.6	82.0	75.8	NA
Receive Prenatal Care in First Trimester (%)	89.1	72.4	71.0	77.9

Sources:

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

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

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

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

APPENDIX C:

Input from Persons Representing the Broad Interests of the Community

Overview:

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

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

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

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

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

Stakeholder Input

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

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

Confirming Community Health Needs

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

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

Community Representation and Rationale for Approach

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

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

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

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

Children's Hospital of Pittsburgh of UPMC invited representatives from the following organizations to participate in the community needs survey conducted in June 2015:

- **Adagio Health, Pittsburgh, PA**
- **Allegheny County Department of Human Services, Pittsburgh, PA**
- **Allegheny Court of Common Pleas, Pittsburgh, PA**
- **Allegheny County Health Department, Pittsburgh, PA**
- **Allegheny Intermediate Unit, Homestead, PA**
- **Carnegie Mellon University, Pittsburgh, PA**
- **Children's Hospital Foundation, Pittsburgh, PA**
- **Dick Building Company, Pittsburgh, PA**
- **District Health Services, Pittsburgh Public Schools, Pittsburgh, PA**
- **Family Support Policy Board, University of Pittsburgh Office of Child Development, Pittsburgh, PA**
- **Greater Pittsburgh Community Food Bank, Pittsburgh, PA**
- **Hanna Holdings, Inc., Pittsburgh, PA**
- **Homewood Children's Village, Pittsburgh, PA**
- **Lawrenceville United, Pittsburgh, PA**
- **Let's Move Pittsburgh, Pittsburgh, PA**
- **LG Realty Advisors, Inc., Pittsburgh, PA**
- **My Next Season, Pittsburgh, PA**
- **Pittsburgh Parks Conservancy, Pittsburgh, PA**
- **Reed Smith, Pittsburgh, PA**
- **Ronald McDonald House Charities of Pittsburgh, Pittsburgh, PA**
- **Sheridan Broadcasting Organization, Pittsburgh, PA**
- **YMCA of Greater Pittsburgh, Pittsburgh, PA**

The Children’s Hospital of Pittsburgh of UPMC community survey was also supported by members of the hospital’s Board of Directors and physicians, as well as hospital leadership.

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

- **Achieva, Pittsburgh, PA**
- **Action Housing, Inc., Pittsburgh, PA**
- **Allegheny County Area Agency on Aging, Pittsburgh, PA**
- **Allegheny County Department of Human Services, Pittsburgh, PA**
- **Allegheny County Office of Children, Youth, and Families, Pittsburgh, PA**
- **Allegheny Intermediate Unit, Homestead, PA**
- **Bethlehem Haven, Pittsburgh, PA**
- **Big Brothers Big Sisters of Greater Pittsburgh, Pittsburgh, PA**
- **Carlow University, Pittsburgh, PA**
- **Catholic Charities Free Health Care Center, Pittsburgh, PA**
- **Center for Engagement and Inclusion, UPMC, Pittsburgh, PA**
- **City of Pittsburgh Bureau of Police, Pittsburgh, PA**
- **Community College of Allegheny County, Monroeville, PA**
- **Consumer Health Coalition, Pittsburgh, PA**
- **Coro Center for Civic Leadership, Pittsburgh, PA**
- **EDSI Solutions, Pittsburgh, PA**
- **Erie Regional Chamber and Growth Partnership, Erie, PA**
- **Expanding Minds, LLC, Pittsburgh, PA**
- **Goodwill of Southwestern Pennsylvania, Pittsburgh, PA**
- **Greater Pittsburgh Community Food Bank, Duquesne, PA**
- **Healthy Lungs Pennsylvania, Cranberry Township, PA**
- **Higher Achievement, Pittsburgh, PA**
- **Hosanna House, Inc., Wilkensburg, PA**
- **iGate Corporation, Pittsburgh, PA**
- **Imani Christian Academy, Pittsburgh, PA**
- **Jewish Family and Children’s Service of Pittsburgh, Pittsburgh, PA**
- **Josh Gibson Foundation, Pittsburgh, PA**
- **Junior Achievement of Western Pennsylvania, Pittsburgh, PA**
- **Kaplan Career Institute, Pittsburgh, PA**
- **Kingsley Association, Pittsburgh, PA**
- **LEAD Pittsburgh, Pittsburgh, PA**
- **Let’s Move Pittsburgh, Pittsburgh, PA**
- **Mainstay Life Services, Pittsburgh, PA**
- **The Mentoring Partnership of Southwestern PA, Pittsburgh, PA**
- **NAMI Southwest Pennsylvania, Pittsburgh, PA**
- **Neighborhood Learning Alliance, Pittsburgh, PA**
- **Office of Human Services, Allegheny County Department of Human Services, Pittsburgh, PA**
- **Operation StrongVet Western Pennsylvania, Wexford, PA**
- **Pennsylvania Health Access Network, Pittsburgh, PA**
- **Pennsylvania Health Law Project, Pittsburgh, PA**
- **Persad Center, Pittsburgh, PA**

