

COMMUNITY HEALTH NEEDS ASSESSMENT FOR
FIVE SOUTH CENTRAL PENNSYLVANIA COUNTIES

Executive Report



SEPTEMBER 2012



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INTRODUCTION

The healthcare landscape in the United States and in the state of Pennsylvania is changing on a daily basis. With the passage of the Affordable Care Act, changes in major entitlement programs such as Medicare, along with a challenging economy, it is important to utilize existing resources while minimizing costs associated with starting and creating new programs.

South Central Pennsylvania, in particular, Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System have a long history of partnering with community organizations, providing innovative strategies to provide care for the medically under-served, vulnerable populations, and serving the general community. There is a unique opportunity to evaluate current strategies, deliver high-quality services, and be the leader for the community.

South Central Pennsylvania, like the rest of the nation, has felt the impact of the national and global recession. South Central Pennsylvania's demographic profile runs the gamut, from Cumberland County which has the highest recorded average household income among the counties within the overall study area, to Perry County which records the lowest annual household income, substantially below the overall study area and state average.¹

In reviewing the overall community need index scores (CNI) for South Central Pennsylvania, it is clear that South Harrisburg, Downtown, and Midtown Harrisburg, along with Allison Hill/Penbrook, are the four areas with the greatest number of socio-economic barriers to healthcare access, thus indicating an at-risk population in regards to community health. (There are five socio-economic barriers to community health that are quantified in the CNI: Income, Cultural/Language, Educational, Insurance, and Housing Barriers.) South Harrisburg and Downtown Harrisburg have unemployment rates of 12%, which is higher than the regional rate (5%), Pennsylvania rate (8.3%), and the U.S. rate, which is approximately 9%.² While there are multiple community organizations that residents can receive health and social services assistance from, most often these organizations work independently of one another and/or in silos. In order for a collaborative effort to exist, healthcare leaders, community providers, and community-based agencies must be linked to form better referral strategies.

The region faces many challenges. Growing uninsured and under-insured populations, rising healthcare costs, and pressures to reduce services are continuing challenges that Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System will face for years. Nonetheless, the demand for services will continue to increase and local health service providers must be ready to address those needs.

Healthcare providers in South Central Pennsylvania are committed to understanding, anticipating, assessing, and addressing the healthcare needs of their communities. In September 2011, Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System, formed a collaborative workgroup to identify the needs of those living within Dauphin, Cumberland, Perry, Lebanon, and the northern tier of York Counties (this was considered the overall study area). With mutual interest in the health and well-being of residents in the region served by the three sponsors, a

¹ Truven Health Analytics (formerly known as Thomson Reuters)

² Truven Health Analytics and the Bureau of Labor Statistics

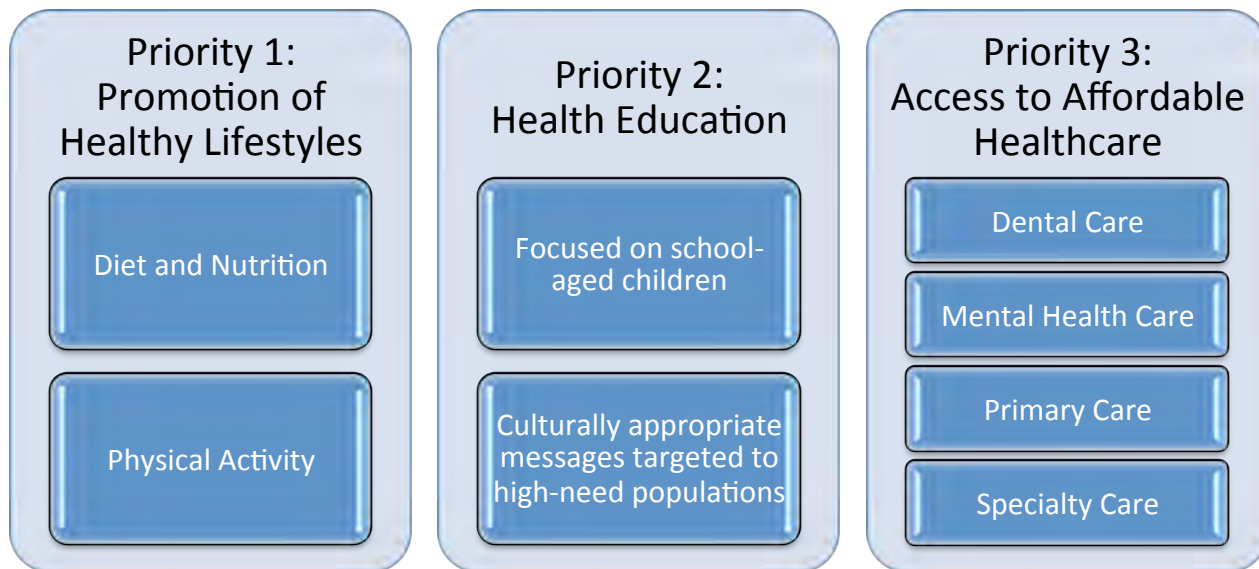
collaborative community health needs assessment was conducted to evaluate and understand the region's health needs. This study, conducted by Tripp Umbach³, a nationally recognized leader in community health assessments, identifies specific community health needs and evaluates how those needs are being met in order to better connect health and human services with the needs of residents in the multi-county region.

The community health needs assessment (CHNA) represented a comprehensive community-wide process where Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System connected with a wide range of public and private organizations, such as educational institutions, health-related professionals, local government officials, human service organizations, and faith-based organizations to evaluate the community's health and social needs. The assessment included primary data collection, interviews with community stakeholders, focus groups with key audiences, and community forums.

Tripp Umbach's independent data analysis in concert with community forums and prioritization of the community health assessment findings resulted in the identification of key community health needs. The regional community health needs were prioritized based upon discussions held at community health forums at each of the sponsoring institutions. The identified needs below are listed in priority order based upon quantitative and qualitative data presented to and evaluated by community residents and leaders. Tripp Umbach recommends that the following community health needs be developed into an implementation phase by each participating hospital or health system that further explores ways in which the hospital/health systems can assist in meeting the needs of the communities they serve.

³ Tripp Umbach (TU) is a recognized national leader in completing community health needs assessments (CHNA), having conducted CHNAs over the past 20 years. Tripp Umbach's projects are national pilots, and have received statewide and national recognition. Tripp Umbach managed all aspects of the community health needs assessment to identify and evaluate community health needs of residents in Cumberland, Dauphin, Perry, Lebanon, and Northern York Counties. TU also supported the management of three partnering non-profit healthcare institutions, as well as other participants (i.e., public health agencies, community-based healthcare providers, faith-based organizations, education institutions, and human service organizations) to better understand the risk indicators, population trends, and healthcare barriers in the project service area.

REGIONAL COMMUNITY HEALTH NEEDS



This report fulfills the requirements of a new federal statute established within the Patient Protection and Affordable Care Act (PPACA) requiring that non-profit hospitals conduct community health needs assessments every three years. The community health needs assessment process undertaken by Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System, with project management and consultation by Tripp Umbach, included extensive input from senior leadership at each of the health systems to accomplish and complete the assessment.

KEY COMMUNITY HEALTH NEEDS

Throughout the community health needs assessment process, Tripp Umbach reviewed primary and secondary data to identify the regional health needs of South Central Pennsylvania. The data included in-depth interviews with community stakeholders who represented a cross-section of community-based agencies, input provided by nine community focus groups, data from hand-distributed health surveys, and input from three community forums. The information obtained resulted in the identification of three key community health needs in Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System’s community. The regional community health needs were considered to be top needs and concerns by community leaders and hospital leadership.

PRIORITY #1: PROMOTION OF HEALTHY LIFESTYLES

There are many reasons to engage in or begin living a healthy lifestyle. An active approach to living healthy will ultimately improve one’s health. The community health assessment for South Central Pennsylvania identified the need to promote healthy lifestyles to include providing information and potentially creating new or expanding current programs on diet/nutrition and physical activity. Underlying factors identified by secondary data and primary input from community leaders and focus groups with residents resulted in the need to promote healthy lifestyles. These types of programs and services are needed to support healthy living and create long-term healthy behaviors.

Engaging in regular physical activity and creating a routine of exercising from adolescence into adulthood is important to overall health. Regular physical activity in childhood and adolescence improves strength and endurance, helps build healthy bones and muscles, helps control weight, reduces anxiety and stress, increases self-esteem, and may improve blood pressure and cholesterol levels.⁴

“People who are physically active live longer and have a lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers.”

