Introduction

ACTION Health, a collaborative partnership in the Central Susquehanna River Valley that includes Geisinger Medical Center, Geisinger-Shamokin Area Community Hospital, Evangelical Community Hospital, Bloomsburg Hospital and Bloomsburg University contracted with Tripp Umbach to facilitate a comprehensive Community Health Needs Assessment (CHNA). The CHNA was conducted between November 2011 and April 2012 and resulted in five separate CHNA reports; four CHNAs that assess the health needs of the communities within each hospital service area as well as an assessment of the regional health needs within ACTION Health’s five-county service area (Columbia, Montour, Northumberland, Snyder and Union County).

As a member of ACTION Health, Geisinger Medical Center, a 404-bed full-service hospital located in Danville, PA, participated in the CHNA process and collaborated with hospitals and outside organizations in the five-county service region including Geisinger HealthSouth Rehabilitation Hospital. Geisinger HealthSouth Rehabilitation Hospital is a 42-bed rehabilitation hospital located on the campus of the Geisinger Medical Center. The following is a list of organizations that participated in the CHNA process in some way:

- Geisinger-Shamokin Area Community Hospital
- ACTION Health
- Bloomsburg Hospital
- Bloomsburg University
- Evangelical Community Hospital
- Central PA Healthcare Quality Unit (Geisinger)
- Central Susquehanna Community Foundation
- CMSU Behavioral Health Services
- Family Planning Plus of SUN and MJ counties
- Columbia County Volunteers in Medicine Clinic
- Geisinger Medical Center Care Management
- Orangeville Nursing & Rehab Center
- Greater Susquehanna Valley United Way
- PA DOH – Montour State Health Center
- Danville Child Development Center
- Union-Snyder Agency on Aging Inc.
- AGAPE
- Bucknell University
- The City of Benton, PA
- American Cancer Society
- Caring Communities
- Columbia/Sullivan Head Start
- Degenstein Foundation
- District 107; North’d Ct.
- Evangelical Community Hospital
- Geisinger Health Plan
- Geisinger Health System
- LIFE Geisinger – Kulpmont
- Milton YMCA
- Montour County Probation
- Nurse Family Partnership
- Sum Child Development Center
- Susquehanna University

What follows is the result of a comprehensive CHNA for the Geisinger Medical Center community. This document is intended to address both Geisinger Medical Center and the Geisinger HealthSouth Rehabilitation Hospital facilities. The rehabilitation hospital is located on the Geisinger Medical Center campus in Danville, PA, and both facilities provide services to the same community. In addition, the operations of the rehabilitation hospital are ultimately controlled by Geisinger Medical Center and are closely integrated into the operations of Geisinger Medical Center. Accordingly, references throughout this document to Geisinger Medical Center should be read to include the Geisinger HealthSouth Rehabilitation Hospital.
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 CHNAs every three years. The CHNA process undertaken by ACTION Health and its partners including Geisinger Medical Center, utilized extensive input from persons who represent the broad interests of the community served by Geisinger Medical Center, including those with special knowledge of public health issues. Tripp Umbach worked closely with leadership from Geisinger Medical Center and the ACTION Health project oversight committee to accomplish the assessment.
Community Definition

While community can be defined in many ways, for the purposes of this report, the Geisinger Medical Center community is defined as the 49 zip codes in Columbia, Montour, Northumberland, Snyder, and Union counties within Pennsylvania containing 80% of the hospital’s inpatient discharges (see Table 1 & Figure 1).

Geisinger Medical Center Community Zip Codes

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<th>Zip</th>
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Consultant Qualifications

ACTION Health contracted with Tripp Umbach, a private healthcare consulting firm headquartered in Pittsburgh, Pennsylvania to complete the CHNA. Tripp Umbach is a recognized national leader in completing CHNAs, having conducted more than 200 CHNAs over the past 20 years. Today, more than one in five Americans lives in a community where Tripp Umbach has completed a CHNA.

Paul Umbach, founder and president of Tripp Umbach, is among the most experienced community health planners in the United States, having directed projects in every state and internationally. Tripp Umbach has written two national guide books\(^1\) on the topic of community health, and has presented at more than 50 state and national community health conferences.

\(^1\) A Guide for Assessing and Improving Health Status Apple Book:
http://www.haponline.org/downloads/HAP_A_Guide_for_Assessing_and_Improving_Health_Status_Apple_Book_1993.pdf and

A Guide for Implementing Community Health Improvement Programs:
Project Mission & Objectives

The mission of the ACTION Health CHNA is to understand and plan for the current and future health needs of residents in its community. The goal of the process is to identify the health needs of the communities served by both ACTION Health and Geisinger Medical Center, while developing a deeper understanding of community needs and identifying community health priorities. Important to the success of the CHNA process is meaningful engagement and input from a broad cross-section of community-based organizations, who were partners in the CHNA.

The objective of this assessment is to analyze traditional health-related indicators as well as social, demographic, economic and environmental factors. Although the consulting team brings experience from similar communities, it is clearly understood that each community is unique. This project was developed and implemented to meet the individual project goals as defined by the project sponsors and included:

- Assuring that community members, including under-represented residents and those with a broad based racial/ethnic/cultural and linguistic background are included in the needs assessment process. In addition, educators, health-related professionals, media representatives, local government, human service organizations, institutes of higher learning, religious institutions and the private sector will be engaged at some level in the process.

- Obtaining statistically valid information on the health status and socio-economic/environmental factors related to health of residents in the community and supplementing general population survey data that is currently available.

- Developing accurate comparisons to baseline health measures utilizing the most current validated data.

- Utilizing data obtained from the assessment to address the identified health needs of the service area.

- Providing recommendations for strategic decision-making regionally and locally to address the identified health needs within the region to use as a baseline tool for future assessments.

- Developing a CHNA document as required by the Patient Protection and Affordable Care Act (PPACA).
Methodology

Tripp Umbach facilitated and managed a comprehensive CHNA on behalf of ACTION Health – resulting in the identification of community health needs in the Geisinger Medical Center community. The assessment process included input from persons who represent the broad interests of the community served by Geisinger Medical Center, including those with special knowledge and expertise of public health issues.

Key data sources in the CHNA included:

- **Community Health Assessment Planning:** A series of meetings were facilitated by the consultants and the ACTION Health CHNA oversight committee consisting of leadership from Geisinger Medical Center and other participating hospitals and organizations (i.e., Geisinger-Shamokin Area Community Hospital, Evangelical Community Hospital, Bloomsburg Hospital and Bloomsburg University).

- **Secondary Data:** The health of a community is largely related to the characteristics of its residents. An individual’s age, race, gender, education and ethnicity often directly or indirectly impact health status and access to care. Tripp Umbach completed comprehensive analysis of health status and socio-economic environmental factors related to the health of residents of the Geisinger Medical Center community from existing data sources such as state and county public health agencies, the Centers for Disease Control and Prevention, County Health Rankings, Thompson Reuters, Community Need Index, Prevention Quality Indicators Index, The Center for Rural PA, PennDOT and other additional data sources.

- **Use of previous CHNA:** In 2009, ACTION Health contracted with Geisinger Center for Health Research to complete a CHNA for the same five-county region (Columbia, Montour, Northumberland, Snyder and Union Counties). While it was not possible to complete trend analyses of the 2009 CHNA raw data, due to a departure in methodologies, there are references throughout this document to the 2009 CHNA Rural Pennsylvania Counts: A Community Needs Assessment of Five Counties. Tripp Umbach did not complete any independent analysis of the data collected in 2009 but chose to rely on the analysis completed by Geisinger Center for Health Research.

- **Interviews with Key Community Stakeholders:** Tripp Umbach worked closely with the ACTION Health CHNA oversight committee to identify leaders from organizations that have special knowledge and/or expertise in public health (i.e., Geisinger Medical Center, ACTION Health, the Community Clinic, the Pennsylvania Office of Rural Health, the Montour County Assistance Office, and the Montour Fire Department). Such persons were interviewed as part of the needs assessment planning process. A series of 18 interviews were completed with key stakeholders in the Geisinger Medical Center community. A complete list of organizations represented in the stakeholder
interviews can be found in the “Key Stakeholder Interviews” section on page 27 of this report.

- **Focus Groups with Community Residents:** Tripp Umbach worked closely with the ACTION Health CHNA oversight committee to assure that community members, including under-represented residents, were included in the needs assessment planning process via three focus groups conducted by Tripp Umbach in the Geisinger Medical Center community. Focus group audiences were defined by the ACTION Health CHNA oversight committee utilizing secondary data to identify health needs and deficits in targeted populations. Focus group audiences included: Nurses Employed by a Public School, Small Business Owners Including Farmers and Working Professionals with Young Children.

- **Identification of top community health needs:** Top community health needs were identified and prioritized by community leaders during a regional community health needs identification forum held on April 5th 2012. Consultants presented to community leaders the CHNA findings from analyzing secondary data, key stakeholder interviews and focus group input. Community leaders discussed the data presented, shared their visions and plans for community health improvement in their communities, and identified the top community health needs in the Geisinger Medical Center community.

- **Final CHNA Report:** A final report was developed that summarizes key findings from the assessment process and prioritizes top community health needs.
Key Community Health Needs

Tripp Umbach’s independent review of existing data, in-depth interviews with community stakeholders representing a cross-section of agencies, and detailed input provided by three community focus groups resulted in the prioritization of three key community health needs in the Geisinger Medical Center community. Community leaders identified the following top community health needs that are supported by secondary and/or primary data: 1) Improving access to affordable healthcare, 2) Improving healthy behavior, and 3) Need for community development, specifically transportation to health service providers. A summary of the top three needs in the Geisinger Medical Center community follows:

- **IMPROVING ACCESS TO HEALTHCARE FOR UNDER/UNINSURED RESIDENTS**

  Underlying factors identified by secondary data and primary input from community stakeholders and focus groups with residents: Need for increased access to affordable health insurance and increased number of healthcare providers in general and specifically, healthcare providers that will accept state-funded medical insurance.

  Community leaders, key stakeholders and focus group participants agree that while there are ample medical resources and healthcare facilities in the five-county region; access to healthcare resources can be limited by health insurance coverage (i.e., provider acceptance of state-funded health insurance and affordable health insurance options) and the availability of providers, particularly those that reside in the more rural areas and/or those that are under/uninsured.

  Montour County, where Geisinger Medical Center is located, has the best access to healthcare in Pennsylvania; whereas Union and Snyder Counties are ranked among the worst for access to healthcare (49 and 55 respectively) when compared to the other 67 Pennsylvania counties.

  **Health insurance Issues:**

  ✓ Thirteen percent (13%) of Pennsylvania adults ages 18-64 did not have healthcare coverage in 2009. Significantly more young adults reported having no health insurance (23% of those ages 18-29) compared to older adults (13% for ages 30-44 and 9% for ages 45-64).²

  • Eleven percent (11%) of Pennsylvania adults responded in 2009 that there was an instance in which they needed to see a doctor in the past year but

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² Centers for Disease Control and Prevention: www.cdc.gov/brfss
could not because of cost. Adults under 45 years of age had significantly higher percentages for being unable to see a doctor due to cost compared to older adults.

- Shamokin (17872), when compared to the Geisinger Medical Center community, shows the highest rates of uninsured individuals (20%) followed by Mount Carmel with the second highest rate of uninsured individuals (16%) both of which are higher than the Geisinger Medical Center community (10.4%) and Pennsylvania (14%).

- Community leaders stated that state-funded health insurance is not readily accepted in the area, causing residents to travel lengthy distances to receive health services. Key stakeholders agree that there are few medical and dental providers in the region that will accept the state-funded health insurance. Focus group participants agreed with community leaders and stakeholders and added that the limited acceptance of state-funded health insurance can make it difficult to identify a primary care physician for residents with this type of healthcare coverage. Additionally, some focus group participants were under the impression that it can be difficult for adult residents to qualify for state-funded health insurance. Community leaders, key stakeholders and focus group participants indicated that the limitations of state-funded health insurance can reduce the access residents have to healthcare.

- Community leaders and focus group participants reported that health insurance can be unaffordable for some residents, leading residents to be underinsured with limited coverage and high deductibles and/or uninsured with no coverage at all. Community leaders and focus group participants both believed some employers are not able to offer comprehensive health insurance benefits to their employees due to the high cost of premiums, causing employees to opt out of healthcare plans offered by employers or employers to hire part-time employees only. Additionally, focus group participants indicated that restrictive health insurance regulations reduce the access residents have to affordable healthcare. While key stakeholders felt that there are medical facilities in the area, that medical care may be unaffordable for some residents if they are under/uninsured.

- The CHNA completed in 2009 identified a lack of healthcare coverage as one of the six key themes found during the needs assessment. The household survey administered found that 18.2 percent (1 in every 5) adults in the region did not have

“45,000 deaths annually linked to lack of health coverage. Uninsured working-aged Americans have a 40% higher death risk than privately insured counterparts.”

*Harvard University, Harvard Gazette 2009*
health insurance and unemployed individuals were the least likely to have health insurance.

Availability of healthcare providers:

- In 2008, Northumberland and Snyder counties had a substantially lower ratio of physicians in direct patient care (77.9 and 47.3 per 100,000 pop. respectively) than Pennsylvania’s ratio (247.8 per 100,000 pop.).³
  - Snyder County did not have any practicing pediatricians and Northumberland County had one practicing pediatrician in the county (1.1 per 100,000 pop.), which is substantially less than the ratio for Pennsylvania (13.8 per 100,000 pop.).
  - Snyder County had a markedly lower ratio of family/general practice physicians (18.4 per 100,000 pop.) and primary care physicians (23.6 per 100,000 pop.) in direct patient care than Pennsylvania’s ratio of family/general practice physicians (35.9 per 100,000 pop.) and primary care physicians (92.1 per 100,000 pop.).

- Community leaders, key stakeholders and focus group participants also discussed the accessibility of providers. Community leaders reported that there is a shortage of dentists in the area to provide both routine and specialty dental care. Similarly, leaders believed there is a shortage of pediatric mental health services in the areas of psychiatry, therapy and treatment facilities. Similarly, key stakeholders believed that there are not enough healthcare providers in the area to meet resident demand for pediatric, under/uninsured, mental health and dental healthcare. Also, key stakeholders and focus group participants gave the impression that providers are moving out of the area. Focus group participants felt that access to pediatric healthcare is limited due to a limited number of pediatricians and pediatric psychiatric and dental providers in the area.

- Community leaders, key stakeholders and focus group participants felt that the limited access some residents have to medical, pediatric, mental and dental healthcare may cause: an increase in the utilization of emergency medical care for non-emergent issues; mismanagement of diagnoses; longer waiting times for healthcare services; an increase in travel distance and time for under/uninsured residents; as well as resistance to seek health services; patients presenting in a worse state of health than they may have with greater access to services and a general decline in the health of residents.

³The Center for Rural PA (http://www.ruralpa2.org/county_profiles.cfm)
The CHNA completed in 2009 identified a lack of healthcare coverage, difficulty locating health care providers and paying for services—particularly dental care; and lack of behavioral health care services as two of the six key themes found during the needs assessment. Behavioral health was identified as a significant need in every community. The household survey indicated that 5.5 percent of the residents of the region needed mental health care but were not able to obtain care and 74 percent did not obtain this care as the result of not being able to afford the cost of care. Dental care was also frequently mentioned—particularly for Medicaid recipients. In fact, the household survey found that nearly 26,000 individuals in the region are unable to afford recommended dental care and as many as 10,000 were often or very often unable to afford prescription medication.

**IMPROVING HEALTHY BEHAVIOR**

Underlying factors identified by secondary data and primary input from community stakeholders and focus groups with residents: Need for increased awareness and education, motivation and/or incentives for residents that practice healthy behavior and increased access to healthy options in the region.

The health of a community largely depends on the health status of its residents. Community leaders, key stakeholders and focus group participants believed that the lifestyles of some residents may have an impact on their individual health status and consequently, cause an increase in the consumption of healthcare resources. Specifically, community leaders, stakeholders and focus group participants discussed lifestyle choices (i.e., poor nutrition, inactivity, smoking, substance abuse, including alcohol and other drugs, etc.) that can lead to chronic illnesses (i.e., obesity, diabetes, pulmonary diseases, etc). An increase in the number of chronic illness diagnoses in a community can lead to a greater consumption of healthcare resources due to the need to monitor and manage such diagnoses. Community leaders believed that residents making lifestyle choices that negatively impact their individual health status may lack the awareness, motivation and/or access to healthier options to implement healthy behaviors. Key stakeholders felt that the health status of many residents is poor due to the prevalence of chronic lifestyle-related illnesses.

**Awareness and education about healthy behaviors:**

- Snyder County is ranked 65 for education (the worst being 67 in PA). This poor of a ranking can have widespread effects; higher education, occupation, income, access to health care, ability and knowledge to make healthy decisions, etc.