- Pittsburgh Action Against Rape, Pittsburgh, PA
- Pittsburgh Black Nurses in Action, Pittsburgh, PA
- Pittsburgh Board of Education, Pittsburgh, PA
- Pittsburgh Disability Employment Project for Freedom, Pittsburgh, PA
- Pittsburgh Job Corps Center, Pittsburgh, PA
- The Pittsburgh Promise, Pittsburgh, PA
- Ralph A. Falbo, Inc., Pittsburgh, PA
- Randall Industries, LLC, Pittsburgh, PA
- Salvation Army of Western Pennsylvania, Carnegie, PA
- Smart Futures, Pittsburgh, PA
- United Way of Allegheny County, Pittsburgh, PA
- University of Pittsburgh School of Health and Rehabilitation Sciences, Pittsburgh, PA
- University of Pittsburgh Health Sciences, Pittsburgh, PA
- UPMC Board Diversity and Inclusion Committee, Pittsburgh, PA
- Urban League of Greater Pittsburgh, Pittsburgh, PA
- Ursuline Support Services, Pittsburgh, PA
- VA Pittsburgh Healthcare System, Pittsburgh, PA
- The Waters Foundation, Pittsburgh, PA
- The Wynnning Experience, Pittsburgh, PA
- Vibrant Pittsburgh, Pittsburgh, PA
- Western Pennsylvania Conservancy, Pittsburgh, PA
- Women for a Healthy Environment, Pittsburgh, PA
- Women's Center and Shelter of Greater Pittsburgh, Pittsburgh, PA
- YMCA of Greater Pittsburgh, Pittsburgh, PA
- YWCA of Greater Pittsburgh, Pittsburgh, PA

APPENDIX D:

Concept Mapping Methodology

Overview:

Children's Hospital of Pittsburgh 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 its community. Concept mapping is well suited for a Community Health Needs Assessment because the research method involves stakeholders in the process and allows for prioritization of health problems based on community input.

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

Children's Hospital of Pittsburgh 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 Children's Hospital of Pittsburgh 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 lists with the Pitt Public Health research team. Their responses were then compiled to generate a full list of community health problems for the hospital. The Pitt Public Health research team shared the full list with the group and facilitated a group discussion of the responses to ensure the list was comprehensive and reflected the scope of health problems faced in the Children's Hospital of Pittsburgh of UPMC community.

The Children's Hospital of Pittsburgh 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 in the following figure.

Final Master List of 50 Community Health Problems

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

Sorting and Rating – Prioritizing Health Needs:

The Children's Hospital of Pittsburgh 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?

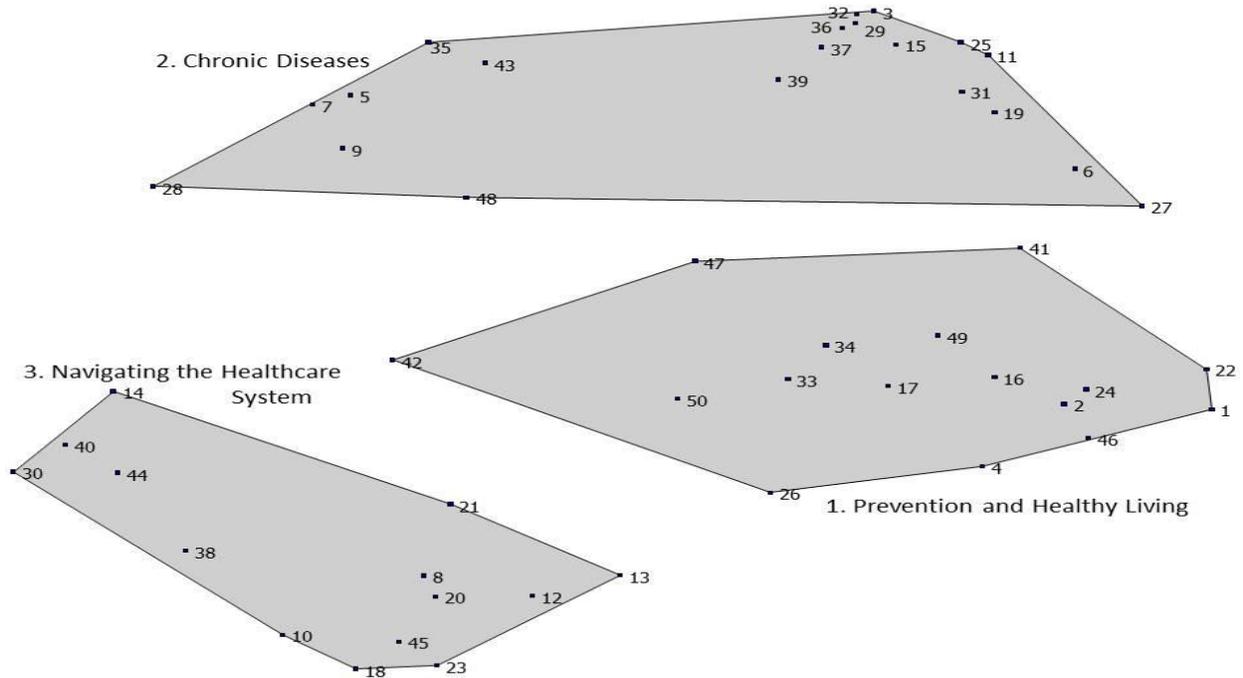
(1 = no ability; 5 = great ability)

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 Healthcare System (14 items)**

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

Final Cluster Map:



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

Importance:

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

Measurable Impact:

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

Hospital Ability to Address:

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

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

The rating categories results were then combined with results from secondary data analyses and used to identify high priority community health problems for Children’s Hospital of Pittsburgh of UPMC. Children’s Hospital of Pittsburgh of UPMC’s 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.