Centers for Disease Control and Prevention, Vital Statistics 2012



Regular physical activity is often associated with an increase in positive mental well-being, and the reduction of death and illnesses. Exercise habits formed in childhood can have long-term health benefits reinforced through education and a supportive home environment. Schools in particular can promote and create comprehensive school-based physical education programs at all grade levels. Parents who participated in the focus group reiterated the need for schools to take an active role in educating and reinforcing

⁴ Centers for Disease Control and Prevention: www.cdc.gov/healthyouth/physicalactivity/facts.htm

physical activity during the school year. An effective collaboration between community organizations and schools offering after-school activities would provide a supervised, educational-based program for children to be physically active.

Some key factors such as physical inactivity and obesity contribute to type 2 diabetes. Geography, household income, culture, and family history also influence disease rates. Some population groups such as African-Americans, Hispanics, American Indians/Alaska Natives, some Asian-Americans, and Pacific Islanders are at a higher risk for type 2 diabetes. Moderate exercise and losing 5% to 7% of body weight can reduce the risk of developing type 2 diabetes by 58% in populations of people at higher risk for the disease.⁵

Eating a healthy diet and understanding the long-term health benefits associated with proper nutrition will reduce the likelihood of being overweight/obese and other physical diseases such as diabetes, high blood pressure, and heart disease. Childhood obesity is a growing problem. According to the CDC, in 2008, more than one-third of children and adolescents were overweight or obese.⁶ Examining school health statistics for Pennsylvania students, children in Kindergarten through grade 6 in Dauphin, Lebanon, and Perry Counties show students with a body mass index (BMI) considered to be overweight and obese.⁷ This data also indicates that the Dauphin, Lebanon, and Perry Counties percentages are above the state averages for overweight and obese children living in Pennsylvania. Therefore, it is important that the promotion of engaging in a healthy lifestyle begin at an early age.

Children often learn and are influenced by their home environment; therefore, good modeling behaviors from parents is the first step. Because children often develop lifelong behavior while young, it is important to instill proper nutritional habits in early childhood. Findings from the focus group identified the need for education on properly reading and understanding nutrition labels, and initiating an exercise program. Residents are often confused when interpreting nutrition labels and how they apply to their daily eating habits. Community leaders reported that residents are often overwhelmed with health and diet information; thus, they are intimidated to research information on their own. Focus group participants believe the benefits of creating healthy eating habits, along with diet/exercise need to be taught to children in school. It is important that schools play an active role in educating, promoting, and reinforcing healthy lifestyles.

When examining data from Pennsylvania County Health Rankings, Dauphin (61), Perry (47), and York (55) Counties have a poor health ranking, well above the median ranking of 34 for all counties in Pennsylvania for diet and exercise. This finding is consistent with data obtained from the Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS) which indicated that 60% of Pennsylvania's adults were overweight or obese (BMI>25), and that 25% of adults were physically inactive.⁸

When examining the hand-distributed survey results, respondents aged 65-74 reported the highest rate of participating in regular physical activity (77.5%); whereas, only 68.9% of individuals aged 18-24 reported engaging in this activity. County Health Rankings graded Perry County at a 47, well above the state average of 34. The hand-distributed survey results show Perry County respondents engaging in regular physical activity at only 57%. Geographic locations of health facilities, lack of an environment

⁵ Centers for Disease Control and Prevention: www.cdc.gov/Features/dsPhysicalInactivity

⁶ Centers for Disease Control and Prevention: www.cdc.gov/healthyyouth/obesity/facts.htm

⁷ Pennsylvania Department of Health, Division of School Health Services

⁸ Pennsylvania Department of Health:
www.portal.health.state.pa.us/portal/server.pt/community/obesity/14184/obesity_prevention/558403

infrastructure to exercise (no walking/bike paths, no sidewalks), cost, transportation, and lack of available activities are just a few factors that prohibit community residents from engaging in regular physical activities.

Changing or modifying a lifetime of poor health behaviors is difficult, and people often fail. Information available publically can be difficult to comprehend and intimidating for those who cannot grasp the consequences of living an unhealthy lifestyle. While it is important to provide information, it is also vital to promote and encourage change in behaviors. Establishing small achievable goals and utilizing community resources to achieve those goals can ultimately lead to notable healthy behaviors.

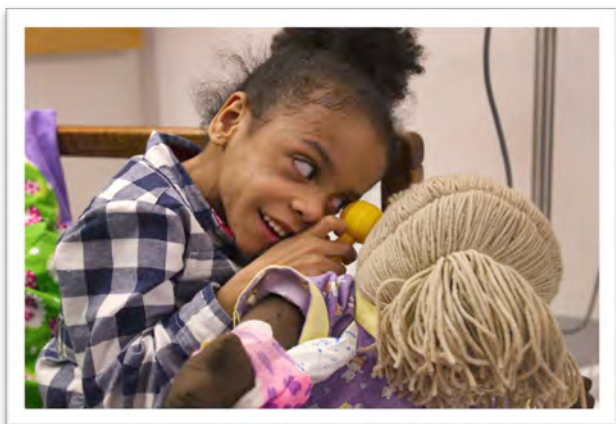
PRIORITY #2: HEALTH EDUCATION

Health education is the manner in which people learn about their own and others' behaviors. Health education is typically centered on how one can improve their own health. There are many different ways to deliver health education, and many different types of messages. Overall, health education is an essential element in improving the health of the community with the appropriate information, educational reinforcement, and message. Ultimately, the goal is to increase knowledge related to health, change in behaviors/attitude, and transform unhealthy behaviors to a positive behavior. For the purposes of the community health assessment, Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System will focus on health education information that is appropriate for school-aged children and messages that are culturally appropriate to targeted high-need populations.

**More than one-third
of U.S. adults
(35.7%) are obese**

*Centers for Disease
Control and Prevention*

For example, tackling a major health issue such as obesity is an initiative that would involve parents, schools, health providers, services organizations, educators, etc. Health education attempts to provide



information and increase the knowledge of ways to combat obesity, in particular, obesity in children. Currently, community leaders, educators, and healthcare professionals are assessing ways to address the problem to prevent the epidemic from spreading. It is important that schools educate children about obesity prevention, benefits of a nutritious diet, and the importance of having a physical lifestyle. The responsibility of the school system and the community to educate and install appropriate health habits in children occur when they are not properly being educated at home.

Primary data collected from community leaders reiterated the need for schools to provide a framework of information on healthy living, which includes diet, exercise, and nutrition for school-aged children. It was reported that low-income households do not reinforce healthy eating and healthy living habits within their own environment due to affordability. Most importantly, community residents do not understand alternative ways to live a healthy lifestyle without the expense. Organization leaders reported that the community needs assistance on how to obtain, understand, and utilize health information related to the long-term effects of obesity and other chronic diseases.

Focus group participants stated the need for more health education programs, resources, and services to residents, particularly those related to obesity, diabetes, and healthier lifestyles. Arming children within the community with health information will transfer well into adulthood. Reviewing the County Health Rankings, Lebanon (44), Perry (66) and York Counties (36) rank poorly in education, compared to other counties in Pennsylvania. It is important to note that Perry County ranked 66, (only one above the bottom) in education for the entire state of Pennsylvania.⁹ When restructuring or creating new health education programs, information must be targeted to community residents who can comprehend and interpret materials in layman terms.

It is essential to note that Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System will focus on different health education topics. Tackling childhood obesity is an example within the section. Nonetheless, health education will focus on school-aged children and health education information that is culturally targeted specifically to high-need populations.

The Centers for Disease Control and Prevention developed the National Health Education Standards (NHES) to establish, promote, and support health-enhancing behaviors for students in all grade levels – from pre-Kindergarten through grade 12. This program provides a framework for teachers, administrators, and policy-makers in designing or selecting curricula, and assessing student achievement and progress. Importantly, the standards provide students, families, and communities with concrete expectations for health education.¹⁰

It is important that health education identifies behaviors that are unhealthy, but also develops methods and skills needed to motivate change. Community residents will be better prepared with healthy foods, understand nutrition, and participate in an active lifestyle, because the ultimate goal is to change behaviors that will lead to a healthier life.

PRIORITY #3: ACCESS TO AFFORDABLE HEALTHCARE

Disparities in accessing healthcare have been well documented. The primary reason for these disparities is the lack of health insurance. Findings collected from community interviews, focus groups, and hand-distributed surveys reconfirm multiple factors in how community residents cannot obtain consistent healthcare services.