- Community leaders and key stakeholders felt that residents may not always be aware of healthy choices due to cultural norms, limited access to preventive healthcare and limited prevention education and community outreach in some areas. Community leaders believed that the health and wellness of residents may be negatively impacted...
by a lack of education and awareness about healthy behaviors. Additionally, focus group participants felt that parents who are not making healthy lifestyle choices may be role modeling unhealthy behaviors that their children could replicate.

In 2009, Rural Pennsylvania Counts household survey found that there are significant differences in sources of health information by education. Individuals at the lowest end of the educational spectrum are less likely to use the internet or print materials from home in comparison to individuals with higher levels of education including some college or Bachelor’s degree. However, most respondents indicated that they would obtain health information directly from their health care provider.

Motivation to implement healthy behaviors:

- Columbia County is ranked 62 for Diet and Exercise (67 being the worst in PA). It is clear that this area has poor health options and therefore poor health decisions when it comes to choosing what foods to eat and how/where to exercise.

- Community leaders recognized that any change in behavior requires individual motivation, which area residents may not always have. Community leaders reported that while some residents may be aware of healthy behaviors, those same residents may not be motivated to make healthy choices. Often it can require more effort and energy to live a healthy lifestyle than to make unhealthy choices. Similarly, focus group participants believed that parents are often choosing the most convenient meals, which are not always the healthiest options (i.e., fast food).

Implementation and access to healthy options:

- Union County includes eight zip code areas, of which only two have healthy food option access (25%).

- Union County also shows only two recreational facilities$^4$ for a total of 43,626 individuals residing in the county (a rate of five per 100,000 population) whereas Snyder County shows seven recreational facilities (a rate of 18 per 100,000).

- Community leaders, key stakeholders and focus group participants reported that some residents may be aware of and/or motivated to make healthy choices; however,

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$^4$ To measure access to recreational facilities, the County Health Rankings replicate the measure used by the USDA Food Environment Atlas, using the most current County Business Patterns data set. The Food Environment Atlas presents a measure of recreational facilities per population, in which recreational facilities are identified by the NAICS code 713940. This industry class includes establishments primarily engaged in operating fitness and recreational sports facilities, featuring exercise and other physical fitness conditioning or recreational sports facilities, such as swimming, skating, or racquet sports. The measure reported by the County Health Rankings is recreational facilities per 100,000 population in the county.
healthy options may not be available in some communities or affordable for some residents. Specifically, community leaders, key stakeholders and focus group participants indicated that healthy options, such as fresh produce, healthy food and physical activities may be unaffordable for residents in some communities in the region. Additionally, focus group participants felt that the local public school does not offer the most healthy or nutritious meals to students. Focus group participants gave the impression that some children are not able to play outside due to the perception that their neighborhood may not be safe. Additionally, focus group participants believed that the public schools in their communities do not offer children as much opportunity to be physically active as schools used to offer (i.e., recess, sports, etc.).

In 2009, Rural Pennsylvania Counts household survey found that household size was not significantly associated with an inability to afford healthy food. However, those in the lower income bracket (household income equal to or less than $40,000 per year) were significantly more likely to report that they could not afford fresh fruits and vegetables (10.9 percent compared to higher income 3.0 percent). Additionally there were significant differences in exercise habits by income status. More than one in four lower income residents report no exercise.

COMMUNITY DEVELOPMENT, SPECIFICALLY TRANSPORTATION

Underlying factors identified by secondary data and primary input from community stakeholders and focus groups with residents: Need for community development, specifically transportation.

Community leaders, key stakeholders and focus group participants reported that the lack of transportation, when coupled with the rural nature of the region, may cause significant barriers to some residents accessing healthcare because they are not always able to make it to appointments, and emergency medical transportation services are not always close by to adequately address medical emergencies.

General public transportation issues:

Coordination and Integration of Rural Public Transportation Services in Pennsylvania is a study conducted by Edinboro University that considers the challenges of public transportation in rural Pennsylvania. To identify barriers and opportunities for integration of rural transportation systems, the researchers interviewed administrators and employees from eight of the 21 providers of public transportation that operated in rural PA areas in 2002 and 2003. A summary of the conditions that affect the operation and coordination of public transportation:

5 Source: The Center for Rural PA (http://www.rural.palegislature.us/rural_public_transportation.pdf)
• Rural public transportation systems are funded in part by the Pennsylvania Department of Transportation (PennDOT) and their routes cover at least parts of 27 counties.

• Tradition and agency preference continue to limit current integration and may limit coordination in the future.

• The Pennsylvania Constitution prohibits the use of gas tax revenues to fund public transportation, leaving the real estate tax as the primary source for supporting public transportation, resulting in severely constrained tax sources. Often, counties lack the revenue resources to better support public transportation.

• Different policy, budget and funding choices among neighboring counties may present barriers to the formation of transportation alliances and coordination.

• Transportation agencies lack information about the availability and amounts of transportation funding available from various sources.

• Increasing numbers of riders are qualifying for subsidized transportation at the same time that states are facing budget shortfalls.

• Most private and public interest organizations, primary and secondary schools, and some human services agencies have traditionally provided transportation for their clients separately. After failed integration attempts in the past, transportation providers may be reluctant to coordinate their efforts.

• The difficulties of driving clients to their scheduled appointments on time and of clients having to wait long periods of time for their return rides continue to complicate transportation coordination efforts.

• Behavioral problems among some rider groups prevent some special needs clients from riding in vehicles with some other rider groups.

✓ While community leaders acknowledged that there are transportation systems operating in the region, leaders believed that those systems were limited and disjointed. Specifically, community leaders believed that there are transit systems administered at the county level; however, each county transit system does not carry residents across county lines. Additionally, community leaders reported that where
one county transit system ends another county system does not always pick up, making it difficult to travel across counties. Furthermore, community leaders, key stakeholders and focus group participants gave the impression that the public transportation that is offered is limited in the area that is covered and schedules that are offered. For many residents that do not have access to private transportation, it can be difficult to get around in the region. In particular, key stakeholders believed that the lack of transportation presents residents with barriers to accessing available community services, employment opportunities, healthy nutrition, healthcare, dental care, mental healthcare, etc.

Transportation for medical appointments:

✓ According to PennDOT, in FY 09-10 the number one purpose for rural transit services was medical (35%) followed by work (30%) and shopping (23%).

✓ Community leaders reported that healthcare providers may not be accepting state-funded health insurance due to recipients having a low attendance rate for scheduled appointments. Community leaders, key stakeholders and focus group participants believed that a lack of transportation due to poor public transportation, inability to maintain a private method of transportation and the cost of gasoline, when coupled with the distance some residents have to travel to get to medical facilities may, in part, be responsible for the limited rate of attendance that local medical providers observed from recipients of state-funded health insurance. Additionally, key stakeholders and focus group participants acknowledged that there are clinics in the area that provide medical care to uninsured residents; however, many residents are not able to get to and from these clinics, which limits the access residents have to primary, preventive, mental and dental healthcare, as well as employment opportunities, community services and healthy produce.

✓ In the 2009 CHNA, Rural Pennsylvania Counts, transportation was one of the six key themes identified in the needs assessment process. One of the greatest needs identified in the household survey was health care transportation. Transportation issues were also discussed in focus groups from four of the five counties (Columbia, Northumberland, Snyder and Union Counties).

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Community Health Needs Identification Forum

The following qualitative data were gathered during a regional community health needs identification forum held on April 5th, 2012 at the Danville Elks Lodge and Banquet Hall. The community forum was conducted with more than 60 community leaders from a five-county region (Columbia, Montour, Northumberland, Snyder and Union Counties). Community leaders were identified by the ACTION Health CHNA oversight committee for Geisinger Medical Center.

Tripp Umbach presented the results from the secondary data analysis, key stakeholder interviews and community focus groups, and used these findings to engage community leaders in a group discussion. Community leaders were asked to share their vision for the community, discuss a plan for health improvement in their community and prioritize their concerns. Breakout groups were formed and asked to identify issues/problems that were most prevalent in the region, along with ways to resolve the identified problems through innovative solutions that would develop a healthier community.

During the community forum process, community leaders discussed regional health needs that centered around three themes: Access to healthcare for under/uninsured residents, Healthy behaviors: awareness, motivation and implementation, and Transportation to health service providers. The following summary represents the most important topic areas discussed at the forum. Community leaders believe the following concerns are the most pressing problems and are identified as the most manageable to address and resolve.

- **ACCESS TO HEALTHCARE FOR UNDER/UNINSURED RESIDENTS:**
  Access to healthcare was discussed among community leaders at the community forum. Community leaders focused their discussions primarily on the limited number of healthcare providers, issues surrounding health insurance for the under/uninsured populations in the region.

  - While community leaders believed there are resources in the area to meet the medical needs of residents, leaders also believed that access to those resources can be restricted by limited health insurance coverage (i.e., provider acceptance of state-funded health insurance and affordable health insurance options) and the availability of providers.

  - Community leaders reported that health insurance can be unaffordable for some residents, leading residents to be underinsured with limited coverage and high deductibles and/or uninsured with no coverage at all. Leaders also gave the impression that some employers are not able to offer comprehensive health insurance benefit to their employees due to the high cost of premiums. Additionally, leaders gave the impression that state-funded health insurance is not readily accepted in the area, causing residents to travel lengthy distances to receive health services.
Community leaders also discussed the accessibility of providers, particularly dentists and pediatric mental health services. Community leaders indicated that there is a shortage of dentists in the area to provide both routine and specialty dental care. Similarly, leaders reported that there is a shortage of pediatric mental health services in the areas of psychiatry, therapy and treatment facilities.

TRANSPORTATION TO HEALTH SERVICE PROVIDERS:
Community leaders gave the impression that the lack of transportation, when coupled with the rural nature of the region, may cause significant barriers to some residents accessing healthcare because they are not always able to make it to appointments, and emergency medical transportation services are not always close by to adequately address medical emergencies.

While community leaders acknowledged that there are transportation systems operating in the region, leaders reported that those systems were limited and disjointed. Specifically, community leaders reported that there are transit systems administered at the county level; however, each county transit system does not carry residents across county lines. Additionally, community leaders reported that where one county transit system ends another county system does not always pick up, making it difficult to travel across counties. Furthermore, community leaders gave the impression that the public transportation that is offered is limited in the area that is covered and schedules that are offered. For many residents that do not have access to private transportation, it can be difficult to get around in the region.

Community leaders reported that healthcare providers may not be accepting state-funded health insurance due to recipients having a low attendance rate for scheduled appointments. Leaders indicated that a lack of transportation due to poor public transportation, limited financial means to maintain a private method of transportation and the cost of gasoline when coupled with the distance some residents have to travel to get to medical facilities may, in part, be responsible for the limited rate of attendance that local medical providers observe from recipients of state-funded health insurance.

HEALTHY BEHAVIORS: AWARENESS, MOTIVATION AND IMPLEMENTATION:
Community leaders felt that the lifestyles of some residents may have an impact on their individual health status and consequently cause an increase in the consumption of healthcare resources. Specifically, community leaders discussed lifestyle choices (i.e., poor nutrition, inactivity, smoking, substance abuse, including alcohol and other drugs, etc.) that can lead to chronic illnesses (i.e., obesity, diabetes, pulmonary diseases, etc). Community leaders felt that
residents making lifestyle choices that negatively impact their individual health status may lack the awareness, motivation and/or access to healthier options to implement healthy behaviors.

✓ Community leaders gave the impression that residents may not always be aware of healthy choices due to cultural norms, limited access to preventive healthcare and limited community outreach in some areas. Community leaders felt that the health and wellness of residents may be negatively impacted by a lack of education and awareness about healthy behaviors.

✓ Community leaders recognized that any change in behavior requires individual motivation, which area residents may not always have. Community leaders gave the impression that while some residents may be aware of healthy behaviors, those same residents may not be motivated to make healthy choices. Often it can require more effort and energy to live a healthy lifestyle than to make unhealthy choices.

✓ Community leaders felt that some residents may not be aware of and/or motivated to make healthy choices; however, healthy options may not be available in some communities or affordable for some residents. Specifically, community leaders reported that healthy options, such as fresh produce, healthy food and physical activities may be unaffordable for residents in some communities in the region.
Secondary Data

Tripp Umbach worked collaboratively with ACTION Health to develop a secondary data process focused on three phases: collection, analysis and evaluation. Tripp Umbach obtained information on the demographics, health status and socio-economic and environmental factors related to health and needs of residents from the multi-community service area of the Geisinger Medical Center. The process developed accurate comparisons to the state baseline of health measures utilizing the most current validated data. In addition to demographic data, specific attention was focused on the development of two key community health index factors: Community Need Index (CNI) and Prevention Quality Indicators Index (PQI).

Demographic Profile

The Geisinger Medical Center community encompasses Columbia, Montour, Northumberland, Snyder and Union Counties, and is defined as a zip code geographic area based on 80% of the hospital’s inpatient volumes. The Geisinger Medical Center community consists of 49 zip code areas (see Figure 2).

Figure 2: Geisinger Medical Center Community Geographic Definition

* Darker shading indicates greater barriers to healthcare access
Demographic Profile – Key Findings:

- The Geisinger Medical Center community shows a slight decline in population from 2011 to 2016 (-0.48%). This is inconsistent with Pennsylvania, which shows a rise in population at a rate of 0.70%.

- The Geisinger Medical Center community shows slightly higher percentages of women as opposed to men; this is consistent with state and national data.

- The Geisinger Medical Center community shows slightly more elderly individuals (65+; 17.4%) as compared with Snyder and Union counties (15.6% and 14.7% respectively).

- The Geisinger Medical Center community shows an average annual household income of $51,750. The highest average income is found in Montour County ($63,212) and the lowest is found in Northumberland County ($45,871).

- The Geisinger Medical Center community shows 16% of the population who have not received a high school diploma; Northumberland County shows even more (16.8%). These rates are much higher than the state (12.6%) and U.S. (15.1%) rates.

- As compared with Pennsylvania and the United States, the Geisinger Medical Center community shows very little diversity (only 6.7% identify as a race or ethnicity other than White, Non-Hispanic).

Community Need Index (CNI)

In 2005 Catholic Healthcare West, in partnership with Thomson Reuters, pioneered the nation’s first standardized Community Need Index (CNI). CNI was applied to quantify the severity of health disparity for every zip code in Pennsylvania based on specific barriers to healthcare access. Because the CNI considers multiple factors that are known to limit healthcare access, the tool may be more accurate and useful than other existing assessment methods in identifying and addressing the disproportionate unmet health-related needs of neighborhoods.

Rather than relying solely on public health data, the CNI accounts for the underlying economic and structural barriers that affect overall health. Using a combination of research, literature, and experiential evidence, CHW identified five prominent barriers that enable us to quantify health care access in communities across the nation.

The five prominent socio-economic barriers to community health quantified in CNI include: Income, Insurance, Education, Culture/Language and Housing. To determine the severity of barriers to health care access in a given community, the CNI gathers data about that community’s socio-economy. For example, what percentage of the population is elderly and living in poverty;

what percentage of the population is uninsured; what percentage of the population is unemployed, etc. Using this data we assign a score to each barrier condition (with 1 representing less community need and 5 representing more community need). The scores are then aggregated and averaged for a final CNI score (each barrier receives equal weight in the average). A score of 1.0 indicates a zip code with the lowest socio-economic barriers, while a score of 5.0 represents a zip code with the most socio-economic barriers.

Overall, the Geisinger Medical Center community has a CNI score of 2.8, indicating a moderate-range level of community health need in the Geisinger Medical Center community. The Geisinger Medical Center community is a collection of “low-need” communities with many of the zip code areas reporting a CNI score below the average for the scale (2.5). The CNI analysis lets us dig deeper into the traditional socio-economic barriers to community health and identify area where the need may be greater than the overall service area.

Table 2: CNI Scores for the Geisinger Medical Center community by Zip Code

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Geisinger Medical Center Community Summary

Higher CNI scores indicate greater number of socio-economic barriers to community health.

Geisinger Medical Center community contains areas with both the highest CNI scores (3.8) in the five-county region and the lowest (1.4). Northumberland County contains three of the top five CNI scores for the Geisinger Medical Center community, with Union county holding the other two.

Shamokin (3.8), Sunbury (3.6) and Coal Township (3.6) are the top CNI scores for the Geisinger Medical Center community in Northumberland County and Allenwood (3.6) and Lewisburg (3.4) are the top CNI scores for the community in Union County.