Health insurance is a critical component in one's ability to access affordable healthcare services. Access to healthcare is the ability to obtain needed primary care services, healthcare specialists, and emergency treatment. Having healthcare coverage does not ensure accessibility to all health services. The type of health insurance plan is also an indicator to how patients access healthcare services. Proximity to health providers, number of providers in the health plan, the out-of-pocket costs, and providers accepting that particular health insurance plan are all important indicators to how adults obtain needed health services.



⁹ County Health Rankings 2011

¹⁰ Centers for Disease Control and Prevention: www.cdc.gov/healthyyouth/sher/standards/index.htm

In 2010, the number of Americans without health insurance grew. Roughly 50 million adults ages 18-64 years old had no health insurance for at least some of the past 12 months. In the past few years, the number of adults aged 18-64 who went without health insurance for at least part of the past 12 months increased by an average of 1.1 million per year.¹¹ Unfortunately, without consistent health insurance, adults are more likely to skip medical care because of cost concerns. Poorer health, long-term healthcare costs, and early death are the results of inconsistent healthcare coverage.

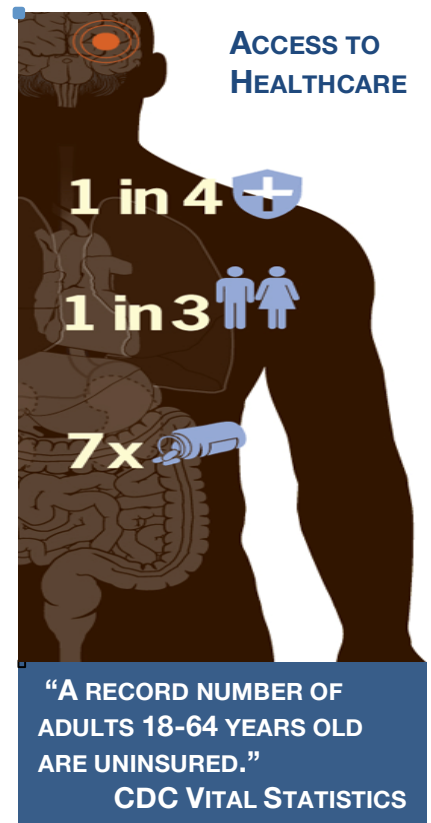
Table 1: Pennsylvania Health Facts on Health Coverage and Health Status¹²

Health Coverage	PA #	PA %	USA #	USA %
Uninsured Population	1,361,700	11%	49,906,900	16% of total population
Uninsured Children	226,900	8%	7,951,800	10% of children
Medicaid Beneficiaries	-	17%	-	20% of total population
Medicare Beneficiaries	-	18%	-	15% of total population

In 2009-2010, 11% of Pennsylvania residents did not have health insurance (see Chart 1). This is an increase from 2004, when 7.5% of the population was uninsured. Findings from the hand-distributed health survey discovered that the majority of respondents have health insurance (71.1%); however, this means that 28.9% of the respondents do not have health insurance. This equates to one in every 3.5 individuals without health insurance. The most common reasons that individuals reported not having health insurance was due to affordability (49.2%) or because they do not qualify for health insurance coverage (25.7%). In addition, more than half of the respondents indicated that not having health insurance affects their ability to get services. However, 61.1% of respondents indicated that they seek care even in spite of not having health insurance. This finding has positive results in terms of health outcomes, but negative results in terms of out-of-pocket healthcare costs for the patient.

Unlike the other counties in the study area that show a majority of individuals with health insurance, the majority of individuals in Lebanon County do not have health insurance (54.5%). A very high rate (60%) of individuals in Northern York County reported that they had insurance, but lost it, or that they do not qualify (40%).

Underlying factors identified by secondary data and primary input from community leaders and focus groups with residents resulted in the identification of the need to improve access to affordable healthcare, specifically, to dental care, mental health services, primary, and specialty care. This regional health need reinforces the necessity to improve access to affordable healthcare services.



¹¹ Centers for Disease Control and Prevention: [/www.cdc.gov/vitalsigns/HealthcareAccess/index.html](http://www.cdc.gov/vitalsigns/HealthcareAccess/index.html)

¹² The Henry J. Kaiser Family Foundation: State Health Facts: www.statehealthfacts.org

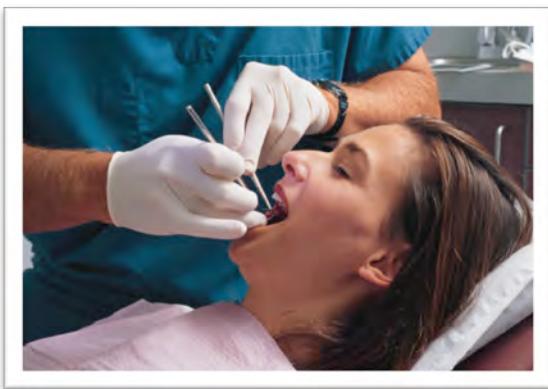
Dauphin, Cumberland, Perry, Lebanon, and the northern tier of York Counties known as the overall study area have a CNI score of 2.5, indicating a mid-range level of community health need within the region. In examining the CNI scores more closely, the entire South Central Pennsylvania area, which is comprised of South Harrisburg (17104), Downtown (17101), Midtown Harrisburg (17102) and Allison Hill/Penbrook (17103) are four areas with the greatest number of socio-economic barriers to healthcare access; indicating an at-risk population in regards to community health. All four zip codes are located within Dauphin County, and more specifically, within the City of Harrisburg. The CNI scores for the four zip codes range from 5.0 to 4.4. These zip codes are in the greatest need for community health access improvement strategies. The most common CNI score for the region is 2.0; slightly below the average, however, this a positive sign for the region overall.

Both community leaders and focus group participants agree that access to affordable healthcare services plays an essential role in lessening the impact of health-related complications. Overall, both community leaders and focus group participants reported that uninsured and under-insured community residents are unable to access affordable healthcare services. There was agreement that the working-poor populations do not typically qualify for certain health services because they do not meet the income requirements/guidelines (resident household income is too high). The failure for qualification prevents many adults from obtaining necessary healthcare services.

It is clear that access to needed healthcare services will continue to grow in South Central Pennsylvania. Healthcare providers, agencies, and organizations must be able to address the growing demand for services. Community resources and health providers must have a coordinated approach to resolving these issues at the local level.

DENTAL CARE

South Central Pennsylvanians identified that dental care is needed in the community. Dental coverage and access to dental care is limited for low-income families, and families with limited dental coverage are not getting sufficient levels of needed care. The group believes that while a few health facilities provide dental care to those in need, a collaboration among dental providers in the community could bridge the gap for those seeking dental services. Focus group participants reported that many residents in their community do not have health insurance, and dental insurance is typically not provided and/or obtainable. As a result, there is a great need for free or low-cost dental care and preventive screenings. Participants stressed the need for preventive dental care for the under-served and under-insured populations. Many families do not have the ability to pay for preventive health services and dental care emergencies.



It is also important to identify dental education (maintenance, prevention, and linking patients to services) as being an important piece of the community's dental needs. According to the National Institute of Dental and Craniofacial Research, dental cavities in children's permanent teeth declined from the early 1970s until the mid-1990s.¹³ However, significant disparities are still found in certain population groups.

¹³ National Institute of Dental and Craniofacial Research: www.nidcr.nih.gov

The following information was obtained from the National Institute of Dental and Craniofacial Research.

- ✓ 21% of children aged six to 11 have had dental caries in their permanent teeth.
- ✓ Hispanic children and those living in families with lower incomes have more decay in their permanent teeth.
- ✓ 8% of children aged six to 11 have untreated decay.
- ✓ Hispanic children and those living in families with lower incomes have more untreated decay.
- ✓ Black and Hispanic subgroups and those with lower incomes have more severe decay in both permanent teeth and surfaces.
- ✓ Black and Hispanic subgroups and those with lower incomes have more untreated permanent teeth and surfaces.

Oral health is a large component of overall health and many Americans lack access to affordable dental health services. While regular dental health check-ups can prevent oral health problems, financial barriers often pose significant dental access problems for many low-income families.

Health insurance companies typically do not provide dental coverage. Low-income families do not have the ability to afford the high out-of-pocket expenses for routine care and treatment. Those without adequate dental coverage turn to a healthcare safety net that often does not focus many resources on oral health, leaving them potentially unable to access needed care.

A study conducted by the Kaiser Foundation reported that access issues and the unaffordability of dental care affects millions of Americans. Some of the key findings included:¹⁴

1. Much of the low-income population does not have dental coverage and is less likely to receive adequate dental care. Over 50% of low-income adults lack dental coverage, and most go without routine dental care.
2. Having dental coverage helps, but access and utilization problems remain for those who have it. Lack of routine dental care and inability to get needed dental care are much higher for low-income adults without dental coverage than for those with dental coverage.
3. Even among low-income adults who do have dental coverage, access to dental care is not adequate.
4. Disparities in access and utilization of dental care exist within the low-income population.
5. Dental access problems are greater for low-income adults in poor health and for those experiencing other unmet health needs and financial difficulties.

Most low-income adults do not receive regular dental check-ups and many are unable to receive dental care. Very few low-income adults are aware of places in their community where the uninsured can find affordable dental care. Addressing gaps in accessibility and affordability could greatly reduce long-term oral problems for those in the community.

MENTAL HEALTH

Mental health illness was a prioritized area of focus under access to affordable healthcare. Mental health illnesses can affect people in all walks of life from an early age to the elderly, and in some cases, mental health illnesses are so severe it disrupts lives on a daily basis. Nearly 448,000 of the

¹⁴ The Henry J. Kaiser Family Foundation: www.kff.org/medicaid

approximately 12.4 million Pennsylvania residents suffer from serious mental illnesses. Of this number, approximately 129,000 children have serious mental health conditions.¹⁵

Mental health is important to monitor because it is associated with increased occurrence of chronic diseases such as cardiovascular disease, diabetes, obesity, asthma, epilepsy, and cancer. Mental illness is also associated with lower use of medical care, reduced adherence to treatment therapies for chronic diseases, and higher risks of adverse health outcomes. It has also been reported that rates for both intentional (e.g., homicide, suicide) and unintentional (e.g., motor vehicle) injuries are two to six times higher among people with a mental illness than in the population overall.

According to focus group participants, there is a growing need for additional mental health care services and treatment centers in South Central Pennsylvania. Participants reported that the demand for mental health services is growing, and the current supply of mental health providers is insufficient to treat those affected with mental health problems. The veteran focus group was aware of post-traumatic syndrome in veterans returning home from wars in Iraq and Afghanistan. These community residents reported that there is an increase in substance abuse among veterans who are battling mental illnesses. According to participants, psychiatric services and mental health facilities are inadequately represented in communities where the population is growing. There are little to no available services to tackle the budding mental health problem.

Regional data obtained from the Capital Area Coalition on Homelessness reported that 10% of episodically homeless adults were comparatively young, and were highly likely to have a mental health, substances abuse, or medical problem. In Pennsylvania, 17.7% reported having a mental illness compared to 19.7% in the U.S.

Mental illness cannot be simply turned off. Treatment and services must be made available to help alleviate and address the conditions of the disease, and to assist people living with these issues.

PRIMARY CARE

Preventive healthcare and wellness relates to adults being screened for diseases and maintaining their health to remain healthy, ruling out diseases and ailments. Those obtaining healthcare services typically have a relationship and/or obtain continuity of care through a healthcare provider. The community health needs assessment has identified that accessing affordable healthcare relates to the availability of physicians and accessing primary care services.

Primary data collected from the hand-distributed surveys revealed that 21.9% of survey respondents did not have a physician. The main reason for not having a physician was due to affordability (66.3%). Of the five counties, Lebanon County shows the highest rate of individuals who did not have a doctor (28.3%). Of the individuals who did not have a doctor, the largest percentages chose to go to a clinic for care (40.8%), with another large percentage going to the ER (38.8%). We can assume that survey respondents who utilize the ER use the facility as one of their primary modes to obtain healthcare services.

Many specialty physician practices do not accept state-sponsored medical insurance. This requires residents to travel further for medical care. According to participants, the lack of specialty physicians in the region greatly impacts the how residents receive healthcare services.

¹⁵ National Alliance on Mental Health:
www.nami.org/ContentManagement/ContentDisplay.cfm?ContentFileID=93517

PHYSICIAN SUPPLY AND SHORTAGES¹⁶

The U.S. Department of Health and Human Services estimates that the physician supply will increase by only 7% in the next 10 years. In some specialties, including urology and thoracic surgery, the overall supply of physicians will actually decrease. At the same time, the Census Bureau projects a 36% growth in the number of Americans over age 65, the very segment of the population with the greatest healthcare needs.

By 2020, our nation will face a serious shortage of both primary care and specialty physicians to care for an aging and growing population. According to the AAMC's Center for Workforce Studies, there will be 45,000 too few primary care physicians – and a shortage of 46,000 surgeons and medical specialists – in the next decade.

Our doctors are getting older, too. Nearly one-third of all physicians will retire in the next decade, just as more Americans need care. The shortfall in the number of physicians will affect everyone, but the impact will be most severe for the vulnerable and under-served populations. These groups include the approximately 20% of Americans who live in rural or inner-city locations designated as health professional shortage areas. Though the number of primary care physicians continues to grow (and has doubled in the last three decades), older patients are sicker and have multiple chronic conditions that require more time and coordination. Team-based approaches, like the “medical home,”¹⁷ may help reduce the shortage, but will not eliminate it.



Even with the best prevention possible, as the number of elderly grows and people live longer, so will the number of patients with age-sensitive conditions like cancer (almost 100 times higher in older adults); more oncologists, surgeons, and other specialists will need to be trained to ensure timely access to high-quality services. In addition to the 15 million patients who will become eligible for Medicare, 32 million younger Americans will become newly insured as a result of healthcare reform, and thereby intensify the demand for physicians even further. Because educating and training physicians takes up to a decade, graduate medical education (residency training) must be expanded now.

Pennsylvania Physician Shortages¹⁸

A report by the Pennsylvania Medical Society presents a number of trends that raise concerns regarding the future supply of physicians. The report points out that the physician workforce in Pennsylvania is aging, with 50% of their physicians over the age of 50, and less than 8% of their

¹⁶ Association of American Medical Colleges: Physician Shortages to Worsen Without Increases in Residency Training, 2010

¹⁷ A patient-centered medical home integrates patients as active participants in their own health and well-being. Patients are cared for by a physician who leads the medical team that coordinates all aspects of preventive, acute, and chronic needs of patients using the best available evidence and appropriate technology. These relationships offer patients comfort, convenience, and optimal health throughout their lifetimes.

¹⁸ Association of American Medical Colleges: Recent Studies and Reports on Physician Shortages in the U.S., 2011

physicians are under the age of 35. With increasing demand for health services outpacing supply, physicians are needed to work more hours, and this negative trend could make retention and recruitment even more problematic. Another problem is the residency retention rate, which dropped from 60% in 1992, to only 22% in 2006. Specialty-specific physicians have been on the decline since 1997, especially in the areas of family medicine, internal medicine, obstetrics and gynecology, cardiology, pathology, orthopedic surgery, general surgery, and neurosurgery.

Table 1 identifies the number of healthcare professionals who practice in the study area. It is alarming to see Lebanon and Perry counties coping with low numbers of practicing physicians in the areas of OB/GYN, internal medicine, and pediatrics.

TABLE 2: HEALTHCARE PROFESSIONALS BY COUNTY OF PRACTICE¹⁹

HEALTHCARE PROFESSIONALS BY COUNTY OF PRACTICE	CUMBERLAND COUNTY	DAUPHIN COUNTY	LEBANON COUNTY	PERRY COUNTY	YORK COUNTY
Total # Physicians in Direct Patient Care, 2008	488	1,049	233	21	738
Total # Primary Care Physicians in Direct Patient Care, 2008	205	302	94	20	337
# OB-GYN & GYN in Direct Patient Care, 2008	18	42	9	1	30
# Family/Gen. Practice Physicians in Direct Patient Care, 2008	102	101	62	17	179
# Internal Medicine Physicians in Direct Patient Care, 2008	61	100	17	0	92
# Pediatrics Physicians in Direct Patient Care, 2008	24	59	6	2	36

SPECIALTY CARE²⁰

Many Americans have limited access to primary care and even more limited access to specialty care physicians. Reviewing data from Rural Pennsylvania, we can clearly see the need for more human manpower. There are not enough physicians to serve the needs of the population. The problem is intensified in rural regions. The healthcare system needs to tackle more with fewer resources and stretch these resources more efficiently.

According to statistics from the Health Resources and Services Administration (HRSA), by the year 2020, several specialties will experience a demand much higher than the supply, with non-primary care specialties in general projected to experience a shortage of 62,400 doctors. It's expected that by the year 2020, the number of practicing general surgeons will decrease to 30,800. It is anticipated that the areas of ophthalmology and orthopedic surgery will need an additional 6,000 physicians. Not far behind are urology, psychiatry, and radiology, which are expected to need 4,000 additional physicians.