- Shamokin (17872), when compared to the Geisinger Medical Center community, shows the highest rates of the following individuals; uninsured (20%), those 65 and older living in poverty (24%), and children living in poverty in households with married parents (29%).
- Sunbury (17801) shows the highest rate of individuals who rent in the Geisinger Medical Center community with 40% of the population renting. Additionally, Sunbury shows elevated rates of single head of household families with children living in poverty (50%).
- Coal Township (17866), when compared to the Geisinger Medical Center community, shows high rates of individuals renting (21%), individuals with no high school diploma (23%), and single head of household families with children living in poverty (25%).
- Allenwood (17810) is a unique population; approximately 78% of the Allenwood population is incarcerated individuals at one of the three, all-male federal correctional facilities (low, medium and high security). The CNI data for Allenwood includes these individuals. With that being said, Allenwood shows the highest rates of non-white residents (60%) and lowest education levels with no high school diploma.
(30%) in the Geisinger Medical Center community. Additionally, Allenwood shows high rates of single head of household families with children living in poverty (40%).

- Lewisburg (17837) shows the second highest rate of individuals who rent (35%) and higher rates of single head of household families with children living in poverty (30%) in the Geisinger Medical Center community.

✓ The overall unemployment rate for the Geisinger Medical Center community of 5.3% is considerably lower than the current rate for both Pennsylvania (7.6%) and the United States (8.2%). Shamokin (17872) and Allenwood (17810) both have unemployment rates that are considerably higher (10% and 17% respectively) than Pennsylvania and the United States.

- Shamokin has an unemployment rate that is almost twice that of the Geisinger Medical Center community and slightly higher than both the state and national averages. Allenwood has an unemployment rate that is triple that of the community, Pennsylvania, and more than double the state and national averages.

**County Health Rankings**

The County Health Rankings show that where we live impacts our health status. The health of a community depends on many different factors – from individual health behaviors, education and jobs, to quality of healthcare and the environment. The rankings help community leaders see that where we live, learn, work and play influences how healthy we are and how long we live.

The County Health Rankings are a key component of the Mobilizing Action Toward Community Health (MATCH) project. MATCH is the collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The rankings identify the multiple health factors that determine a county’s health status. Each county receives a summary rank for its health outcomes and health factors – the four different types of health factors include: health behaviors, clinical care, social and economic factors, and the physical environment. The rankings are a real “Call-to-Action” for state and local health departments to develop broad-based solutions with others in their community so all residents can be healthy. But efforts will also be made to mobilize community leaders outside the public health sector to take action and invest in programs and policy changes that address barriers to good health and help residents lead healthier lives. Other community leaders may include: educators; elected and appointed officials, including mayors, governors, health commissioners, city/county councils, legislators, and staff; business owners; and the healthcare sector.

✓ Counties in each of the 50 states are ranked according to summaries of 37 health measures. Those having high ranks, e.g., 1 or 2, are considered to be the “healthiest.” Counties are ranked relative to the health of other counties in the same state on the following summary measures:

---

• Health Outcomes — Two types of health outcomes are measured to represent the health of each county: how long people live (mortality) and how healthy people feel (morbidity). These outcomes are the result of a collection of health factors and are influenced by existing programs and policies at the local, state and federal levels.

• Health Factors — A number of different health factors shape a community’s health outcomes. The County Health Rankings are based on weighted scores of four types of factors: Health behaviors (six measures), Clinical care (five measures), Social and economic (seven measures), and the Physical environment (four measures).

Pennsylvania has 67 counties; therefore, the rank scale for Pennsylvania is 1 to 67 (1 being the healthiest county and 67 being the most unhealthy). The median rank is 34.

✓ The counties included in the Geisinger Medical Center community show very high (unhealthy) rankings for the following measures:
  - Education (rank of 65 for Snyder county)
  - Diet and Exercise (rank of 62 for Columbia County)
  - Community Safety (rank of 60 for Montour County)

<table>
<thead>
<tr>
<th>County</th>
<th>Education</th>
<th>Diet and Exercise</th>
<th>Community Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>24</td>
<td>62</td>
<td>11</td>
</tr>
<tr>
<td>Montour</td>
<td>21</td>
<td>23</td>
<td>60</td>
</tr>
<tr>
<td>Northumberland</td>
<td>58</td>
<td>23</td>
<td>59</td>
</tr>
<tr>
<td>Snyder</td>
<td>65</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td>Union</td>
<td>35</td>
<td>39</td>
<td>2</td>
</tr>
</tbody>
</table>

✓ However, at the same time, the counties in the Geisinger Medical Center community show very low (healthier) rankings for the following measures:
  - Clinical Care (rank of 1 for Montour county)
  - Quality of Care (rank of 1 for Union County and 2 for Snyder County)
  - Physical Environment (rank of 1 for Montour County and 2 for Snyder County)

<table>
<thead>
<tr>
<th>County</th>
<th>Clinical Care</th>
<th>Quality of Care</th>
<th>Physical Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia</td>
<td>36</td>
<td>45</td>
<td>3</td>
</tr>
<tr>
<td>Montour</td>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Northumberland</td>
<td>17</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>Snyder</td>
<td>9</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Union</td>
<td>7</td>
<td>1</td>
<td>58</td>
</tr>
</tbody>
</table>
Prevention Quality Indicators Index (PQI)

The Prevention Quality Indicators index (PQI) was developed by the Agency for Healthcare Research and Quality (AHRQ). The AHRQ model was applied to quantify the PQI within the Geisinger Medical Center community and Pennsylvania. The PQI index identifies potentially avoidable hospitalizations for the benefit of targeting priorities and overall community health.

The quality indicator rates are derived from inpatient discharges by zip code using ICD diagnosis and procedure codes. There are 14 quality indicators. Lower index scores represent fewer admissions for each of the PQIs.

Table 3: Prevention Quality Indicators – Geisinger Medical Center Community Compared to Pennsylvania

<table>
<thead>
<tr>
<th>Prevention Quality Indicators (PQI)</th>
<th>Geisinger Medical Center</th>
<th>Pennsylvania</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bacterial Pneumonia Admission Rate (PQI 11)</td>
<td>3.89</td>
<td>3.49</td>
<td>+ 0.40</td>
</tr>
<tr>
<td>Angina Without Procedure Admission Rate (PQI 13)</td>
<td>0.34</td>
<td>0.17</td>
<td>+ 0.17</td>
</tr>
<tr>
<td>Chronic Obstructive Pulmonary Disease Admission Rate (PQI 5)</td>
<td>3.18</td>
<td>3.08</td>
<td>+ 0.10</td>
</tr>
<tr>
<td>Perforated Appendix Admission Rate (PQI 2)</td>
<td>0.33</td>
<td>0.27</td>
<td>+ 0.06</td>
</tr>
<tr>
<td>Diabetes Short-Term Complications Admission Rate (PQI 1)</td>
<td>0.65</td>
<td>0.63</td>
<td>+ 0.02</td>
</tr>
<tr>
<td>Dehydration Admission Rate (PQI 10)</td>
<td>0.75</td>
<td>0.76</td>
<td>- 0.01</td>
</tr>
<tr>
<td>Congestive Heart Failure Admission Rate (PQI 8)</td>
<td>4.81</td>
<td>4.85</td>
<td>- 0.04</td>
</tr>
<tr>
<td>Uncontrolled Diabetes Admission Rate (PQI 14)</td>
<td>0.16</td>
<td>0.20</td>
<td>- 0.04</td>
</tr>
<tr>
<td>Lower Extremity Amputation Rate Among Diabetic Patients (PQI 16)</td>
<td>0.39</td>
<td>0.43</td>
<td>- 0.04</td>
</tr>
<tr>
<td>Hypertension Admission Rate (PQI 7)</td>
<td>0.47</td>
<td>0.59</td>
<td>- 0.12</td>
</tr>
<tr>
<td>Diabetes Long-Term Complications Admission Rate (PQI 3)</td>
<td>1.08</td>
<td>1.27</td>
<td>- 0.19</td>
</tr>
<tr>
<td>Adult Asthma Admission Rate (PQI 15)</td>
<td>0.79</td>
<td>1.44</td>
<td>- 0.65</td>
</tr>
<tr>
<td>Urinary Tract Infection Admission Rate (PQI 12)</td>
<td>1.45</td>
<td>2.30</td>
<td>- 0.85</td>
</tr>
<tr>
<td>Low Birth Weight Rate (PQI 9)</td>
<td>0.12</td>
<td>1.11</td>
<td>- 0.99</td>
</tr>
</tbody>
</table>

Source: Calculations by Tripp Umbach

✓ The Geisinger Medical Center community shows much higher rates of Bacterial Pneumonia, Angina without Procedure and Chronic Obstructive Pulmonary Disease hospital admissions than Pennsylvania.

✓ On the other hand, the Geisinger Medical Center community shows much more drastic differences in the rates of hospital admissions for Low Birth Weight and Urinary Tract Infections in which the Geisinger Medical Center community shows lower rates as compared with Pennsylvania. For example, the Geisinger Medical Center community shows a rate of low birth weight admissions at 0.12, whereas PA shows a rate of 1.11 (a difference of -0.99).

✓ Although the Geisinger Medical Center community shows a lower rate for low birth weight hospital admissions than PA; this value (0.12) is actually higher than many of the counties in the area which receive such low hospital admission rates due to low birth weight that the value is negligible. It is concerning that the Geisinger Medical Center community shows a PQI value for low birth weight when many of the other areas do not.
The Geisinger Medical Center community shows slightly lower rates than PA for most of the diabetes measures (long-term complications, uncontrolled diabetes and lower extremity amputations). Columbia and Northumberland counties show the highest rates of all diabetes-related hospital admissions for the Geisinger Medical Center community.

The Geisinger Medical Center community shows lower rates for hypertension and congestive heart failure hospital admissions as compared with PA. However, the Geisinger Medical Center community shows a much higher rate of angina without procedure hospital admissions than PA.

Transportation:

Coordination and Integration of Rural Public Transportation Services in Pennsylvania is a study conducted by Edinboro University that considers the challenges of public transportation in rural Pennsylvania. To identify barriers and opportunities for integration of rural transportation systems, the researcher interviewed administrators and employees from eight of the 21 providers of public transportation that operated in rural PA areas in 2002 and 2003. A summary of the conditions that affect the operation and coordination of public transportation:

- Rural public transportation systems are funded in part by the Pennsylvania Department of Transportation (PennDOT) and their routes cover at least parts of 27 counties.
- Tradition and agency preference continue to limit current integration and may limit coordination in the future.
- The Pennsylvania Constitution prohibits the use of gas tax revenues to fund public transportation, leaving the real estate tax as the primary source for supporting public transportation, resulting in severely constrained tax sources. Often, counties lack the revenue and resources to better support public transportation.
- Different policy, budget and funding choices among neighboring counties may present barriers to the formation of transportation alliances and coordination.
- Transportation agencies lack information about the availability and amounts of transportation funding available from various sources.
- Increasing numbers of riders are qualifying for subsidized transportation at the same time that states are facing budget shortfalls.

Source: The Center for Rural PA (http://www.rural.palegislature.us/rural_public_transportation.pdf)
Most private and public interest organizations, primary and secondary schools, and some human services agencies have traditionally provided transportation for their clients separately. After failed integration attempts in the past, transportation providers may be reluctant to coordinate their efforts.

The difficulties of driving clients to their scheduled appointments on time and of clients having to wait long periods of time for their return rides continue to complicate transportation coordination efforts.

Behavioral problems among some rider groups prevent some special needs clients from riding in vehicles with some other rider groups.

Accessibility of Healthcare Professionals:

Table 4: Number of Healthcare Professionals per 100,000 Residents by County in the Geisinger Medical Center community

<table>
<thead>
<tr>
<th>HEALTHCARE PROFESSIONALS BY COUNTY OF PRACTICE</th>
<th>Columbia County</th>
<th>Montour County</th>
<th>Northumberland County</th>
<th>Snyder County</th>
<th>Union County</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # Physicians per 100,000 Residents, 2008</td>
<td>127.7</td>
<td>2264.9</td>
<td>77.9</td>
<td>47.3</td>
<td>226.9</td>
<td>247.8</td>
</tr>
<tr>
<td>Total # Primary Care Physicians in Direct Patient Care per 100,000 Residents , 2008</td>
<td>78.5</td>
<td>485.7</td>
<td>48.3</td>
<td>23.6</td>
<td>98.5</td>
<td>92.1</td>
</tr>
<tr>
<td># Family/ Gen Practice Physicians in Direct Patient Care per 100,000 Residents, 2008</td>
<td>38.5</td>
<td>56.5</td>
<td>31.8</td>
<td>18.4</td>
<td>41.2</td>
<td>35.9</td>
</tr>
<tr>
<td># Pediatrics Physicians in Direct Patient Care per 100,000 Residents, 2008</td>
<td>10.8</td>
<td>90.4</td>
<td>1.1</td>
<td>0</td>
<td>11.5</td>
<td>13.8</td>
</tr>
<tr>
<td># Dentist per 100,000 Residents by County of Practice, 2009</td>
<td>35.3</td>
<td>73.4</td>
<td>30.7</td>
<td>38.9</td>
<td>48.2</td>
<td>49.7</td>
</tr>
</tbody>
</table>

In 2008, Northumberland and Snyder counties had significantly less physicians in direct patient care (77.9 and 47.3 per 100,000 pop. respectively) than Pennsylvania’s average (247.8 per 100,000 pop.).

- Snyder County did not have any practicing pediatricians and Northumberland County had one practicing pediatrician in the county (1.1 per 100,000 pop.), which is significantly less than the average for Pennsylvania (13.8 per 100,000 pop.).

- Snyder County had significantly lower numbers of family/general practice physicians (18.4 per 100,000 pop.) and primary care physicians (23.6 per 100,000 pop.) in direct patient care than Pennsylvania’s average of family/general practice physicians (35.9 per 100,000 pop.) and primary care physicians (92.1 per 100,000 pop.).
Key Stakeholder Interviews

Tripp Umbach worked collaboratively with the ACTION Health CHNA oversight committee to develop a comprehensive list of community stakeholders. Stakeholders were selected based on their involvement within the community and their participation in overall community health. The following qualitative data were gathered during individual interviews with 18 stakeholders of the Geisinger Medical Center community. Each interview was conducted by a Tripp Umbach consultant and lasted approximately 60 minutes. All respondents were asked the same set of questions developed by Tripp Umbach and reviewed by the ACTION Health CHNA oversight committee (see Appendix C).

The organizations represented by stakeholders were:

- SEDA-Cog
- Caring Communities
- Geisinger Medical Center
- ACTION Health
- Community Clinic
- Bucknell University
- Pennsylvania Office of Rural Health
- United Way of Greater Susquehanna Valley
- Susquehanna University
- The Gatehouse Shelter
- Berwick United Way
- Montour County Probation
- Montour County Assistance Office
- St. Paul’s United Church of Christ
- Montour Fire Department

The 18 stakeholders identified the following problems and/or barriers as preventing the residents of the Geisinger Medical Center community from achieving their vision of a healthy community. A high-level summary of community health needs identified by community stakeholders include:

- **ACCESS TO PRIMARY, PREVENTIVE AND MENTAL HEALTHCARE**
  - While stakeholders felt there is ample medical resources and healthcare facilities in some of their communities, they gave the impression that medical care is not always accessible to all residents, particularly those that reside in the more rural areas and/or those that are under/uninsured.

Stakeholders acknowledged that there are clinics in the area that provide medical care to uninsured residents; however, many residents are not able to get to and from these clinics due to the distance one must travel and a lack of transportation. Additionally, stakeholders felt that there are medical facilities in the area that medical care that may be unaffordable for some residents if they are under/uninsured.

Stakeholders reported that not all residents are able to access pediatric, under/uninsured, mental health and dental healthcare. Stakeholders indicated that there are not enough healthcare providers in the area to meet resident demand for pediatric, under/uninsured, mental health and dental healthcare. Stakeholders believed that demand has increased as
a result of an aging baby-boomer population. Also, stakeholders gave the impression that providers are moving out of the area. Stakeholders reported that there are few medical and dental providers in the region that will accept the Medical Access Card. Additionally, stakeholders felt that there is a stigma around mental health diagnosis and seeking mental health services, which may cause residents to avoid using the mental health services that exist.

The limited access some residents have to medical, pediatric, mental and dental healthcare may cause: an increase in the utilization of emergency medical care for non-emergent issues; longer waiting times for healthcare services; an increase in travel distance and time for under/uninsured residents; as well as resistance to seek health services; patients presenting in a worse state of health than they may have with greater access to services and a general decline in the health of residents.

**THE HEALTH AND WELLNESS OF RESIDENTS**

- The health of a community largely depends on the health status of its residents. Community stakeholders reported the health status of many residents to be poor due to the prevalence of chronic lifestyle-related illnesses, limited education on how to maintain health, limited awareness about prevention and limited access residents have to health options.

Stakeholders felt that residents make poor lifestyle choices, which contributes to their unhealthy status and often leads to chronic health conditions (i.e., diabetes, obesity and respiratory issues). Stakeholders felt that residents have a limited understanding about preventive choices and healthy options due to the culture of the region, limited access to preventive healthcare and a lack of prevention education and outreach in their communities. Additionally, stakeholders believed that affordable healthy food options can be inaccessible for some residents.

Poor lifestyle choices can lead to chronic illness like obesity, diabetes, heart disease and respiratory issues. An increase in the number of chronic illness diagnoses in a community can lead to a greater consumption of healthcare resources due to the need to monitor and manage such diagnoses.

**COMMUNITY SERVICES**

- While stakeholders feel their communities provide many services to residents, they also perceive services to be limited in the areas of transportation and capacity to meet demand.

Stakeholders reported that there are areas with a higher demand for community services. Stakeholders feel there is a high rate of poverty in some communities, which creates pockets of higher demand for community services that some communities may not have
the capacity to meet. Additionally, stakeholders mentioned there has been an increase in the demand for flood-related community services due to recent flooding.

Stakeholders gave the impression that transportation is not always available to residents in their communities due to the limited public transportation system in the area. Stakeholders believed that when coupled with the rural nature of the region, the lack of transportation presents residents with barriers to accessing available community services, employment opportunities, healthy nutrition, healthcare, dental care, mental healthcare, etc.

Additional data and greater detail related to the Geisinger Medical Center Community Key Stakeholder Interviews is available in Appendix C.
Focus Groups with Community Residents

Tripp Umbach facilitated three focus groups with residents in the Geisinger Medical Center community service area. Top community concerns include access to primary, preventive, mental and dental healthcare, healthy behaviors, community infrastructure. Approximately 30 residents from the Geisinger Medical Center community participated in the focus groups, each providing direct input related to top community health needs of themselves, their families and communities.

The goal of the focus group process is that each participant feels comfortable and speaks openly so that they contribute to the discussion. It was explained to participants that there are no wrong answers, just different experiences and points of view. This process ensures that each participant shares their experiences from their point of view, even if it is different from what others have said. Specifically, focus group participants were asked to identify and discuss what they perceived to be the top health issues and/or concerns in their communities. The focus group process gathers valuable qualitative and anecdotal data regarding the broad health interests of the communities served by the medical facilities within the service area of Geisinger Medical Center. Focus group input is subject to the limitations of the identified target populations (i.e., vocabulary, perspective, knowledge, etc.), and therefore, is not factual and inherently subjective in nature.

The three focus group audiences were:

- Working Professionals with Young Children
  - Conducted on March 21st, 2012 at Little Britches Daycare Center Inc. (Elysburg, PA)

- Nurses Employed by a Public School
  - Conducted on March 22nd, 2012 at The Pine Barn Inn (Danville, PA)

- Small Business Owners Including Farmers
  - Conducted on March 23rd, 2012 at Country Cupboard (Lewisburg, PA)

Key high-level themes from all three focus groups include:

- **ACCESS TO PRIMARY, PREVENTIVE, MENTAL AND DENTAL HEALTHCARE**

  Focus group participants felt that primary, preventive, mental and dental healthcare was difficult for some residents to access due to these services being limited in the areas of availability of providers (i.e., pediatric providers) and affordability of medical services.

  - **Availability of providers:** Group participants gave the impression that access to pediatric healthcare is limited due to a limited number of pediatricians, pediatric psychiatric and dental providers in the area.
Some focus group participants reported that the limited number of pediatric psychiatric services available in their communities leads pediatricians to have to prescribe and manage psychotropic medications. Pediatricians may not have the specialized training in psychiatry to effectively diagnose and/or manage a child’s mental health diagnosis, which participants believed can cause children to have a negative reaction to medications and parents to consequentially avoid future pharmacological approaches to managing their child(ren)’s mental health diagnosis.

Participants reported that there are few dental providers that accept state-funded health insurance which causes parents lengthy waits for appointments, lengthy travel times for scheduled appointments or the inability to meet their child(ren)’s dental and psychiatric needs. Additionally, participants believed that the limited public transportation system can further restrict the access parents have to pediatric psychiatric and dental care due to the distance between providers that will accept state-funded health insurance.

Some participants indicated that there were a limited number of pediatricians practicing in the community. Participants were under the impression that there is an outflux of pediatricians due to state laws that increase the risk of malpractice litigation and consequentially the cost of malpractice insurance. Participants gave the impression that the lack of available pediatricians causes lengthy travel times and waits for scheduled appointments, a difficulty securing same-day appointments and an increased use of emergency medical services for non-emergent issues.

**Affordability of medical services:** Group participants felt that healthcare can be difficult for some residents to afford due to health insurance issues (i.e., provider acceptance of state-funded health insurance and a decrease in healthcare benefits being offered by employers).

Some focus group participants reported that it can be difficult for adult residents to qualify for state-funded health insurance. Additionally, participants indicated that there is a lack of local healthcare providers (medical and dental) that will accept state-funded medical insurance, which can make it difficult to identify a primary care physician for residents with this type of healthcare coverage. Participants believed that the limitations of state-funded health insurance can reduce the access residents have to healthcare.

Focus group participants indicated that affordable health insurance may not be readily accessible to residents in their communities. Specifically,
participants gave the impression that many employers, particularly small businesses are offering health insurance as a benefit of employment less often. Participants reported that the cost of health insurance has become unaffordable for employers and employees. Additionally, participants gave the impression that restrictive health insurance regulations reduce the access residents have to affordable healthcare.

**HEALTHY BEHAVIORS**

Focus group participants discussed the need for some residents to increase their practice of healthy behaviors in the areas of lifestyle choices, healthy nutrition and physical activity.

- **Lifestyle choices:** Focus group participants gave the impression that there are residents in their communities that they feel are not always making the healthiest lifestyle choices for themselves and their children (i.e. smoking, nutrition, activities, etc.). Participants felt that the lifestyle choices many residents are making may lead to chronic illness (i.e., obesity, diabetes, respiratory issues, etc.). Additionally, participants felt that parents who are not making healthy lifestyle choices may be role modeling behaviors that their children could replicate.

- **Healthy Nutrition:** Participants reported that residents do not always have access to healthy nutrition. Participants believed that parents are often choosing the most convenient meals, which are not always the healthiest options (i.e., fast food). Additionally, participants felt that the local public school does not offer the most healthy or nutritious meals to students.

- **Physical activity:** Participants indicated that residents in their communities may not always have access to affordable physical activities and as a result are not always as active as they might need to be to remain healthy. Participants gave the impression that some children are not able to play outside due to the perception that their neighborhood may not be safe. Additionally, participants felt that the public schools in their communities do not offer children as much opportunity to be physically active as schools used to offer (i.e., recess, sports, etc.).

**COMMUNITY INFRASTRUCTURE**

Often the barriers to accessing healthcare can be traced back to the infrastructure of a community. Focus group participants indicated that the infrastructure of their communities is limited in the areas of transportation and capacity to provide community services.
**Limited transportation:** Focus group participants reported that residents have limited access to transportation in many of their communities. Participants gave the impression that there is no affordable method of public transportation available to residents. Participants believed that the lack of transportation, when coupled with the rural nature of the region limits the access residents have to primary, preventive, mental and dental healthcare as well as, employment opportunities, community services and healthy produce.

**Community Services:** While focus group participants perceive that services are available in their communities, many participants gave the impression that the community’s capacity to meet the demand for services in some areas is limited. Participants discussed the gap between self-sufficiency and public assistance eligibility being the point at which community services may be needed and unavailable. Additionally, participants thought that residents may not always be aware of what services are available in their communities, resulting in the underutilization of available programs and services.

Additional data and greater detail related to the Geisinger Medical Center Community Focus Groups is available in Appendix D.
Conclusions and Recommended Next Steps

The community needs identified through the Geisinger Medical Center CHNA process are not all related to the provision of traditional medical services provided by medical centers. However, the top needs identified in this assessment do “translate” into a wide variety of health-related issues that may ultimately require hospital services. For example, limited access to affordable health insurance leaves residents underinsured or uninsured, which can cause an increase in the use of emergency medical services for non-emergent issues and residents that resist seeking medical care until their symptoms become emergent due to the inability to pay for routine treatment and/or preventive care.

Geisinger Medical Center, working closely with community partners, understands that the CHNA document is only a first step in an ongoing process. It is vital that ongoing communication and a strategic process follow the assessment process – with a clear focus on expanding access to healthcare for under/uninsured residents in Columbia, Montour, Northumberland, Snyder and Union Counties. There is a wealth of medical resources in the region with multiple clinics that serve under/uninsured residents. However, there is a need for an increase in healthcare providers, increased access to affordable health insurance and transportation to healthcare facilities, including free clinics. Collaboration and partnership are strong in the community. It is important to expand existing partnerships and build additional partnerships with multiple community organizations to develop strategies to address the top identified needs. Tripp Umbach recommends the following actions be taken by the hospital sponsors in close partnership with community organizations over the next six to nine months.

Recommended Action Steps:

- Widely communicate the results of the CHNA document to Geisinger Medical Center staff, providers, leadership and boards.

- Conduct an open community forum where the CHNA results are presented widely to community residents, as well as through multiple outlets such as; local media, neighborhood associations, community-based organizations, faith-based organizations, schools, libraries and employers.

- Take an inventory of available resources in the community that are available to address the top community health needs identified by the CHNA.

- Implement a comprehensive “grass roots” community engagement strategy in partnership with ACTION Health to build upon the resources that already exist in the community and the energy of and commitment of community leaders that have been engaged in the CHNA process.
- Develop three “Working Groups” to focus on specific strategies to address the top three needs identified in the CHNA. The working groups should meet for a period of four to six months to develop action plans and external funding requests.

- Attraction of outside funding and implementation of actions to address the top three community health needs on a regional level.

- Work at the hospital and regional level through ACTION Health to translate the top identified community health issues into individual hospital and regional level strategic planning and community benefits programs.

- Within one years’ time, hold a Community Celebration where community leaders present results of the needs assessment and status updates on measurable actions.

- Within three years’ time conduct updated CHNA to evaluate community effectiveness on addressing top needs and to identify new community needs.
Community Health Needs Identification Forum Results

GEISINGER MEDICAL CENTER
April 5th, 2012
Community:
Geisinger Medical Center community

INTRODUCTION:
The following qualitative data were gathered during a regional community health needs identification forum held on April 5th, 2012 at the Danville Elks Lodge and Banquet Hall (Danville, Pa). The community forum was conducted with more than 60 community leaders from a five-county region (Columbia, Montour, Northumberland, Snyder and Union Counties). Community leaders were identified by the ACTION Health CHNA oversight committee for Geisinger Medical Center. Geisinger Medical Center is a 404-bed full-service hospital. The community forum was conducted by Tripp Umbach consultants and lasted approximately five hours.

Tripp Umbach presented the results from the secondary data analysis, key stakeholder interviews and community focus groups, and used these findings to engage community leaders in a group discussion. Community leaders were asked to share their vision for the community, discuss a plan for health improvement in their community and prioritize their concerns. Breakout groups were formed to pinpoint and identify issues/problems that were most prevalent and widespread in their community. Most importantly, the breakout groups needed to identify ways to resolve the identified problems through innovative solutions in order to bring about a healthier community.

GROUP RECOMMENDATIONS:
The group provided many recommendations to address community health needs and concerns for Residents in the Geisinger Medical Center community. Below is a brief summary of the recommendations:

• **Increase the number of healthcare providers offering under/uninsured services:** Community leaders recommended that local dentists and physicians commit to providing uninsured care to a set number of patients. Leaders believed that providers would be more likely to take on a couple of under/uninsured patients if they knew the limit would not be more than their practices could absorb. Also, leaders believed that medical licensure once required aspiring physicians to spend time providing some form of public health, which leaders recommended be reinstated as a requirement to secure physician licensure. Additionally, leaders recommended that qualified nurses can provide health services that do not require a physician’s license to administer. Leaders also recommended that one community-based organization be identified to organize and manage the newly developed network of providers.

• **Certify caregivers to provide comfort services:** Community leaders recommended that caregivers that provide care to a loved one often learn a great deal during their experience and may be able to become certified to help others in a hospice or other capacity afterward. Leaders believed that a certification would have to be developed.

• **Develop a community-wide electronic record:** Community leaders were under the impression that Google and Yahoo offer electronic medical records that could be used by preventive
outreach services to provide screening results to primary care physicians. Developing a community-wide electronic medical record would improve continuity of care for residents.

- **Increase advocacy for legislative change at the state level:** Community leaders believed that advocating for an increase in funding for under/uninsured healthcare could help increase access to under/uninsured health services. Community leaders believed that advocacy for a particular bill (Senate Bill 5) may help to increase funding for under/uninsured healthcare in Pennsylvania.

- **Increase awareness about healthy behavior:** Community leaders believed that residents are often unaware of how to implement healthy behaviors. Community leaders recommended that a study of countries that provide health information all the time (i.e., Scandinavian countries) be completed to identify best practices. Leaders suggested that communities place ads about healthy behaviors in locations where unhealthy options are located (i.e., soda machines, McDonalds, warning labels on cigarettes, etc.). Community leaders were under the impression that illiteracy is an issue in the area, and as a result, recommended that any awareness campaigns use pictures and the spoken word. Additionally, leaders believed that residents would be more aware of healthy choices if they were able to see healthy behaviors modeled.

- **Increase the incentives for healthy behavior:** Community leaders believed that residents could be healthier if they had more incentives. Leaders suggested that residents be offered healthcare incentives for healthy behaviors (i.e., a decrease in health insurance premiums for non-smokers).

- **Increase access to transportation:** Community leaders recommended that healthcare providers offer travel vouchers to residents when an appointment is scheduled. Additionally, leaders recommended that state laws make allowances for single parents traveling with more than one child on medical transportation services. Leaders recommended that county commissioners in the region collaborate to resolve barriers and provide effective transportation from county to county. Community leaders also suggested that efforts to increase transportation increase and build upon existing support systems between residents in the community to empower the community and promote self-sufficiency.

- **Increase mobile healthcare provided in the community:** Community leaders recommended that mobile healthcare services be offered in public places (i.e., the parking lot of Wal-Mart). Community leaders also recommended that any efforts to increase access to medical care as it relates to transportation for health services be focused on the people with the greatest need.

**Problem Identification:**

During the community forum process, community leaders discussed regional health needs that centered around three themes. These were:

1. Access to healthcare for under/uninsured residents
2. Healthy behaviors: awareness, motivation and implementation
3. Transportation to health service providers
The following summary represents the most important topic areas within the community discussed at the retreat. Community leaders believe the following concerns are the most pressing problems and are identified as the most manageable to address and resolve.

**ACCESS TO HEALTHCARE FOR UNDER/UNINSURED RESIDENTS:**

Access to healthcare was discussed at the community forum. Community leaders focused their discussions primarily on the limited number of healthcare providers, and issues surrounding health insurance for the under/uninsured populations in the region.

**Perceived Contributing Factors:**

- Community leaders believed that some residents may not be able to afford the rising cost of health insurance premiums, which may lead to residents who are underinsured with limited coverage and/or unaffordable co-pays and deductibles.
- Community leaders believed that providing health insurance to employees may be unaffordable for some employers, which may lead employers to offer only part-time employment so that the business is not required to provide health insurance.
- Community leaders were under the impression that local medical and dental healthcare providers may not always accept state-funded health insurance, leading residents receiving that type of insurance to have to travel lengthy distances to secure medical and dental healthcare.
- Community leaders believed that there are a limited number of pediatric mental health providers in the region.
- Community leaders believed that there are a limited number of dental providers in the region.
- Community leaders were under the impression that some residents may not seek mental health services due to the stigma associated with having a mental health diagnosis.
- Community leaders were under the impression that residents may be seeking emergency medical care for non-emergent issues due to a lack of health insurance and the absence of after-hours medical care, which may lead to poor access to prevention and overall continuity of care.
- Community leaders believed that healthcare providers do not offer under/uninsured healthcare, due to many of them getting frustrated with a population that does not show up for their appointments.
- Community leaders were under the impression that providers can become overwhelmed when there are too few of them taking on the needs of under/uninsured residents.
- Community leaders were under the impression that Pennsylvania laws increase the risk of malpractice litigation for physicians causing physicians to leave the state.

**Group Suggestions/Recommendations:**

Community leaders offered the following as possible solutions to help improve the access to healthcare for under/uninsured residents in the region:

- **Increase the number of healthcare providers offering under/uninsured services:**
  Community leaders recommended that local dentists and physicians commit to providing
uninsured care to a set number of patients. Leaders believed that providers would be more likely to take on a couple of under/uninsured patients if they knew the limit would not be more than their practices could absorb. Also, leaders believed that medical licensure once required aspiring physicians to spend time providing some form of public health, which leaders recommended be reinstated as a requirement to secure physician licensure. Additionally, leaders recommended that qualified nurses can provide health services that do not require a physician’s license to administer. Leaders also recommended that one community-based organization be identified to organize and manage the newly developed network of providers.