¹⁹ Rural Pennsylvania: www.ruralpa2.org/county_profiles.cfm

²⁰ Association of American Medical Colleges:

www.aamc.org/newsroom/reporter/oct10/152090/physician_shortage_spreads_across_specialty_lines.html

Our population is aging, and this, along with medical advances, will mean a need for more specialty care providers. Specialties such as geriatrics, oncology, and endocrinology are more in demand than ever. According to a 2007 study conducted for the American Society of Clinical Oncology (ASCO) by the AAMC's Center for Workforce Studies, the need for oncology services is expected to rise 48% between 2005 and 2020.

Dermatology is often considered a smaller sub-specialty, but the demand for these physicians is great. According to a recent study that analyzed data from the American Medical Association Masterfile, for every 100,000 Americans, only 3.5 dermatologists are currently available. This is thought to be largely due to the cap on the amount of residency training spots that Medicare will fund. The number of dermatology residencies has stayed stagnant at around 300 per year since 1970. A new patient can wait anywhere from 34 days to three months for an appointment.

The need for more specialty physicians is a growing concern nationally and locally. There are many reasons why specialty physicians will continue to be a concern for South Central Pennsylvania. The study area reflects the growing concern for primary care and specialty care physicians.

CONCLUSIONS AND RECOMMENDATIONS

South Central Pennsylvania is rich in resources but needs to continue to leverage and support its existing programs to assist those in the community. This community health needs assessment presents a clear need for a wide range of programs and services to be offered by Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System in conjunction with assistance with community organizations in South Central Pennsylvania.

This unique community health needs assessment speaks to needs across multiple geographies and lenses. Common themes throughout the assessment speak to the need to increase the promotion of healthy lifestyles, focus on health education, and improve access to affordable healthcare services, while simultaneously building a culture that supports healthy behaviors both at the individual and community levels. The need for strong medical facilities is supported throughout the document as secondary data and input from participants at all levels relate to the need for more programs and services that will lead to improved community health outcomes.

It is important that ongoing communication within each hospital/health system infrastructure promote the findings of the community health needs assessment. Residents receive both health information and social services from a number of local facilities and organizations; however, residents also identify a desire to have help in seeking and utilizing these services. Strengthening existing relationships and forging new partnerships will be important in developing strategies to address the regional community needs.

The specific regional community health needs identified included 1) the promotion of healthy lifestyles (diet and nutrition as well as physical activity), 2) health education with a focus on school-aged children, and developing culturally appropriate messages targeted to high-need populations, and 3) access to affordable healthcare including dental care, mental health care, primary care and specialty care.

Additional data and greater detail related to the inventory of available resources within the community that may provide programs and services to meet such needs is available in a separate document provided to Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System. Participating hospitals and health systems worked closely with local, regional, statewide, and national partners, and understand that the community health needs assessment document is only a first step in an ongoing process. To this end, the next phase of the community health needs assessment may include the following steps:

- 1) **Internal Communication:** Widely communicate the results of the community health needs assessment document to Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System's staff, providers, leadership, and boards.
- 2) **External Communication:** Widely communicate the results of the community health needs assessment document to community residents through multiple outlets. Make the results of the CHNA available to the public via the Internet and through community-based organizations.
- 3) **Community Engagement:** Review existing community outreach efforts and consider the impact of Community Health Needs Assessment data on the community benefit programs. Coordinate existing community resources to better serve the community across the continuum of healthcare.
- 4) **Internal Strategic Planning:** Identify specific implementation strategies to be undertaken by each individual hospital/health system based on the top needs identified in the community health assessment report.

Appendices



Appendix A: Purpose Statement

Appendix B: Objectives

Appendix C: Community Definition

Appendix D: Process Overview

Appendix E: Consultant Qualifications

APPENDIX A: PURPOSE STATEMENT (JULY 2011)

Mission-driven healthcare organizations have a long tradition of working to improve community health through community benefit activities. To better serve the residents of Dauphin, Cumberland, Perry, Lebanon, and the northern tier of York Counties, the leadership of Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System have committed to use a collaborative approach to assess community needs and plan community benefit programs for the purpose of improving the health of these communities.

In July 2011, this dynamic tri-system collaborative convened to meet the following objectives:

- ✓ Conduct an objective and comprehensive study of the overall health status of our region.
- ✓ Include input from individuals who represent the broad interests of the community served by the hospitals, as well as those with special knowledge and expertise in public health.
- ✓ Present consistent findings to our physician providers, health and human service organizations, and communities we serve.
- ✓ Measure and report impact on target populations.
- ✓ Deliver a useful and valuable report that creates a baseline for strategic planning decisions and can be made widely available to the public.

Over the next several months, this collaborative will conduct a community health needs assessment and use it to develop strategies designed to improve the effectiveness of their community benefit programs, comply with federal tax exemption requirements in the Affordable Care Act, and, most importantly, improve the overall health of the community as they are able.

APPENDIX B: OBJECTIVES

The objective of this assessment is to analyze traditional health-related indicators as well as social, demographic, economic, and environmental factors. The overall objective of the CHNA is summarized by the following areas:

- ✓ Obtaining information on population health status, as well as socio-economic and environmental factors;
- ✓ Assuring that community members and organizations, including under-represented residents, were included in the needs assessment process;
- ✓ Identifying key community health needs within the hospital/health system's community, along with an inventory of available resources within the region that may provide programs and services to meet such needs; and
- ✓ Developing a CHNA document as required by the Patient Protection and Affordable Care Act (PPACA).

APPENDIX C: COMMUNITY DEFINITION

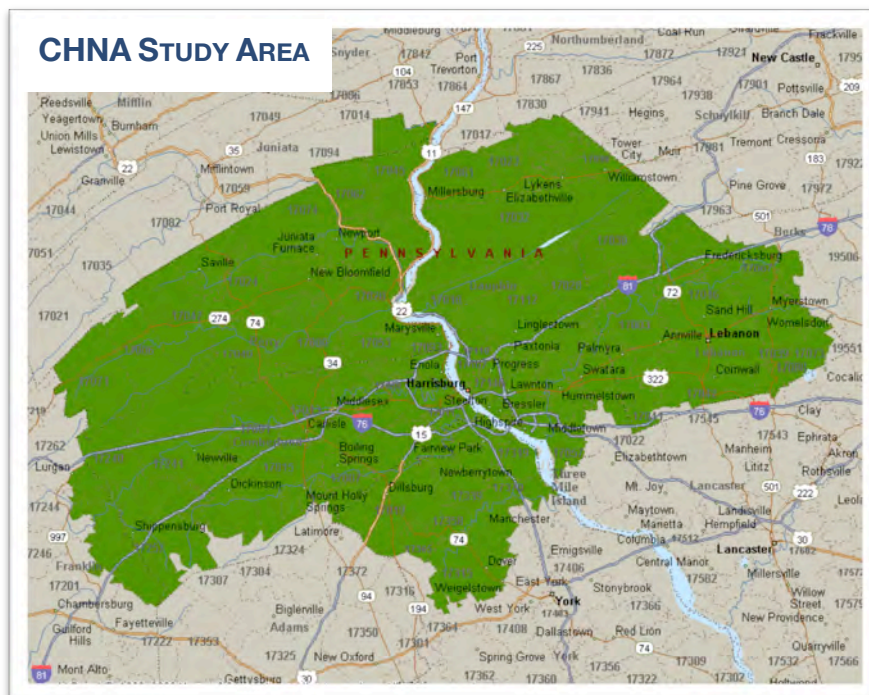
A community can be defined in many different ways – 102 zip codes were provided by Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System to represent the service area. Out of the 102 zip codes, only 66 of those were used for the CHNA as they were the populated zip code areas (they exclude zip codes for P.O. Boxes and offices).