- **Certify caregivers to provide comfort services:** Community leaders recommended that caregivers that provide care to a loved one often learn a great deal during their experience and may be able to become certified to help others in a hospice or other capacity afterward. Leaders believed that a certification would have to be developed.

- **Develop a community-wide electronic record:** Community leaders were under the impression that Google and Yahoo offer electronic medical records that could be used by preventive outreach services to provide screening results to primary care physicians. Developing a community-wide electronic medical record would improve continuity of care for residents.

- **Increase advocate on for legislative change on the state level:** Community leaders believed that advocating for an increase in funding for under/uninsured healthcare could help increase access to under/uninsured health services. Community leaders believed that advocacy for a particular bill (Senate Bill 5) may help to increase funding for under/uninsured healthcare in Pennsylvania.

**HEALTHY BEHAVIORS: AWARENESS, MOTIVATION AND IMPLEMENTATION:**
Behaviors that impact residents’ health were discussed at the community forum. Community leaders focused their discussions primarily on the prevalence of chronic illness and lack of awareness of, motivation to employ and implementation of healthy behaviors among residents in the region.

**Perceived Contributing Factors:**

- Community leaders believed that residents are not always practicing healthy behaviors and/or modeling how to make healthy lifestyle choices.
- Community leaders were under the impression that healthy foods are not always easily accessible and/or affordable for some residents, which may cause some residents to choose more unhealthy options for their family because they are more accessible and affordable.
- Community leaders believed that there is limited preventive education available in their communities about healthy lifestyle options (i.e., healthy nutrition, smoking cessation, etc.).
- Community leaders were under the impression that many residents may be finding information about healthy choices from sources that may not always be reliable (i.e., the internet).
- Community leaders believed that residents may not always be motivated to implement healthy behaviors, which may cause limited follow-through if there are barriers to accessing healthy options.
- Community leaders were under the impression that chronic disease is prevalent in many communities in their region.
**Group Suggestions/Recommendations:**

Community leaders offered the following as possible solutions to help improve the practice of healthy behavior in the region:

- **Increase awareness about healthy behavior:** Community leaders believed that residents are often unaware of how to implement healthy behaviors. Community leaders recommended that a study of countries that provide health information all the time (i.e., Scandinavian countries) be completed to identify best practices. Leaders suggested that communities place ads about healthy behaviors in locations where unhealthy options are located (i.e., soda machines, McDonalds, warning labels on cigarettes, etc.). Community leaders were under the impression that illiteracy is an issue in the area and as a result recommended that any awareness campaigns use pictures and the spoken word. Additionally, leaders believed that residents would be more aware of healthy choices if they were able to see healthy behaviors modeled.

- **Increase the incentives for healthy behavior:** Community leaders believed that residents could be healthier if they had more incentives. Leaders suggested that residents be offered healthcare incentives for healthy behaviors (i.e., a decrease in health insurance premiums for non-smokers).

**Transportation to Health Service Providers:**

Transportation was discussed at the community forum. Community leaders focused their discussions primarily on the impact transportation has on access to healthcare in the region.

**Perceived Contributing Factors:**

- Community leaders gave the impression that the lack of transportation, when coupled with the rural nature of the region, may cause significant barriers to some residents accessing healthcare because they are not always able to make it to appointments and emergency medical transportation services are not always close by.
- Community leaders believed that healthcare providers may not be accepting state-funded health insurance due to recipients having a low attendance rate for scheduled appointments.
- Community leaders were under the impression that some residents (i.e., under/uninsured residents) may not have the financial means to maintain a dependable method of transportation.
- Community leaders believed there were areas of the region that do not have affordable public transportation available.
- Community leaders gave the impression that the public transportation that is available to residents offers limited routes and schedules leaving lengthy gaps of time during the day when public transportation is not available.
- Community leaders believed that county-wide transportation will not carry residents across county lines. Additionally, community leaders were under the impression that where one county transit system ends the other county system does not always pick up, making it difficult to travel across counties.
**Group Suggestions/Recommendations:**

Community leaders offered the following as possible solutions to help improve the transportation to health service providers in the region:

- **Increase access to transportation:** Community leaders recommended that healthcare providers offer travel vouchers to residents when an appointment is scheduled. Additionally, leaders recommended that state laws make allowances for single parents traveling with more than one child on medical transportation services. Leaders recommended that county commissioners in the region collaborate to resolve barriers and provide effective transportation from county to county. Community leaders also suggested that efforts to increase transportation increase and build upon and existing support systems between residents in the community to empower the community and promote self-sufficiency.

- **Increase mobile healthcare provided in the community:** Community leaders recommended that mobile healthcare services be offered in public places (i.e., the parking lot of Wal-Mart). Community leaders also recommended that any efforts to increase access to medical care as it relates to transportation for health services be focused on the people that have the greatest need.
Appendix B

Community Secondary Data Profile

Geisinger Medical Center
Completed March 2012
Overview

- Geisinger Medical Center Populated Zip Code Areas

- Key Points

- Demographic Trends

- Community Need Index (CNI)

- County Health Rankings

- Prevention Quality Indicators Index (PQI)
**Geisinger Medical Center Populated Zip Code Areas**

The community served by ACTION Health includes Columbia, Montour, Northumberland, Snyder and Union Counties. The Geisinger Medical Center community includes 49 populated zip code areas which make up the 5-County ACTION Health study area (excluding zip codes for P.O. Boxes and offices).

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Key Points – Community Needs in the Geisinger Medical Center

- The Geisinger Medical Center community includes all of the 49 zip code areas used in the 5-County ACTION Health study area; therefore, the values for the Geisinger Medical Center community are the same as for the 5-County ACTION Health study area.
  - The Geisinger Medical Center community shows a decline in population over the next 5 years at a rate of -0.48%.
  - Northumberland and Montour counties show the largest declines in population with a loss of nearly 2,000 individuals.
  - The trends seen for the Geisinger Medical Center community and Northumberland and Montour counties differ from that of Pennsylvania as a whole. Pennsylvania is projected to see a 0.70% rise in population between 2011 and 2016. Therefore, people are coming into Pennsylvania but not to counties in the ACTION Health region.

- The Geisinger Medical Center community shows an average annual household income of $51,750.
  - The highest average income is found in Montour County ($63,212) and the lowest is found in Northumberland County ($45,871). Income levels are highly correlated to health care access and health activities.
  - It is interesting to see that all of the average household income levels for the study area fall below the averages for Pennsylvania and for the United States. Generally, rural areas show lower income levels as compared with more urban areas.

- As compared with Pennsylvania and the United States, the Geisinger Medical Center community shows very little diversity. Only 6.7% of the population in the Geisinger Medical Center community identify as a race/ethnicity other than White, Non-Hispanic whereas 19.6% in PA and 35.8% in the U.S. identify as a race other than White, Non-Hispanic.
  - Union County in the Geisinger Medical Center community shows the most diversity with 14.1% of a race or ethnicity other than White, Non-Hispanic.
To determine the severity of barriers to health care access in a given community, the Community Health Needs Index (CNI) gathers data about the community’s socio-economy (i.e. % of the population that is elderly and living in poverty; % uninsured, % unemployed, etc.). Using this data we assign a score to each barrier condition. A score of 1.0 indicates a zip code area with the lowest socio-economic barriers (low need), while a score of 5.0 represents a zip code area with the most socio-economic barriers (high need).

The CNI was applied to the ACTION Health System with the following results for the Geisinger Medical Center community:

- The highest CNI score for the Geisinger Medical Center community is for the town of Shamokin with a score of 3.8. The highest CNI score indicates the most barriers to community health care access.
- From the data, we can see that Shamokin shows the highest rates of the following individuals; uninsured (20%), those 65 and older living in poverty (24%), and families with married spouses and children living in poverty (29%).

The weighted average CNI score for the entire Geisinger Medical Center community is 2.8.

- A CNI score of 2.8 is above the average for the scale (2.5) but the community health access need of the Geisinger Medical Center community is not considered critical as a score of 5 on the CNI scale indicates an area with the most need.

The median for the CNI scale is 2.5. The Geisinger Medical Center community shows 21 zip code areas above the median while at the same time shows 27 below the median. This helps us to see that the Geisinger Medical center community contains more zip code areas with CNI scores below the median indicating fewer barriers to community health care access.

The unemployment rate for the Geisinger Medical Center community is only 5.3%; below both the Pennsylvania and U.S. unemployment rate (both currently around 8.2%).
Key Points – Community Needs in the Geisinger Medical Center

• Counties in each of the 50 states are ranked according to summaries of 37 health measures. Those having high ranks, e.g. 1 or 2, are considered to be the “healthiest.” Counties are ranked relative to the health of other counties in the same state on the following summary measures:
  ▫ Health Outcomes-- Two types of health outcomes are used to represent the health of each county: how long people live (mortality) and how healthy people feel (morbidity). These outcomes are the result of a collection of health factors and are influenced by existing programs and policies at the local, state, and federal levels.
  ▫ Health Factors--A number of different health factors shape a community’s health outcomes; Health behaviors (6 measures), Clinical care (5 measures), Social and economic (7 measures), and the Physical environment (4 measures).

• The counties included in the Geisinger Medical Center community show very high (unhealthier) rankings for the following measures (67 being the worst):
  ▫ Education (rank of 65 for Snyder county)
  ▫ Diet and Exercise (rank of 62 for Columbia County)
  ▫ Community Safety (rank of 60 for Montour County)

• On the other hand, the counties in the Geisinger Medical Center community show very low (healthier) rankings for the following measures (1 best the best):
  ▫ Clinical Care (rank of 1 for Montour county)
  ▫ Quality of Care (rank of 1 for Union County and 2 for Snyder County)
  ▫ Physical Environment (rank of 1 for Montour County and 2 for Snyder County)
Key Points – Community Needs in the Geisinger Medical Center

- The PQI index identifies potentially avoidable hospitalizations for the benefit of targeting priorities and overall community health. Lower index scores represent less admissions for each of the PQI measures. There are 14 quality indicators.

- The Geisinger Medical Center community shows much higher rates of Bacterial Pneumonia, Angina without Procedure and Chronic Obstructive Pulmonary Disease hospital admissions than Pennsylvania.

- On the other hand, the Geisinger Medical Center community shows much more drastic differences in the rates of hospital admissions for Low Birth Weight and Urinary Tract Infections in which the Geisinger Medical Center community shows lower rates as compared with Pennsylvania. For example, the Geisinger Medical Center community shows a rate of low birth weight admissions at 0.12 whereas PA shows a rate of 1.11 (a difference of -0.99).

- Although the Geisinger Medical Center community shows a lower rate for low birth weight hospital admissions than PA; this value is actually higher than many of the counties in the area which receive such low hospital admission rates due to low birth weight that the value is negligible. It is concerning that the Geisinger Medical Center community shows a PQI value for low birth weight when many of the other areas do not.

- The Geisinger Medical Center community shows slightly lower rates than PA for most of the diabetes measures (long-term complications, uncontrolled diabetes and lower extremity amputations). Columbia and Northumberland counties show the highest rates of all diabetes related hospital admissions for the community.

- The Geisinger Medical Center community shows lower rates for hypertension and congestive heart failure hospital admissions as compared with PA. However, the Geisinger Medical center community shows a much higher rate of angina without procedure hospital admissions than PA.
Community Demographic Profile

- The Geisinger Medical Center community contains 49 zip codes in the ACTION Health system.

- The Geisinger Medical Center community shows a slight decline in population from 2011 to 2016 (-0.48%). This is inconsistent with Pennsylvania which shows a rise in population at a rate of 0.70%.

- The Geisinger Medical Center community shows slightly higher percentages of women as opposed to men; this is consistent with state and national data.

- The Geisinger Medical Center community shows slightly more elderly individuals (65+; 17.4%) as compared with Snyder and Union counties (15.6% and 14.7% respectively).

- The Geisinger Medical Center community shows an average annual household income of $51,750. The highest average income is found in Montour County ($63,212) and the lowest is found in Northumberland County ($45,871).

- The Geisinger Medical Center community shows 16% of the population who have not received a high school diploma; Northumberland County shows even more (16.8%). These rates are much higher than the state (12.6%) and the U.S. (15.1%).

- As compared with Pennsylvania and the United States, the Geisinger Medical Center community shows very little diversity (only 6.7% identify as a race or ethnicity other than White, Non-Hispanic).
Population Trends

<table>
<thead>
<tr>
<th></th>
<th>Geisinger Medical Center</th>
<th>Columbia County</th>
<th>Montour County</th>
<th>Northumberland County</th>
<th>Snyder County</th>
<th>Union County</th>
<th>5-County Study Area</th>
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<tr>
<td><strong>2011 Total Population</strong></td>
<td>263,631</td>
<td>68,530</td>
<td>19,399</td>
<td>90,331</td>
<td>39,547</td>
<td>45,824</td>
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<tr>
<td><strong>% Change</strong></td>
<td>-0.48%</td>
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<td>+0.70%</td>
<td>+1.06%</td>
<td>-0.48%</td>
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</table>

- The Geisinger Medical Center community includes all of the 49 zip code areas used in the 5-County study area; therefore, the values for the Geisinger Medical center community are the same as for the 5-County Study Area.

- The Geisinger Medical center community shows a decline in population over the next 5 years at a rate of -0.48%.

- Northumberland and Montour counties show the largest declines in population with a loss of nearly 2,000 individuals.

- The trends seen for the Geisinger Medical Center community and Northumberland and Montour counties differs from that of Pennsylvania as a whole. Pennsylvania is projected to see a 0.70% rise in population between 2011 and 2016. Therefore, people are coming into Pennsylvania but not to counties in the ACTION Health community.
- The Geisinger Medical Center community shows slightly higher percentages of women as opposed to men; this is consistent with state and national data.

- This is important to note when assessing morbidity and mortality data.

*Source: Thomson Reuters*
The Geisinger Medical Center community shows slightly more elderly individuals (65+) as compared with Pennsylvania and the U.S. This is important to know when assessing morbidity and mortality data as areas with higher percentages of elderly individuals may need to focus their community health needs based on age.

Northumberland County in the Geisinger Medical Center community shows the largest percentage of individuals aged 65 and older.  

Source: Thomson Reuters
- The Geisinger Medical Center community shows an average annual household income of $51,750.

- The highest average income is found in Montour County ($63,212) and the lowest is found in Northumberland County ($45,871).

- It is interesting to see that all of the average household income levels for the study area fall below the averages for Pennsylvania and for the United States. Generally, rural areas show lower income levels as compared with more urban areas.

*Source: Thomson Reuters*
The Geisinger Medical Center community shows the highest percent of households earning between $25K and $50K annually. More than 60% of the households in the Geisinger Medical Center community earn $50K or less; this is a much higher proportion than seen for PA (52.2%) or the U.S. (50.3%).

Consistent with the previous slide, Northumberland shows the highest rate of households earning less than $25K per year. 

*Source: Thomson Reuters*
The Geisinger Medical Center community shows 15.9% of the population who have not received a high school diploma; Union county shows even more (19.0%). The state rate (12.6%) and U.S. rate (15.1%) are somewhat lower than the rate for the Geisinger Medical Center community and educational level is highly related to occupation and therefore income.

On the other hand, 37.6% of the Geisinger Medical Center community have received some college education or received a college degree.  

Source: Thomson Reuters
As compared with Pennsylvania and the United States, the Geisinger Medical Center community shows very little diversity. Only 6.7% of the population in the Geisinger Medical Center community identify as a race/ethnicity other than White, Non-Hispanic whereas 19.6% in PA and 35.8% in the U.S. identify as a race other than White, Non-Hispanic.

Union County in the Geisinger Medical Center community shows the most diversity with 14.1% of a race or ethnicity other than White, Non-Hispanic.

Source: Thomson Reuters
CNI Data Methodology

- The data collected to analyze demographic statistics was collected from Thomson Reuters and was from 2011 data.

- The data collected to analyze the CNI statistics was also collected from Thomson Reuters but was from 2010 data.

- Between 2010 and 2011, the town of West Milton (17886) in Union County was created.

- Please note this discrepancy; that the following slides concerning CNI statistics include 48 towns in the study area, as opposed to the 49 towns in the demographic data.
Community Need Index (CNI)

- The highest CNI score for the Geisinger Medical Center community is 3.8 in the zip code area of Shamokin in Northumberland County. The highest CNI score indicates the most barriers to community health care access.
  - From the data, we can see that Shamokin shows the highest rates of the following individuals; uninsured (20%), those 65 and older living in poverty, (24%) and families with married spouses and children living in poverty (29%).

- The median for the CNI scale is 2.5. The Geisinger Medical Center community shows 21 zip code areas above the median while at the same time shows 27 below the median. This helps us to see that the Geisinger Medical Center community contains more zip code areas with CNI scores below the median indicating fewer barriers to community health care access.

- All of the average CNI scores for the study area are very similar. However, Union county shows the highest CNI score (3.0) and Columbia County shows the lowest (2.7). The Geisinger Medical Center community falls between the highest and lowest with the CNI score of 2.8 indicating higher than average need for an area but not the worst (which would be 5.0).
Community Need Index

- **Income Barriers** – Percentage of elderly, children, and single parents living in poverty

- **Cultural/Language Barriers** – Percentage Caucasian/non-Caucasian and percentage of adults over the age of 25 with limited English proficiency

- **Educational Barriers** – Percentage without high school diploma

- **Insurance Barriers** – Percentage uninsured and percentage unemployed

- **Housing Barriers** – Percentage renting houses

Five prominent socio-economic barriers to community health are quantified in the CNI
Assigning CNI Scores

To determine the severity of barriers to health care access in a given community, the CNI gathers data about the community’s socio-economy. For example, what percentage of the population is elderly and living in poverty; what percentage of the population is uninsured; what percentage of the population is unemployed, etc.

Using this data we assign a score to each barrier condition. A score of 1.0 indicates a zip code area with the lowest socio-economic barriers (low need), while a score of 5.0 represents a zip code area with the most socio-economic barriers (high need). The scores are then aggregated and averaged for a final CNI score (each barrier receives equal weight in the average).

A CNI score above 3.0 will typically indicate a specific socio-economic factor impacting the community’s access to care. At the same time, a CNI score of 1.0 does not indicate the community requires no attention at all, which is why a larger community such as the study area community presents a unique challenge to hospital leadership.
Assigning CNI Scores

<table>
<thead>
<tr>
<th>Zip</th>
<th>City</th>
<th>County</th>
<th>2010 Tot. Pop</th>
<th>Rental %</th>
<th>Unemp %</th>
<th>Uninsu %</th>
<th>Minor %</th>
<th>Lim Eng</th>
<th>No HS Dp</th>
<th>65+ Pov</th>
<th>M w/ Chil Pov</th>
<th>Sin w/ Chil Pov</th>
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<th>Insur Rank</th>
<th>Educ Rank</th>
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<td>13%</td>
<td>11%</td>
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<td>5%</td>
<td>33%</td>
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<td>17%</td>
<td>6%</td>
<td>28%</td>
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<td>12%</td>
<td>10%</td>
<td>36%</td>
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<td>2</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>2.6</td>
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</tbody>
</table>

- The highest CNI score for the Geisinger Medical Center community is 3.8 in the zip code area of Shamokin in Northumberland County. The highest CNI score indicates the most barriers to community health care access.
- From the data, we can see that Shamokin shows the highest rates of the following individuals; uninsured (20%), those 65 and older living in poverty (24%), and families with married spouses and children living in poverty (29%).
- Allenwood has the highest unemployment rate (17%), minority (60%), limited English (3%), and individuals with no high school diploma (30%) across the entire Geisinger Medical Center community.
- Other zip code areas with substantially high rates in the CNI score index are:
  - Sunbury with 40% renting and Wilburton with 83% single parents living with children in poverty.

*Source: Thomson Reuters*
Assigning CNI Scores

<table>
<thead>
<tr>
<th>Zip</th>
<th>City</th>
<th>County</th>
<th>2010 Tot. Pop.</th>
<th>Rental %</th>
<th>Unemp %</th>
<th>Uninsur %</th>
<th>Minor %</th>
<th>Lim Ens.</th>
<th>No HS Grad.</th>
<th>65+ Poor</th>
<th>M w Chil Poor</th>
<th>Jw w/ Chil Poor</th>
<th>Inc Rank</th>
<th>Insur Rank</th>
<th>Educ Rank</th>
<th>Cul Rank</th>
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<td>6%</td>
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<td>6%</td>
<td>10%</td>
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<td>1%</td>
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<td>1</td>
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<td>1</td>
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<td>1.4</td>
</tr>
</tbody>
</table>

- The median for the CNI scale is 2.5. The Geisinger Medical Center community shows 21 zip code areas above the median while at the same time shows 27 below the median. This helps us to see that the Geisinger Medical Center community contains more zip code areas with CNI scores below the median indicating fewer barriers to community health care access.
- However, we must remember to focus on the zip code areas with the most need in the study area (those with CNI scores above 2.5).

Source: Thomson Reuters
The average CNI scores for the Geisinger Medical Center community and the counties in which it includes are all above the median for the scale (2.5).

All of the average CNI scores for the community are very similar. However, Union county shows the highest CNI score (3.0) and Columbia County shows the lowest (2.7). The Geisinger Medical center community falls between the highest and lowest with the CNI score of 2.8 indicating higher than average need for an area but not the worst (which would be 5.0).

Source: Thompson Reuters
The County Health Rankings show that where we live impacts our health status. The health of a community depends on many different factors – from individual health behaviors, education and jobs, to quality of healthcare and the environment. The rankings help community leaders see that where we live, learn, work, and play influences how healthy we are and how long we live.

The County Health Rankings are a key component of the Mobilizing Action Toward Community Health (MATCH) project. MATCH is the collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The rankings identify the multiple health factors that determine a county’s health status. Each county receives a summary rank for its health outcomes and health factors – the four different types of health factors include: health behaviors, clinical care, social and economic factors, and the physical environment. The Rankings are a real “Call to Action” for state and local health departments to develop broad-based solutions with others in their community so all residents can be healthy. But efforts will also be made to mobilize community leaders outside the public health sector to take action and invest in programs and policy changes that address barriers to good health and help residents lead healthier lives. Other community leaders may include: educators; elected and appointed officials, including mayors, governors, health commissioners, city/counties councils, legislators, and staff; business owners; and the healthcare sector.

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
County Health Rankings Data

• Data across 37 various health measures is used to calculate the Health Ranking.
  ▫ The measures include:
    • Mortality
    • Morbidity
    • Tobacco Use
    • Diet and Exercise
    • Alcohol Use
    • Sexual Behavior
    • Access to care
    • Quality of care
    • Education
    • Employment
    • Income
    • Family and Social support
    • Community Safety
    • Environmental quality
    • Built environment
    • Population
    • % below 18 years of age
    • % 65 and older
    • % African American
    • % American Indian and Alaskan Native
    • % Asian
    • % Native Hawaiian/Other Pacific Islander
    • % Hispanic
    • % not proficient in English
    • % female
    • % rural
    • % diabetic
    • HIV rate
    • Binge drinking
    • Physical Inactivity
    • Mental health providers
    • Median household income
    • % with high housing costs
    • % of children eligible for free lunch
    • % illiterate
    • Liquor store density
    • % of labor force that drives alone to work

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
County Health Rankings Data

• Counties in each of the 50 states are ranked according to summaries of 37 health measures. Those having high ranks, e.g. 1 or 2, are considered to be the “healthiest.” Counties are ranked relative to the health of other counties in the same state on the following summary measures:
  ▫ Health Outcomes--Two types of health outcomes to represent the health of each county: how long people live (mortality) and how healthy people feel (morbidity). These outcomes are the result of a collection of health factors and are influenced by existing programs and policies at the local, state, and federal levels.
  ▫ Health Factors--A number of different health factors shape a community’s health outcomes. The County Health Rankings are based on weighted scores of four types of factors:
    • Health behaviors (6 measures)
    • Clinical care (5 measures)
    • Social and economic (7 measures)
    • Physical environment (4 measures)

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
County Health Rankings Data

- Pennsylvania has 67 counties; therefore, the rank scale for Pennsylvania is 1 to 67 (1 being the healthiest county and 67 being the most unhealthy). The median rank is 34.

- Data for the County Health Rankings is only defined as far as the county level, zip code level data is not available. Therefore, the county level data has been presented here (no Geisinger Medical Center community level data is available).

- The counties included in the Geisinger Medical Center community show very high (unhealthier) rankings for the following measures (67 being the worst):
  - Education (rank of 65 for Snyder county)
  - Diet and Exercise (rank of 62 for Columbia County)
  - Community Safety (rank of 60 for Montour County)

- On the other hand, the counties in the Geisinger Medical Center community show very low (healthier) rankings for the following measures (1 being the best):
  - Clinical Care (rank of 1 for Montour county)
  - Quality of Care (rank of 1 for Union County and 2 for Snyder County)
  - Physical Environment (rank of 1 for Montour County and 2 for Snyder County)
County Health Rankings Data

- Montour county has the most health rank scores in the top 5 or better. Montour county may be considered the healthiest county in the Geisinger Medical Center community. Montour county is ranked 1 in 5 separate health data areas (clinical care, physical environment, smoking, access to care and built environment). Interestingly, Montour has some of the worst health data ranks for mortality and community safety (65 and 60 respectively).

- Northumberland county, on the other hand, has 14 health rank scores above the median for the state (34). Although, Northumberland county has the most poor rankings across the study area, the majority of the rank scores are in the 50’s range. Other counties such as Montour and Snyder have some of the highest rank scores (Montour rank of 65 for community safety and Snyder rank of 65 for education).

- Columbia county is ranked 1 for air quality, at the same time ranks 62 for diet and exercise.

- Snyder county holds 6 categories with a rank of 5 or better but also holds 6 categories with a rank above the median of 34.

- Union county has a rank of 1 for health outcomes and quality of care but has a rank of 63 for the built environment.

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
## County Health Rankings Data

<table>
<thead>
<tr>
<th>County</th>
<th>Health Outcomes</th>
<th>Health Factors</th>
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<th>Morbidity</th>
<th>Health Behaviors</th>
<th>Clinical Care</th>
<th>Social and Economic Factors</th>
<th>Physical Environment</th>
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<td>5</td>
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<td>3</td>
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<td>7</td>
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</table>

Blue text indicates a rank in the top 5 (good ranking).

Red text indicates a rank above the state median (poor ranking).

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
County Health Rankings Data

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
## County Health Rankings Data

<table>
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<th>Alcohol Use</th>
<th>Unsafe Sex</th>
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</table>

*Blue text* indicates a rank in the top 5 (good ranking).

*Red text* indicates a rank above the state median (poor ranking).

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
County Health Rankings Data

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
## County Health Rankings Data

<table>
<thead>
<tr>
<th>County</th>
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<th>Income</th>
<th>Family and Social Support</th>
<th>Community Safety</th>
<th>Air Quality</th>
<th>Built Environment</th>
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</table>

*Blue text* indicates a rank in the top 5 (good ranking).

*Red text* indicates a rank above the state median (poor ranking).

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
County Health Rankings Data

Source: 2011 County Health Rankings
A collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute
Prevention Quality Indicators Index (PQI)

The Prevention Quality Indicators index (PQI) was developed by the Agency for Healthcare Research and Quality (AHRQ). PQI is similarly referred to as Ambulatory Care Sensitive Hospitalizations. The quality indicator rates are derived from inpatient discharges by zip code using ICD diagnosis and procedure codes. There are 14 quality indicators.

The PQI index identifies potentially avoidable hospitalizations for the benefit of targeting priorities and overall community health. Lower index scores represent less admissions for each of the PQIs.

- The Geisinger Medical Center community shows much higher rates of Bacterial Pneumonia, Angina without Procedure and Chronic Obstructive Pulmonary Disease hospital admissions than Pennsylvania.

- However, at the same time, the Geisinger Medical Center community shows much more drastic differences in the rates of hospital admissions for Low Birth Weight and Urinary Tract Infections in which the Geisinger Medical Center community shows lower rates as compared with Pennsylvania. For example, the Geisinger Medical Center community shows a rate of low birth weight admissions at 0.12 whereas PA shows a rate of 1.11 (a difference of -0.99).

- Although the Geisinger Medical Center community shows a lower rate for low birth weight hospital admissions than PA; this value is actually higher than many of the counties in the area which receive such low hospital admission rates due to low birth weight that the value is negligible. It is concerning that the Geisinger Medical Center community shows a PQI value for low birth weight when many of the other areas do not.

- The Geisinger Medical Center community shows slightly lower rates than PA for most of the diabetes measures (long-term complications, uncontrolled diabetes and lower extremity amputations). Columbia and Northumberland counties show the highest rates of all diabetes related hospital admissions for the community.

- The Geisinger Medical Center community shows lower rates for hypertension and congestive heart failure hospital admissions as compared with PA. However, the Geisinger Medical Center community shows a much higher rate of angina without procedure hospital admissions than PA.
Prevention Quality Indicators Index (PQI)

PQI Subgroups

• Chronic Lung Conditions
  ▫ PQI 5 Chronic Obstructive Pulmonary Disease Admission Rate
  ▫ PQI 15 Adult Asthma Admission Rate

• Diabetes
  ▫ PQI 1 Diabetes Short-Term Complications Admission Rate
  ▫ PQI 3 Diabetes Long-Term Complications Admission Rate
  ▫ PQI 14 Uncontrolled Diabetes Admission Rate
  ▫ PQI 16 Lower Extremity Amputation Rate Among Diabetic Patients

• Heart Conditions
  ▫ PQI 7 Hypertension Admission Rate
  ▫ PQI 8 Congestive Heart Failure Admission Rate
  ▫ PQI 13 Angina Without Procedure Admission Rate

• Other Conditions
  ▫ PQI 2 Perforated Appendix Admission Rate
  ▫ PQI 9 Low Birth Weight Rate
  ▫ PQI 10 Dehydration Admission Rate
  ▫ PQI 11 Bacterial Pneumonia Admission Rate
  ▫ PQI 12 Urinary Tract Infection Admission Rate
Chronic Lung Conditions

PQI 5  Chronic Obstructive Pulmonary Disease Admission Rate
PQI 15  Adult Asthma Admission Rate

Source: Ohio Hospital Association
Diabetes

PQI 1 Diabetes Short-Term Complications Admission Rate
PQI 3 Diabetes Long-Term Complications Admission Rate
PQI 14 Uncontrolled Diabetes Admission Rate
PQI 16 Lower Extremity Amputation Rate Among Diabetic Patients

Source: Ohio Hospital Association
Heart Conditions

PQI 7  Hypertension Admission Rate
PQI 8  Congestive Heart Failure Admission Rate
PQI 13  Angina Without Procedure Admission Rate

Source: Ohio Hospital Association
Other Conditions

PQI 2  Perforated Appendix Admission Rate
PQI 9  Low Birth Weight Rate
PQI 10  Dehydration Admission Rate
PQI 11  Bacterial Pneumonia Admission Rate
PQI 12  Urinary Tract Infection Admission Rate

Source: Ohio Hospital Association
The consultant team has identified the following data trends and their potential impact:

- The Geisinger Medical Center community is defined as the same zip code areas that were included in the 5-County study area; therefore, the conclusions for the Geisinger Medical Center community are the same as for the entire study area.

- The Geisinger Medical Center community shows a decline in population over the next 5 years at a rate of -0.48%. Northumberland and Montour Counties show the largest declines in population with a loss of nearly 2,000 individuals. These trends differ from that of Pennsylvania as a whole. Pennsylvania is projected to see a 0.70% rise in population between 2011 and 2016. Therefore, people are coming into Pennsylvania but not to counties in the 5-County ACTION Health study area.

- The median for the CNI scale is 2.5. The Geisinger Medical Center community shows 21 zip code areas above the median while at the same time shows 27 below the median. This helps us to see that the Geisinger Medical Center community contains more zip code areas with CNI scores below the median indicating fewer barriers to community health care access.

- Columbia and Northumberland counties show the highest rates of all diabetes related hospital admissions for the study area. However, the overall Geisinger Medical Center community shows slightly lower rates than PA for most of the diabetes measures.

- The Geisinger Medical Center community shows lower rates for hypertension and congestive heart failure hospital admissions as compared with PA. However, the Geisinger Medical Center community shows a much higher rate of angina without procedure hospital admissions than PA.
APPENDIX C

Community Stakeholder Interview Results

GEISINGER MEDICAL CENTER
Conducted December 2011 – January 2012
**INTRODUCTION:**

Tripp Umbach conducted interviews with community leaders in the Geisinger Medical Center community. Leaders whom were targeted for interviews encompassed a wide variety of professional backgrounds including education, healthcare, media, local government, human service organizations, institutes of higher learning, religious institutions, and the private sector (See Appendix 1 for a list of participating organizations). The interviews offered community leaders an opportunity to provide feedback on the needs of the community, input on the focus group audiences, secondary data resources and other information relevant to the study.

This report represents a section of the overall CHNA project completed by Tripp Umbach.