TABLE 1: OVERALL STUDY AREA COMMUNITY ZIP CODES

ZIP CODE	COUNTY	ZIP CITY	ZIP CODE	COUNTY	ZIP CITY
17007	Cumberland	Boiling Springs	17113	Dauphin	Steelton
17011	Cumberland	Camp Hill	17111	Dauphin	Swatara Township
17013	Cumberland	Carlisle	17110	Dauphin	Uptown /North Susquehanna Township
17015	Cumberland	Carlisle	17098	Dauphin	Williamstown
17025	Cumberland	Enola	17097	Dauphin	Wisconisco
17043	Cumberland	Lemoyne	17003	Lebanon	Annaville
17050	Cumberland	Mechanicsburg	17026	Lebanon	Fredericksburg
17055	Cumberland	Mechanicsburg	17038	Lebanon	Jonestown
17065	Cumberland	Mount Holly Springs	17042	Lebanon	Lebanon
17070	Cumberland	New Cumberland	17046	Lebanon	Lebanon
17240	Cumberland	Newburg	17067	Lebanon	Myerstown
17241	Cumberland	Newville	17073	Lebanon	Newmanstown
17257	Cumberland	Shippensburg	17078	Lebanon	Palmyra
17266	Cumberland	Walnut Bottom	17087	Lebanon	Richland
17103	Dauphin	Allison Hill/Penbrook	17006	Perry	Blain
17005	Dauphin	Berrysburg	17020	Perry	Duncannon
17018	Dauphin	Dauphin	17024	Perry	Elliottsburg
17101	Dauphin	Downtown Harrisburg	17037	Perry	Ickesburg
17023	Dauphin	Elizabethville	17040	Perry	Landisburg
17028	Dauphin	Grantville	17045	Perry	Liverpool
17030	Dauphin	Gratz	17047	Perry	Loysville
17032	Dauphin	Halifax	17053	Perry	Marysville
17033	Dauphin	Hershey	17062	Perry	Millerstown
17034	Dauphin	Highspire	17068	Perry	New Bloomfield
17036	Dauphin	Hummelstown	17071	Perry	New Germantown
17048	Dauphin	Lykens	17074	Perry	Newport
17057	Dauphin	Middleton	17090	Perry	Shermans Dale
17102	Dauphin	Midtown Harrisburg	17019	York	Dillsburg
17061	Dauphin	Millersburg	17315	York	Dover
17112	Dauphin	North Lower Paxton	17319	York	Etters
17080	Dauphin	Pillow	17339	York	Lewisburg
17104	Dauphin	South Harrisburg	17365	York	Wellsville
17109	Dauphin	South Lower Paxton/ Susquehanna Township	17370	York	York Haven

CHNA STUDY AREA PROFILE

- ✓ Population growth is projected in all counties included in the study.
- ✓ The population of Lebanon County trends slightly older than the overall study area.
- ✓ Dauphin County has the highest percentage of African-Americans residing in the county, while Lebanon and Dauphin have a substantially higher percentage of Hispanic population within the study area.
- ✓ Cumberland County has the highest recorded average household income and educational attainment levels among the counties within the study area. Perry County records the lowest annual household income.
- ✓ Population growth is projected in all of the counties included in the study area over the next five years. The projected population growth increase in the study area (2.8%) is higher than projected growth in PA (0.7%), but less than projected national population growth (4.0%) during the next five years.
- ✓ The population of Lebanon County trends slightly older than the overall study area. More than 17% of the Lebanon County population is 65 or older, compared to 15.2% within the overall study area and 15.9% within Pennsylvania. The national percentage of population 65 and older is 13.3%; all counties, except York County, have 65 and older percentages higher than the national benchmark.
- ✓ Cumberland County has the highest recorded average household income among the counties within the overall study area. Perry County records the lowest annual household income, substantially below the overall study area and state average.
- ✓ Dauphin County has the highest percentage of households below \$15,000 annually within the overall study area.
- ✓ Cumberland County has the highest educational attainment levels among the overall study area. Perry County records the lowest percentage of post-high school attainment.
- ✓ Dauphin County has the highest percentage of African-Americans residing in the community, while Lebanon and Dauphin have a substantially higher percentage of Hispanic population within the overall study area and the State.



APPENDIX D: PROCESS OVERVIEW

Tripp Umbach directed and managed a comprehensive community health needs assessment for the three health systems — resulting in the identification and prioritization of community health needs at the regional level. The diagram below outlines the process and depicts each project component piece within the Community Health Needs Assessment (CHNA). Each project component is further described in following the graphic.



CHNA KICK-OFF MEETING

The CHNA was initiated on September 28, 2011. Members of the collaborative work group, including representatives from Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System, were introduced to the Tripp Umbach project team. Collaborative members were also provided with an overall project scope, which included a timeline for project completion, roles, and expectations of each participating sponsoring hospital/health system.

Small task-related groups were formed to tackle and manage the work behind each project component piece. In total, three working groups were created: 1) secondary data, 2) communications/media, and 3) community engagement. The working groups included members of the collaborative and additional hospital/health system associates whose expertise helped guide the CHNA process.

COMMUNITY HEALTH ASSESSMENT MEETINGS

A series of bi-monthly meetings facilitated by Tripp Umbach and attendance from members of the collaborative consisting of leadership from Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System

COMMUNITY LEADER INTERVIEWS

Interviews with community leaders throughout the region were conducted to gain an understanding of the community's health needs from organizations and agencies that have a deep understanding of the populations in the greatest need. The collaborative provided Tripp Umbach with a list of community leaders to interview. Interviews were conducted with an array of directors and staff members from community health centers, members from social services organizations, educational leaders, religious groups, and elected officials. The information collected provided knowledge about the community's health status, risk factors, service utilization, and community resource needs, as well as gaps and service suggestions.

Tripp Umbach mailed an introduction letter to each organization, announcing the health assessment and the collaborative efforts between the sponsoring hospital/health systems. In total, 58 interviews were completed between the months of December 2011 – January 2012.

The overarching themes collected from community leader interviews were:

- 1) Absence of Health Education/Accessing Health Information
- 2) Inadequate Health Services
- 3) Poor Economy
- 4) Transportation

SECONDARY DATA

Tripp Umbach collected and analyzed secondary data from multiple sources, including: County Health Rankings, Healthy People 2020, Office of Applied Studies, Pennsylvania Department of Health, Bureau of Health Statistics and Research, Pennsylvania Office of Rural Health, Capital Area Coalition on Homelessness, The Centers for Disease Prevention and Control (CDC), etc. The data resources were related to disease prevalence, socio-economic factors, and behavioral habits. Tripp Umbach benchmarked data against state and national trends where applicable.

Tripp Umbach obtained data through Truven Health Analytics (formerly known as Thomson Reuters) to quantify the severity of health disparities for every zip code in the needs assessment area, based on specific barriers to healthcare access. Truven Health Analytics provides data and analytics to hospitals, health systems, and health-supported agencies. Community Need Index (CNI) was a data source that was used in the health assessment.

CNI considers multiple factors that are known to limit healthcare access; the tool is useful in identifying and addressing the disproportionate unmet health-related needs of neighborhoods. Five prominent socio-economic barriers to community health quantified in the CNI are: Income Barriers, Cultural/Language Barriers, Educational Barriers, Insurance Barriers, and Housing Barriers.

The information below reflects key information collected from the overall study area from the community needs index.

- ✓ There are four zip code areas that fall in the CNI score range of 5.0 to 4.0; these areas have the highest rates of any of the individual socio-economic markers, as compared to the rest of the 66 zip code areas in the south central Pennsylvania region defined as the overall study area.