**DATA COLLECTION:**

The following qualitative data were gathered during individual interviews with 18 stakeholders of the Geisinger Medical Center community as identified by an advisory committee of Geisinger Medical Center. Geisinger Medical Center is a 404-bed full-service hospital. Each interview was conducted by a Tripp Umbach consultant and lasted approximately 60 minutes. All respondents were asked the same set of questions developed by Tripp Umbach and previously reviewed by the Geisinger Medical Center advisory committee. The purpose of these interviews was for stakeholders to identify health issues and concerns affecting residents in the Geisinger Medical Center community, as well as ways to address those concerns.

Of the 18 respondents, the 11 places mentioned by stakeholders when asked what community they were speaking on behalf of were: Columbia County, Montour County, Snyder County, Northumberland County, Union County, Central Susquehanna Valley, Middleburg, Lewisburg, Danville, Berwick and Central, Pa (in order of most mentioned). Additionally, there was a diverse representation of positions held in the community. Those positions represented included business professional, healthcare professional, non-profit leader, educator, healthcare leader, county employee, city employee, business leader, probation officer, educational leader, state employee and community leader.
**Effective Communication in the Community:**

Many stakeholders felt there was not one method of communication that is most effective. More often, stakeholders identified the need to utilize multiple communication methods over a period of time to effectively communicate with residents. Additionally, stakeholders felt that the effectiveness of each communication method largely depends upon the characteristics of the audience being targeted. That being said, stakeholders identified the following as effective methods of information dissemination to residents in the community and their own clients and consumers (listed in order of most mentioned):

*Communicating with Residents in the Community:*

- Print Media (i.e., Newspaper, newsletters, etc.)
- Radio (i.e., Sunbury Broadcasting)
- Electronic Communication (i.e., email, websites, blogs, Facebook, twitter, etc.)
- Television
- Person-to-person (i.e., word-of-mouth, information booths, etc.)
- Schools (i.e., sending things home with children)
- Churches (i.e., bulletins, announcements, etc.)
- Direct mailing
- Posting in the community

*Stakeholder Communication with Clients and Consumers:*

- Electronic communication (i.e., email, closed list texting, Facebook, twitter)
- In-person (i.e., meetings, word-of-mouth, patient education, etc.)
- Direct mailing (i.e., postcard reminders)
- Telephone
- Handouts
- Flyer circulation
- Bulletin boards
- Newsletters

**Group Recommendations:**

The stakeholders provided many recommendations to address health issues and concerns for residents living in the Geisinger Medical Center community. Below is a brief summary of the recommendations:
• **Increase access to primary and preventive care:** Stakeholders recommended that access to primary and preventive medical care, as well as dental care could be increased. Stakeholders also felt that funding could be increased for preventive screenings to be offered in communities. Stakeholders felt that medical professionals could be required to provide under/uninsured care as a component of their training and future employment. Additionally, stakeholders recommended that free transportation could be provided by local medical facilities for medical appointments.

• **Improve the wellness of residents:** While stakeholders felt that residents need to be accountable for their own lifestyle choices, they also indicated that residents could be healthier if there were more preventive education and wellness programs available. Stakeholders felt that nutritional education could be added to budgeting education/food pantry services that are already being provided in the community. Stakeholders also recommended that providers reach out to families with substance abuse issues and help them directly address addiction. Additionally, stakeholders felt that residents need to be engaged in activities they are interested in that promote wellness. Finally, residents believed that there are a number of residents that are familiar with physical fitness training that could provide educational classes to others in the community.

• **Increase the access residents have to community services:** Stakeholders recommended that a central location to provide information about community services could be developed. Stakeholders also recommended that housing be increased; particularly housing for seniors that is integrated into the community and based on a smart growth model. Additionally, stakeholders recommended that more bike/hiking trails be developed. Finally, stakeholders felt that a reduction in the duplication of services regionally coupled with additional funding could increase the access residents have to a variety of community services.

**PROBLEM IDENTIFICATION:**

During the interview process, the stakeholders stated three overall health issues and concerns in their community. In random order these were:

1. Access to primary and preventive medical services
2. Resident wellness
3. Access to community services

**PRIMARY AND PREVENTIVE HEALTH SERVICES:**

While many stakeholders felt that quality primary medical care is available in the area; they also perceived primary and preventive health services provided by medical facilities (i.e., hospitals, private practitioners, etc.) in their communities to be limited in the areas of affordable healthcare/health insurance, health services for under/uninsured, dental care, preventive medical care and patient navigation.

**Contributing Factors:**

• Limited access to affordable healthcare and/or health insurance for the under/unemployed and senior populations.
• There are not enough clinics in the community to meet resident demand for under/uninsured medical care.
• Clinics are often located a far distance from the patient and the lack of public transportation makes it difficult to obtain services including emergency medical care.
• Access to dental care is limited due to the limited number of local providers that accept medical assistance, limited services available at local clinic and restricted health insurance coverage of dental care costs.
• Access to affordable preventive medical care is limited due to health insurance coverage restrictions, cost of preventive care, limited prevention services for under/uninsured and limited resident participation/demand.
• An aging baby-boomer population is placing a strain on medical care resources.
• Navigating the healthcare systems that are available may be difficult for some residents.
• Emergency room services are being over utilized for non-emergent health issues due to limited under/uninsured medical care being offered in the area and the resistance of residents to seek medical care at the onset of medical symptoms.
• Children are not always being seen on a regular basis by a primary pediatrician.

Mitigating Resources:

Stakeholders identified the following existing resources in their community that they felt could help improve their access to primary and preventive health services:

• There are federally qualified health centers/clinics in the area,
• Senior services are offered in many communities (i.e., Area Agency on Aging),
• There are local medical facilities that offer high-quality primary/secondary/tertiary/preventive medical care,
• Community education programs are available through Geisinger Medical Center,
• There are organizations that offer outreach and preventive services (i.e., PA Office of Rural Health, Family Nurse Partnership, etc.),
• There are caring compassionate healthcare workers striving to meet the needs of residents (i.e., Volunteers in Medicine) and
• Universities in the area offer services through service learning programs.

Group Suggestions/Recommendations:

Stakeholders offered the following as possible solutions to improve their access to primary and preventive health services in their communities:

• **Increase access to primary and preventive care:** Stakeholders recommended that access to primary and preventive medical care, as well as dental care could be increased. Stakeholders also felt that funding could be increased for preventive screenings to be offered in communities. Stakeholders felt that medical professionals could be required to provide under/uninsured care as a component of their training and future employment. Additionally, stakeholders recommended that free transportation could be provided by local medical facilities for medical appointments.
RESIDENT WELLNESS:

Stakeholders felt that the wellness of residents was lacking in the areas lifestyle choices, awareness, available services and the prevalence of chronic illness.

Contributing Factors:

- Affordable prevention education and outreach programs are needed in many communities.
- Many residents make lifestyle choices that can lead to poor health statuses (i.e., smoking, inactivity, substance abuse, poor nutrition and not securing preventive medical care).
- There are not enough services currently being offered on a broad continuum to have a positive impact on the behavior of residents (i.e., substance abuse preventive education, substance abuse treatment, support services, etc.).
- Many residents are not aware of how to make healthier lifestyle choices as a result of generational patterns and traditions.
- Chronic illness is prevalent (i.e., diabetes, obesity, respiratory issues, etc.).
- Under/uninsured residents often do not have access to wellness information and/or programs.
- Healthy food is not always accessible and/or affordable.

Mitigating Resources:

Stakeholders identified the following existing resources in their community that they felt could help improve resident wellness:

- There are institutions that offer services to improve resident wellness (i.e., Penn State Cooperative Extension, YMCA, community education departments at local hospitals, etc.),
- There are outreach programs offered in the community (i.e., Pennsylvania Association for Sustainable Agriculture, Red Cross, etc.),
- There are prevention programs offered in the community,
- Supportive services are available to improve resident wellness (i.e., smoking cessation, diabetes, etc.),
- There are community centers that offer a variety of wellness services (i.e., Donald Heiter Community Center, local family/community centers, churches, etc.) and
- Natural resources (i.e., local parks) are available for outdoor wellness activities.

Group Suggestions/Recommendations:

Stakeholders offered the following as possible solutions to improve the wellness of residents in their communities:

- **Improve the wellness of residents:** While stakeholders felt that residents need to be accountable for their own lifestyle choices, they also indicated that residents could be healthier if there were more preventive education and wellness programs available. Stakeholders felt that nutritional education could be added to budgeting education/food pantry services that are already being provided in the community. Stakeholders also recommended that providers reach out to families with substance
abuse issues and help them directly address addiction. Additionally, stakeholders felt that residents need to be engaged in activities they are interested in that promote wellness. Finally, residents believed that there are a number of residents that are familiar with physical fitness training that could provide educational classes to others in the community.

**ACCESS TO COMMUNITY SERVICES:**

While stakeholders believed that there are some services available in their communities; they perceived community services to be limited in the areas of transportation, behavioral health services, employment and housing.

**Contributing Factors:**

- Access to community services can be limited due to the lack of public transportation and the distance residents must travel due to the rural nature of the area.
- Access to behavioral health services can be limited due to a lack of providers, the stigma around mental illness, a fear of being seen seeking mental health services and restricted health insurance coverage.
- Flood victims have greater need for services to meet basic needs now and in the future.
- Access to affordable stable housing is limited in some areas due to recent flooding particularly for seniors and low-income families.
- Poverty is high in some communities, which has an impact on nutrition, access to education, transportation, additional resources, and often is an indicator of poor overall health.

**Mitigating Resources:**

Stakeholders identified the following existing resources in their community that they felt could help improve access to community services:

- Churches have a strong presence and provide many services to the community,
- There are institutions and organization in the area that provide community services (i.e., community centers, YMCA, etc.),
- Community members and organizations are generous and collaborative and
- Housing Authorities offer housing solutions (i.e., Columbia County Housing Authority),
- Food pantries and soup kitchens offer nutritional food,
- There are many recreational opportunities (i.e., local amusement park, YMCA, etc.) and
- There are some behavioral health providers in the area (i.e., Mental Health Association, SMSU Base Service Unit, Geisinger Behavioral Health Department, Central Susquehanna Intermediate Unit, etc.).

**Group Suggestions/Recommendations:**

Stakeholders offered the following as possible solutions to improve access to community services in their communities:
• **Increase the access residents have to community services:** Stakeholders recommended that a central location to provide information about community services could be developed. Stakeholders also recommended that housing be increased; particularly housing for seniors that is integrated into the community and based on a smart growth model. Additionally, stakeholders recommended that more bike/hiking trails be developed. Finally, stakeholders felt that a reduction in the duplication of services regionally coupled with additional funding could increase the access residents have to a variety of community services.
Appendix D

Community Focus Group Results

Geisinger Medical Center
Conducted March 2012
The following qualitative data were gathered during three separate discussion groups conducted with target populations that were defined by the advisory committee for Geisinger Medical Center. Geisinger Medical Center is a 404-bed full-service hospital. Each group was conducted by Tripp Umbach consultants and participants were provided an incentive of $20 for participating. The discussion groups were conducted using a discussion guide previously created by Tripp Umbach and reviewed by the Geisinger Medical Center advisory committee (Appendix 1).

The goal of the focus group process is that each participant feels comfortable and speaks openly so that they contribute to the discussion. It was explained to participants that there are no wrong answers, just different experiences and points of view. This process ensures that each participant shares their experiences from their point of view, even if it is different from what others have said. Specifically, focus group participants were asked to identify and discuss what they perceived to be the top health issues and/or concerns in their communities. The focus group process gathers valuable qualitative and anecdotal data regarding the broad health interests of the communities served by the medical facilities within the service area of Geisinger Medical Center. Focus group input is subject to the limitations of the identified target populations (i.e., vocabulary, perspective, knowledge, etc.), and therefore, is not factual and inherently subjective in nature.

The three focus group audiences were:

- **Nurses Employed by a Public School**
  - Conducted at The Pine Barn Inn (Danville, PA)

- **Small Business Owners Including Farmers**
  - Conducted at Country Cupboard (Lewisburg, PA)

- **Working Professionals with Young Children**
  - Conducted at Little Britches Daycare Center Inc. (Elysburg, PA)
NURSES EMPLOYED BY A PUBLIC SCHOOL

The purpose of this discussion group was to identify community health needs and concerns affecting school-aged children in the Geisinger Medical Center community, as well as ways to address those concerns for this population.

Note: The decision was made to hold a focus group with nurses employed by public schools in Montour, Columbia, Snyder, Union and Northumberland Counties (further referred to as public school nurses) instead of school-aged children or their parents.

GROUP RECOMMENDATIONS:

The group provided many recommendations to address community health needs and concerns for school-aged children in the Geisinger Medical Center community. Below is a brief summary of the recommendations:

- **Increase the number of local pediatric providers**: Participants believed that there is a shortage of pediatric providers that accept medical assistance and offer dental and mental health services, particularly psychiatric services. Participants felt that incentives could be offered to attract doctors, dentists and child psychiatrists to move into the area. Increasing the number of local pediatric providers could increase the access children have to healthcare services.

- **Increase the use of the mobile model in providing pediatric healthcare**: Participants believed that children’s healthcare needs are not being met for a variety of reasons. Participants felt that mobile dentistry is an effective model that could be replicated to ensure that children’s psychiatric and medical healthcare needs are being met as well.

- **Increase the presence of pediatric nurses in public schools**: Participants believed that the presence of pediatric nursing in public schools could increase the access parents and children have to primary and preventive pediatric medical care (i.e., diagnostic, prescription and other services).

- **Improve access to medical transportation**: Participants believed that the limitations of the transportation system restrict the access parents and children have to all healthcare services. Participants were under the impression that medical facilities could partner with local transportation providers (i.e., cab companies) to provide transportation for children and their families to and from medical appointments. Participants felt that insurance companies could start a program where they provide transportation at a low cost and it could be incorporated into the insurance billing.

- **Increase the regulation of public assistance dollars**: Participants felt that residents who receive public assistance are not always making the healthiest purchases with their public dollars. Participants felt that public assistance recipients could be required to purchase healthy foods with their EBT dollars. Participants were under the impression that recipients of public assistance would make healthier choices if they were required to when using their public dollars.

- **Increase awareness about healthy behavior**: Participants believed that families are often unaware of how to implement healthy behaviors in their own lives. Participants felt that there could be programs available in the community to teach parents how to prepare healthy foods. Participants also
felt that public schools could offer school-aged children education on healthy nutrition and preparing healthy meals for themselves. Increasing the awareness of residents about healthy behavior increases the likelihood they will implement healthier behaviors.

- **Increase the incentives for healthy behavior:** Participants believed that residents do not always have access to healthy options. Participants felt that tax incentives could be provided to employers that offer their employees health and wellness programs. Increasing the access residents have to health and wellness programs increases the likelihood that they will participate in these programs.

- **Increase the safe recreation outlets available:** Participants believed that there are limited recreational outlets in some children’s communities that are safe reducing the physical activities of children and causing them to be unhealthy. Participants felt that an increase in the number of parks and recreation areas for children to play could help keep them physically active and impact the prevalence of childhood obesity.

- **Increase access to transportation:** Participants felt that the access residents have to many resources is limited by the lack of public transportation. Participants suggested that there could be a central location where parents could access transportation to begin and as the system was developed more “depots” could be established throughout the community. Participants believed that increasing the access residents have to transportation would allow residents to be healthier and increase the access residents have to employment, primary, preventive, mental and dental healthcare.

- **Increase awareness about the services that are available in the community:** Participants believed that residents are not always aware of the programs and services that are available in their communities. Participants felt that providing a community liaison/social worker for each school district that would be available to connect residents to available programs and services on an ongoing basis.
**Problem Identification:**

During the discussion group process, public school nurses discussed three community health needs and concerns for school-aged children in their communities. These were:

- 4. Access to primary, preventive, mental and dental healthcare
- 5. Healthy behaviors
- 6. Community infrastructure

**Access to Primary, Preventive, Mental and Dental Healthcare:**

Public school nurses perceived that access to primary, preventive, mental and dental healthcare in their communities may be limited in the areas of availability, accessibility, pediatric psychiatry, pediatric dental care, transportation, stigma, unhealthy environments and affordable health insurance.