- ✓ All of the zip code areas that have the greatest number of socio-economic barriers are within Dauphin County. Four zip code areas in Harrisburg (17101, 17102, 17013, and 17014) have the highest CNI scores (greatest number of socio-economic barriers).
- ✓ 17101, 17102, 17013, and 17014 have the highest unemployment rates for the entire south central Pennsylvania region. South Harrisburg and Downtown Harrisburg both have unemployment rates of 12%; this is higher than the region rate (5%), Pennsylvania rate (8.3%), and U.S. rate (approx. 9%).
- ✓ The majority of zip codes in the region have CNI scores between 3.9 and 2.0.
- ✓ Even though the above listed zip code areas fall in the middle of the CNI scale, there can still be important findings from their data. Many of the zip code areas listed in this subgroup have the possibility, with improved community health planning, of reaching the CNI=1.9-1.0 level. This would be a benefit for the people of the local community and the area as a whole. At the same time, we must remember that many of the above listed zip code areas can easily, with restrictions to community health improvement, fall into the CNI=5.0-4.0 subgroup.
- ✓ Out of the 66 zip code areas in the south central Pennsylvania region analyzed for this study, 18 of those zip code areas (27%) are considered to have low levels of socio-economic barriers to healthcare access. This is a positive sign. There are 4.5 times as many zip code areas that have few to no socio-economic barriers to community healthcare access, as there are zip code areas that have substantial socio-economic barriers to healthcare access.
- ✓ We must also remember that each zip code area is unique; it is important to look at each zip code areas' individual barrier ranks when determining the best ways to address barriers to community health. For example, Mechanicsburg (17055) and New Cumberland (17070) have high CNI scores in the housing rank, whereas Mechanicsburg (17050) and North Lower Paxton (17112) have higher CNI ranks for cultural barriers. This is less of an issue for the CNI=1.9-1.0 subgroup, but it is key when planning strategies to improve community health overall.
- ✓ Four zip code areas in Harrisburg (17101, 17102, 17013, and 17014) have the highest CNI scores (greatest number of socio-economic barriers) for the overall south central Pennsylvania area included in the overall study area. On the other hand, two zip code areas in York county (17339 and 17319), have the lowest CNI scores (lowest number of barriers) for the area.
- ✓ A closer look at the four zip codes areas (17104, 17101, 17102, and 17103) reveals that South Harrisburg (17104) holds the highest percentages of the populous that are unemployed, a minority, having limited English, no high school diploma and families living in poverty. Downtown Harrisburg holds the highest percentage of renters and uninsured by far. At the same time, Midtown Harrisburg (17102) holds the highest rates of unemployed, and individuals 65 and older living in poverty.
- ✓ The CNI provides greater ability to diagnose community need as it explores zip code areas with significant barriers to healthcare access. The overall unemployment rate for the south central Pennsylvania region is only 5%; below both the Pennsylvania unemployment rate (8.3%) and the national unemployment rate (currently fluctuating around 9%). However, the unemployment rate for the zip code areas 17104 and 17102 is 12%, higher than the service region, Pennsylvania and the country.
- ✓ Examining the overall CNI scores for the entire south central Pennsylvania area, it is clear that South Harrisburg, Downtown and Midtown Harrisburg along with Allison Hill/Penbrook are the four areas with the greatest number of socio-economic barriers to healthcare access; indicating an at-risk population in regards to community health.

HAND-DISTRIBUTED SURVEYS

Tripp Umbach employed a hand-distribution methodology to disseminate surveys to individuals throughout the study area. A work session was held with members of the collaborative workgroup to create a survey that would be utilized to collect input from under-served populations. The survey was designed to capture and identify the health risk factors and health needs of those within the study area. The survey was finalized in March 2012, and was available in both English and in Spanish.

Tripp Umbach, working through community-based organizations, distributed the surveys to end-users in the under-served populations. Engagement of local community organizations was vital to the survey distribution process. In total, 1,279 surveys were used for analysis. 1,175 surveys were collected in English, and 104 surveys were collected in Spanish. The information below are key survey findings collected from the hand-distributed survey.

SPANISH-SPEAKING POPULATION

- ✓ Dauphin County shows the largest Spanish-speaking population (11.2%); Lebanon, Perry, and Northern York did not have any Spanish surveys completed. The U.S. rate is 16.3% (2010 Census Data).

GENDER

- ✓ There were always more female responses than male responses, but Dauphin and Northern York counties show much higher rates of women than other county ratios.

AGE

- ✓ Dauphin County showed a much higher rate of younger individuals (20.2% 18-24 year olds), whereas Northern York County showed high rates of older individuals (4.8% 85 years and older).

COUNTY

- ✓ All of the respondents in Northern York County reported having a doctor; of those who did not have a doctor, Dauphin County showed the highest rate at 63.8%, compared to the next highest of 22.4% in Cumberland County.
- ✓ Of individuals without health insurance, the largest group fell in Dauphin County (51.7%), the next highest rate is found in Cumberland County at only 22.9%.

HAVING A PHYSICIAN

- ✓ The majority of respondents indicated that they had a doctor; however, 21.9% indicated that they did not have a doctor. The top reason, by far, for an individual not having a doctor is due to affordability (66.3%).
- ✓ Younger respondents were less likely to report having a doctor than older individuals; 100% of those 85 and older (10 individuals) have a doctor. Interestingly, 50% of individuals aged 65-74 without a doctor reported that it is because they do not need one.
- ✓ Lebanon County shows the highest rate among the counties of respondents who did not have a doctor (28.3%). Of those in Perry County with no health insurance, a large percentage reported that it was due to the fact that their doctor does not accept their insurance.

WHERE RESPONDENTS GO FOR CARE

- ✓ The vast majority of respondents go to their doctors' offices for care (56.4%); however, a large percentage (30.1%), go to a clinic for care or the emergency room (9.8%).
- ✓ Individuals in Lebanon County showed a very high rate of going to a clinic for care (40.9%); and Dauphin County showed the highest rate of individuals who reported going to the ER for care (10.8%).
- ✓ Of the individuals who did not have a doctor, they frequented a clinic for care (40.8%) with another large percentage seeking services at the ER (38.8%); urgent care and pharmacy are very rarely used (only around 5% of those without a doctor).

HEALTH INSURANCE COVERAGE

- ✓ The majority of respondents have health insurance (71.1%); however, this means that 28.9% of the respondents do not have health insurance. This equates to one in every 3.5 individuals without health insurance. The top reasons that individuals reported not having health insurance was due to affordability (49.2%) or because they do not qualify (25.7%). Another 6.4% of the respondents have just not applied for health insurance.

GETTING CARE

- ✓ More than 50% of the respondents indicated that not having health insurance affects their ability to get services. However, thankfully, 61.1% of the respondents indicated that they seek care even in spite of not having health insurance. This has positive results in terms of health outcomes, but negative results in terms of healthcare bills.
- ✓ Unlike the other counties in the study area that show a majority of individuals with health insurance, the majority of individuals in Lebanon County do not have health insurance (54.5%). A very high rate (60%) of individuals in Northern York County reported that they had insurance but lost it, or that they do not qualify for it (40%).
- ✓ Unlike other counties, Northern York County showed a majority of respondents who reported not seeking care because of lack of insurance (54.5%).

METHOD OF CARE

- ✓ The most common resource that individuals use when they cannot get care is over-the-counter medications (46.5%). It is concerning that 21.8% of the respondents indicated that they simply ignore their health problem when they cannot receive care.
- ✓ Those in Northern York County ignore health problems at a higher rate than other counties (46.2%); and those in Dauphin County reported getting over-the-counter medications more than other counties (57.4%).

GENERAL HEALTH

- ✓ The largest percentage of respondents who reported 'excellent' health was found in Dauphin County (12.5%); on the other hand, the largest percentage of individuals reporting a 'poor' health status was found in Northern York County (19.0%).

HEALTHY BEHAVIORS

- ✓ 68.1% of individuals reported participating in regular physical activity to stay healthy.
- ✓ Those aged 65-74 reported the highest rate of participating in regular physical activity (77.5%); whereas only 68.9% of individuals aged 18-24 reported engaging in regular physical activity.
- ✓ Individuals in Perry County reported the lowest rates of physical activity, only 57% engage in regular activity.
- ✓ Cumberland County shows the lowest rate of individuals being able to find healthy foods (only 80.7%); Dauphin County showed a very high rate (94.5%). Interestingly though, individuals in Perry County reported the lowest rate of eating healthy foods (only 87.1%) and Northern York County reported the highest rate of eating healthy foods (95%).

HIGH BLOOD PRESSURE

- ✓ More than one-fourth of the population reported having high blood pressure (28.9%).
- ✓ Men reported having high blood pressure at a much higher rate than women (35.7% for men, and 25.8% for women).
- ✓ Those aged 65-74 have the highest rate of high blood pressure across the age groups (64.9%); higher than those 75 and older.
- ✓ Those in Northern York and Perry Counties reported the highest rate of high blood pressure (42.9% and 42.4% respectively).

TROUBLE BREATHING

- ✓ One-quarter of the population reported having trouble breathing or having a frequent cough (24.5%).
- ✓ Those aged 85 and older reported the lowest rate of trouble breathing or a cough (9.1%); on the other hand, those aged 45-54 have the highest rate (36.1%).
- ✓ Those in Lebanon County reported higher rates of trouble breathing than other counties (33.3%).

HEART PROBLEMS

- ✓ Those in Perry County showed the highest rate among the counties of individuals reporting heart problems (22.3%).
- ✓ Interestingly, individuals with a physician reported higher rates of high blood pressure, difficulty breathing, and heart problems than individuals without a doctor. This may be due to the fact that individuals without a doctor are simply unaware of the conditions, as they have not been tested.

CARE GIVING

- ✓ Within the 'last month', the majority of individuals (51.3%) reported giving care to another, and a large percentage (49.5%) reported receiving care. With healthcare costs rising, more individuals felt the need to provide for family and friends.
- ✓ The largest percentage (63.6%) of individuals who have given care is also the age group that has received the most care (72.7%); those 85 and older.

- ✓ Those aged 24 and younger reported the highest rate (71.9%) of not having limitations to their activities; interestingly, those aged 85 and older reported the second highest rate of no limitations at 70%.

FLU SHOTS

- ✓ The majority of individuals reported not getting the flu shot last year (51.3%).
- ✓ Only 50% of those aged 85 and older got the flu shot in the past year.
- ✓ The majority of individuals in Cumberland, Dauphin, and Perry Counties reported not getting the flu shot in the past year; a majority of individuals in Lebanon and Northern York Counties have received the flu shot in the past year.

IMMUNIZATIONS

- ✓ A large majority of individuals reported that their children are up-to-date on their immunizations (62%).
- ✓ Perry County showed the lowest rate of individuals who reported that their children are up-to-date on their immunizations (only 53.8%).
- ✓ Individuals without a physician reported more than double the rate of those with a doctor of their children not being up-to-date with their immunizations (7.7% vs. 3.8% respectively); the findings were similar for individuals with and without health insurance. Access to care affects not only an individual's health needs, but also the needs of the family.
- ✓ As an individual's perception of their own health declines, the rate at which they report their children's immunizations being up-to-date declines. This is concerning, because a parent's perception of his/her health can lead to negative consequences for their children.

ACCESSING INFORMATION

- ✓ The top three avenues in which individuals receive information in their community are: television (21.9%), word-of-mouth (20.1%), and newspaper (18.9%).
- ✓ Cumberland, Perry, and Northern York counties all receive their information primarily through word-of-mouth; Dauphin County received information primarily through TV, and Lebanon County received information primarily through newspaper.

TRANSPORTATION

- ✓ Not surprisingly, an individual's own car is the most common mode of transportation among respondents (51.6%).
- ✓ Respondents in Dauphin County are much more likely to utilize public transportation or a family/friend's car instead of their own car. 84.2% of respondents in Northern York County use their own car, whereas only 44.2% of respondents in Dauphin County use their own car.
- ✓ Individuals without health insurance are twice as likely to walk as their main form of transportation than individuals with health insurance (14.3% vs. 7.8% respectively).

SEAT BELT USE

- ✓ The vast majority of individuals reported ‘always’ wearing a seat belt when in a car (72.7%).
- ✓ Respondents aged 85 and older showed the lowest rates of wearing their seat belts; only 55.6% reported they always wear one, whereas individuals aged 45-54 show 80.3% always wearing one.
- ✓ Respondents in Lebanon and Northern York Counties reported never wearing their seat belts at the highest rates (10.7% and 10.5% respectively).

SAFETY

- ✓ Respondents in Dauphin County reported feeling ‘not at all safe’ at the highest rate (14.5%); the next highest rate is only 7.9% in Lebanon County. Respondents in Dauphin County reported feeling unsafe in their communities twice as often as those in Lebanon and more for other counties.
- ✓ Individuals in Cumberland County mostly feel unsafe due to drug-related issues, whereas individuals in Dauphin and Lebanon counties feel unsafe due to general crime.

SERVICES

- ✓ The services in which individuals reported the lowest rates of being able to find were:
 - Services for people with HIV/AIDS (16%)
 - Services for people over 60 years old (16.9%)
- ✓ The services in which individuals reported the lowest rates of using were:
 - Services for people with HIV/AIDS (3.4%)
 - Services for people who use drugs (4.7%)
- ✓ The services in which individuals reported the highest rates of being able to find and use were:
 - Services for eye care (50%, 31.3%)
 - Services for dental care (48%, 32.8%)
- ✓ Respondents in Northern York County reported the lowest rate of being able to find services for people over 60 years old and services for housing assistance.
- ✓ Respondents in Perry County reported the lowest rate of being able to find services for children and pregnancy care (only 23.1% and 15.4% respectively).
- ✓ Respondents in Dauphin County reported being able to find and utilize services related to STDs at the highest rate among the other counties; whereas Lebanon County showed the lowest rates of being able to find or use services for STDs.

FOCUS GROUPS

Between the months of April and May 2012, Tripp Umbach facilitated nine focus groups within the study area with at-risk healthcare populations. The under-served segments of the population were identified through secondary data findings, stakeholder interview results, and direction from members. Tripp Umbach worked interactively with community-based organizations and their representatives to schedule, recruit, and facilitate focus groups within each of the at-risk communities. Participants were provided with a cash incentive, along with food and refreshments for their participation.

The number of focus group participants ranged from eight to 20 attendees, with sessions to facilitate lasting two hours. A minimum number of 15 people to a maximum number of 20 people were the intended recruitment focus group size. The total number of participants was 142.

The common themes that were obtained from all focus group audiences were:

- 1) **Absence of Health Education/Accessing Health Information**
- 2) **Community Environment**
- 3) **Community Services**
- 4) **Inadequate Access to Healthcare Information/Services and Education**
- 5) **Lack of Cohesion among Community Organizations**
- 6) **Lack of Healthy Lifestyle Options and Education**
- 7) **Poor Economy**
- 8) **Transportation**

The table below lists the focus group audiences and the locations where each group was conducted.

FOCUS GROUP AUDIENCE:	LOCATION OF THE EVENT:
1. HIV/AIDS Population 15 attendees	Kline Health Center
2. Homeless Population 19 attendees	Bethesda Mission
3. Immigrant/Disenfranchised Population 17 attendees	Holy Spirit Health Services Medical Outreach
4. Obese Adults/Diabetic Population 11 attendees	Polyclinic Campus
5. Rural Under-Served Population 19 attendees	The Northern Dauphin Human Services Center
6. Seniors on a Fixed-Income Population 19 attendees	Rutherford House Senior Center
7. Spanish-Speaking Adults Population 14 attendees	Polyclinic Campus
8. Veterans Population 8 attendees	The American Legion
9. Working-Poor Population (household income under \$25,000) 20 attendees	New Hope Ministries

While the sessions were held primarily in locations in Dauphin County, efforts were made to include participants from throughout the five-county study region. Specific data about attendees is available in the Focus Group Report.

COMMUNITY FORUMS

On May 29 and May 30, 2012, Tripp Umbach facilitated a series of three public input sessions (community forums) with community organization leaders, religious leaders, government stakeholders,

and other key community leaders at each of the sponsoring hospital/health system locations. The purpose of the community forums was to present the CHNA findings to date and to receive input in regards to the needs and concerns of the community. With input received from forum participants, collaborative members identified the three top priority areas. They included: healthy lifestyles, health education, and access to affordable healthcare. Each of the prioritized areas has subcategories that further illustrate the identified need.

- 1) **PROMOTION OF HEALTHY LIFESTYLES** (DIET AND NUTRITION, AND PHYSICAL ACTIVITY)
- 2) **HEALTH EDUCATION** (FOCUSED ON SCHOOL-AGED CHILDREN AND CULTURALLY APPROPRIATE MESSAGES TARGETED TO HIGH-NEED POPULATIONS)
- 3) **ACCESS TO AFFORDABLE HEALTHCARE** (DENTAL CARE, MENTAL HEALTH CARE, PRIMARY CARE, AND SPECIALTY CARE)

PROVIDER INVENTORIES

An inventory of programs and services available in the region was developed by Tripp Umbach. This inventory highlights available programs and services within all of the 66 zip codes that fall under each of the three priority need areas.

The inventory identifies the range of organizations and agencies in the community that are serving the various target populations within each of the priority needs. It provides program descriptions and collects information about the potential for coordinating community activities and creating linkages among agencies.

FINAL REPORTS/PRESENTATION

Top community health needs were identified by analyzing secondary data, primary data collected from key stakeholder interviews, focus group input, hand-distributed surveys, and community forums. The analysis process identified the health needs revealed in each data source. Tripp Umbach followed a process where the top needs identified in the assessment were supported by secondary data, when available, and strong consensus was provided by both key community stakeholders and focus group participants.

A final report was developed that summarized key findings from the community health assessment process and an identification of top community health needs. In addition to an overall system-wide report, separately prepared reports will be provided to each hospital/health system.

APPENDIX E: CONSULTANT QUALIFICATIONS

Holy Spirit Health System, Penn State Milton S. Hershey Medical Center, and PinnacleHealth System contracted with Tripp Umbach, a private healthcare consulting firm headquartered in Pittsburgh, Pennsylvania to complete the community health needs assessment.



Tripp Umbach is a recognized national leader in completing community health needs assessments, having conducted more than 200 community health needs assessments over the past 20 years. Today, more than one in five Americans lives in a community where Tripp Umbach has completed a community health assessment.