*Perceived Contributing Factors:*

- Participants believed that there is a shortage of pediatric providers of both psychiatric and dental care in their communities.
- Participants were under the impression that there are few dental and psychiatric providers that accept medical assistance, which causes parents lengthy waits for appointments, lengthy travel times for scheduled appointments or the inability to meet their child(ren)’s dental and psychiatric needs. Additionally, participants believed that the limited public transportation system can further restrict the access parents have to pediatric psychiatric and dental care. Participants also gave the impression that school-aged children that are not having their psychiatric and dental needs met can at times cause behavioral disruptions in school as a result of their discomfort.
- Participants were under the impression it can take an entire day to attend an appointment for their child(ren) due to the lack of transportation and distance to the nearest provider that will accept medical assistance.
- Participants were under the impression that some parents are seeking prescriptions for psychiatric medication from their pediatrician due to the shortage of pediatric psychiatrists. Participants perceived the result of pediatricians managing medications for psychiatric diagnoses can at times be the misdiagnosis of a child’s symptoms and/or the over/under medicating of a mental health disorder, which can exacerbate a child’s mental health symptoms. Participants felt that there is a general lack of communication between parents, providers of their child(ren)’s mental health medication and the public school.
- Participants believed there is a negative stigma associated with the use of medical assistance, which participants perceived to manifest as poor parent/staff interaction and limited respect when seeking any type of healthcare in the community.
- Participants were under the impression that school-aged children are not healthy overall due to the prevalence of allergies, childhood obesity and diabetes, which participants attributed to an unhealthy environment (i.e., pollution, parents and children smoking, limited exercise, unhealthy nutrition, etc.).
- Participants gave the impression that parents of school-aged children do not always have access to healthcare due to the limitations of medical assistance eligibility, under/unemployment, under/uninsurance, and the cost of medical care being unaffordable for some parents. Additionally, participants believed that a parent’s access to medical care can influence the health of their child(ren).
**Mitigating Resources:**

Public school nurses identified the following existing resources in their communities that they felt could improve the access to primary, preventive, mental and dental healthcare:

- There is an annual health fair that provides residents with information on available resources in the community.
- Mobile dentist visits school-aged children and provides maintenance dental care.
- There are universities in the community where students participate in programs for credits and residents can receive free care.

**Group Suggestions/Recommendations:**

Public school nurses offered the following as possible solutions to help improve the access to primary, preventive, mental and dental healthcare in their communities.

- **Increase the number of local pediatric providers:** Participants believed that there is a shortage of pediatric providers that accept medical assistance and offer dental and mental health services, particularly psychiatric services. Participants felt that incentives could be offered to attract doctors, dentists and child psychiatrists to move into the area. Increasing the number of local pediatric providers could increase the access children have to healthcare services.

- **Increase the use of the mobile model in providing pediatric healthcare:** Participants believed that children's healthcare needs are not being met for a variety of reasons. Participants felt that mobile dentistry is an effective model that could be replicated to ensure that children’s psychiatric and medical healthcare needs are being met as well.

- **Increase the presence of pediatric nurses in public schools:** Participants believed that the presence of pediatric nursing in public schools could increase the access parents and children have to primary and preventive pediatric medical care (i.e., diagnostic, prescription and other services).

- **Improve access to medical transportation:** Participants believed that the limitations of the transportation system restrict the access parents and children have to all healthcare services. Participants were under the impression that medical facilities could partner with local transportation providers (i.e., cab companies) to provide transportation for children and their families to and from medical appointments. Participants felt that insurance companies could start a program where they provide transportation at a low cost and it could be incorporated into the insurance billing.

**Healthy Behaviors:**

Public school nurses perceived that healthy behavior in their communities is limited by resident awareness, access to healthy options and individual choices.

**Perceived Contributing Factors:**
• Participants believed that physical activities are limited in public schools, which they felt generates unhealthy behavior when coupled with the impression of participants that the food served in public schools is not always healthy and often has a lot of sugar.

• Participants believed that residents are not always practicing healthy behaviors and/or modeling how to make healthy lifestyle choices for their child(ren). Additionally, participants were under the impression that parents may not always be monitoring what their child(ren) consumes.

• Participants were under the impression that healthy foods are not always easily accessible and/or affordable for some residents, which may cause some residents to choose more unhealthy options for their family because they are more accessible and affordable.

• Participants believed that there is limited preventive education available in their communities about healthy choices.

• Participants believed that the physical activity of school-aged children can be further limited by the safety of the community where they live (i.e., if the community is not safe children may not be able to play outside).

**Mitigating Resources:**

Public school nurses identified the following existing resources in their communities that they felt could improve the practice of healthy behavior:

• Geisinger Medical Center offers wellness programs in public schools

• Public schools offer activities for children (i.e., after school)
**Group Suggestions/Recommendations:**

Public school nurses offered the following as possible solutions to help improve the practice of healthy behavior in their communities:

- **Increase the regulation of public assistance dollars:** Participants felt that residents who receive public assistance are not always making the healthiest purchases with their public dollars. Participants felt that public assistance recipients could be required to purchase healthy foods with their EBT dollars. Participants were under the impression that recipients of public assistance would make healthier choices if they were required to when using their public dollars.

- **Increase awareness about healthy behavior:** Participants believed that families are often unaware of how to implement healthy behaviors in their own lives. Participants felt that there could be programs available in the community to teach parents how to prepare healthy foods. Participants also felt that public schools could offer school-aged children education on healthy nutrition and preparing healthy meals for themselves. Increasing the awareness of residents about healthy behavior increases the likelihood they will implement healthier behaviors.

- **Increase the incentives for healthy behavior:** Participants believed that residents do not always have access to healthy options. Participants felt that tax incentives could be provided to employers that offer their employees health and wellness programs. Increasing the access residents have to health and wellness programs increases the likelihood that they will participate in these programs.

- **Increase the safe recreation outlets available:** Participants believed that there are limited recreational outlets in some children’s communities that are safe reducing the physical activities of children and causing them to be unhealthy. Participants felt that an increase in the number of parks and recreation areas for children to play could help keep them physically active and impact the prevalence of childhood obesity.

**Community Infrastructure:**

Public school nurses perceived that the infrastructure of their communities were limited in the areas of resident awareness, transportation and capacity to provide services.

**Perceived Contributing Factors:**

- Participants were under the impression that there is limited awareness among residents about what services and resources are available in the community and how to access those services.
- Participants believed that many residents do not have access to transportation due to the limitations of the public transportation system, which participants believed restricts the access residents have to viable employment, healthy food options and healthcare.
- Participants perceived that the capacity to provide services in the community does not always meet resident demand.

**Mitigating Resources:**
Public school nurses identified the following existing resources in their communities that they felt could improve the infrastructure:

- Residents come together when needed.
- Some communities are collaborative and giving.

**Group Suggestions/Recommendations:**

Public school nurses offered the following as possible solutions to help improve the infrastructure in their communities:

- **Increase access to transportation:** Participants felt that the access residents have to many resources is limited by the lack of public transportation. Participants suggested that there could be a central location where parents could access transportation to begin and as the system was developed more “depots” could be established throughout the community. Participants believed that increasing the access residents have to transportation would allow residents to be healthier and increase the access residents have to employment, primary, preventive, mental and dental healthcare.

- **Increase awareness about the services that are available in the community:** Participants believed that residents are not always aware of the programs and services that are available in their communities. Participants felt that providing a community liaison/social worker for each school district that would be available to connect residents to available programs and services on an ongoing basis.
SMALL BUSINESS OWNERS INCLUDING FARMERS

The purpose of this discussion group was to identify community health needs and concerns affecting small business owners including farmers (further referred to as small business owners) and the residents they employ in the Geisinger Medical Center community, as well as ways to address concerns for both populations.

GROUP RECOMMENDATIONS:

The group provided many recommendations to address community health needs and concerns for small business owners and the residents they employ in the Geisinger Medical Center community. Below is a brief summary of the recommendations:

- **Increase preventive efforts:** Participants were under the impression it is difficult for small businesses to gain access to preventive care programs that are offered by insurance companies and larger medical facilities for a variety of reasons. Participants felt that local medical facilities could work with small business to increase the focus on preventive health care. Participants believed that increasing preventive efforts could decrease the cost of healthcare.

- **Make resident wellness sustainable:** Participants believed that one barrier to the widespread implementation of healthy behaviors in the community is the sustainability and incentives of healthy behaviors. Participants felt that local medical facilities and health insurance companies could contribute to helping residents get healthy by providing funding for programs throughout the community and incentives, such as health insurance discounts for ongoing participation in and completion of programs.

- **Make healthy choices convenient:** Participants believed that implementing healthy behavior is not convenient. Participants believed that insurance companies could offer annual health assessments online and/or in the community. Also, participants believed that if communities had a one-stop-shop wellness center that offered all the health services residents could need (i.e., medical, dental and mental health), then residents would be more likely to utilize wellness services. Making healthy choices more convenient, participants believed, will make it easier for residents to implement healthy behaviors.

- **Increase awareness about healthy choices:** Participants felt that residents may not always be aware of healthy options and/or motivated to make healthy choices. Participants believed that insurance companies could offer annual health assessments online and/or in the community. Also, participants believed that if communities had a one-stop-shop wellness center that offered all the health services residents could need (i.e., medical, dental and mental health), then residents would be more likely to utilize wellness services. Making healthy choices more convenient, participants believed, will make it easier for residents to implement healthy behaviors.

- **Increase the access small businesses have to health-related information:** Participants felt that the access small businesses have to up-to-date health-related information about resources,
prevention, etc. is limited for a variety of reasons. Participants believed that Geisinger Medical Center could help small businesses with access to up-to-date health-related information in an easily accessible, user-friendly environment like the internet. Increasing the access small businesses have to health-related information could improve the health-related resources small businesses could offer to their employees.

**Problem Identification:**

During the discussion group process, small business owners discussed three community health needs and concerns affecting small business owners and the residents they employ in their communities. These were:

1. Access to primary and preventive healthcare
2. Healthy behaviors
3. Community infrastructure

**Access to Primary and Preventive Healthcare:**

Small business owners perceived that access to primary and preventive healthcare in their communities may be limited in the areas of affordable health insurance, utilization of healthcare resources and resident responsibility.

**Perceived Contributing Factors:**

- Participants believed that the cost of providing health insurance benefits to employees is cost prohibitive for small businesses due to underwriting limitations and the small number of employees. Participants gave the impression that their ability to provide health insurance benefits for themselves and their employees impacts their overall operations (i.e., overhead, risk, part-time vs. full-time employment, etc.).
- Participants believed that healthcare resources can be over-utilized at times due to what participants believed was a feeling of entitlement of residents.
- Participants were under the impression that residents do not always take responsibility for their own health.

**Mitigating Resources:**

Small business owners identified the following existing resources in their communities that they felt could improve the access to primary and preventive healthcare:

- There is a strong hospital system in the community.
- There are universities in the community where students can participate in programs for credits and residents can receive free care.

**Group Suggestions/Recommendations:**
Small business owners offered the following as a possible solution to help improve the access to primary and preventive healthcare in their communities:

- **Increase preventive efforts:** Participants were under the impression it is difficult for small businesses to gain access to preventive care programs that are offered by insurance companies and larger medical facilities for a variety of reasons. Participants felt that local medical facilities could work with small business to increase the focus on preventive health care. Participants believed that increasing preventive efforts could decrease the cost of healthcare.

**HEALTHY BEHAVIORS:**

Small business owners perceived that healthy behaviors in their communities are limited by resident awareness, access to healthy options and individual choices.

**Perceived Contributing Factors:**

- Participants believed that residents are not practicing healthy behaviors and/or making the healthiest lifestyle choices.
- Participants were under the impression that healthy foods are not always easily accessible and/or affordable for some residents, which may cause some residents to choose more unhealthy options because they are more accessible and affordable.
- Participants believed that there is limited preventive education available in their community about healthy choices.

**Mitigating Resources:**

Small business owners identified the following existing resource in their communities that they felt could improve the practice of healthy behavior:

- Geisinger Medical Center offers health and wellness programs to its employees.

**Group Suggestions/Recommendations:**

Small business owners offered the following as possible solutions to help improve the practice of healthy behavior in their communities:

- **Make resident wellness sustainable:** Participants believed that one barrier to the widespread implementation of healthy behaviors in the community is the sustainability and incentives of healthy behaviors. Participants felt that local medical facilities and health insurance companies could contribute to helping residents get healthy by providing funding for programs throughout the community and incentives, such as health insurance discounts for ongoing participation in and completion of programs.

- **Make healthy choices convenient:** Participants believed that implementing healthy behavior is not convenient. Participants believed that insurance companies could offer annual health assessments online and/or in the community. Also, participants believed that if communities had a one-stop-shop wellness center that offered all the health services residents could need (i.e., medical, dental and
mental health), then residents would be more likely to utilize wellness services. Making healthy choices more convenient, participants believed, will make it easier for residents to implement healthy behaviors.

- **Increase awareness about healthy choices:** Participants felt that residents may not always be aware of healthy options and/or motivated to make healthy choices. Participants believed that employers could implement health and wellness programs with the support of local medical facilities. Also, participants felt that there could be a focus on health education in their communities. Participants believed that ACTION Health or a similar entity could provide a list of resources and information to all residents using the internet. Additionally, participants believed that ACTION Health or a similar entity could work with local chambers of commerce to provide health-related information to residents.

**COMMUNITY INFRASTRUCTURE:**

Small business owners perceived that the infrastructure of their communities was limited in the areas of awareness, transportation, community services and employment capacity of small businesses.

**Perceived Contributing Factors:**

- Participants were under the impression that there is limited awareness among residents about what services and resources are available in the community.
- Participants believed that many residents do not have access to transportation due to the limitations of the public transportation system, which participants believed restricts the access residents have to viable employment, healthy food options and healthcare.
- Participants perceived that the capacity to provide services in the community does not always meet resident demand.
- Participants gave the impression that they are only able to employ part-time employees due to the prohibitive cost of health insurance, coupled with the expectation of residents that employers are obligated to provide health insurance coverage in addition to their salary.

**Mitigating Resources:**

Small business owners identified the following existing resources in their communities that they felt could improve the infrastructure of their communities:

- Some residents have access to their own private transportation.
- Transportation is available for medical purposes.

**Group Suggestions/Recommendations:**

Small business owners offered the following as a possible solution to help improve the infrastructure in their communities:
• **Increase the access small businesses have to health-related information**: Participants felt that the access small businesses have to up-to-date health-related information about resources, prevention, etc. is limited for a variety of reasons. Participants believed that Geisinger Medical Center could help small businesses with access to up-to-date health-related information in an easily accessible, user-friendly environment like the internet. Increasing the access small businesses have to health-related information could improve the health-related resources small businesses could offer to their employees.
**WORKING PROFESSIONALS WITH YOUNG CHILDREN FOCUS**

**GROUP INPUT**

The purpose of this discussion group was to identify community health needs and concerns affecting working professionals and their young children (further referred to as professionals with young children) in the Geisinger Medical Center community, as well as ways to address those concerns for both populations.

**GROUP RECOMMENDATIONS:**

The group provided many recommendations to address community health needs and concerns for working professionals and their young children in the Geisinger Medical Center community. Below is a brief summary of the recommendations:

- **Increase preventive efforts:** Participants were under the impression that preventive care is not readily available for all residents. Participants felt that increasing the amount of preventive care all residents receive could decrease the utilization of healthcare resources and increase the access residents have to emergency medical services and primary medical care.

- **Increase the number of local pediatric providers:** Participants believed that there is a shortage of pediatric providers in their community including dental, psychiatric and specialty services. Participants felt that incentives could be offered to attract primary care physicians, dentists and pediatricians to move into the area. Additionally, participants believed that the state could create an environment that makes it easier for pediatricians to practice medicine. Increasing the number of local pediatric providers could increase the access children have to healthcare services and limit the number of mentally disabled person being mismanaged due to limited resources.

- **Expand Fast Track emergency medical services:** Participants were under the impression that the Fast Track option at Geisinger Medical Center is effective, though it is not available 24 hours a day. Participants felt that the Fast Track option at Geisinger Medical Center could be open 24 hours a day. Also, participants would like to see this option available at other emergency departments in the area.

- **Increase the number medical facilities open after-hours:** Participants believed that the only medical care available after normal business hours is emergency medical care. Participants felt that increasing the number of medical facilities that are open after-hours would improve resident’s access to affordable medical care and decrease the utilization of emergency medical services for non-emergent issues.

- **Employers could allow more flexibility for parents:** Participants believed it is difficult for some residents to schedule medical appointment for themselves or their children(ren) due to doctor offices being open during the work day and closed after-hours when many parents are available. If employers were able to allow parents more flexibility in their work day it could increase the access parents and their children have to healthcare.
• **Provide basic consumer information to patients:** Participants believed that physicians and patients are not always communicating effectively. Participants believed that providers could educate themselves on talking with consumers (i.e., seniors) and consumers could educate themselves on communicating with providers. Insurers and providers could participate. Additionally, participants felt that insurance companies could offer resources that would help residents navigate the healthcare industry, including benefits explanations.

• **Increase awareness about healthy behavior:** Participants believed that families are often unaware of how to implement healthy behaviors in their own lives. Participants felt that there could be programs available in the community to teach parents and children how to prepare healthy foods. Increasing the awareness of residents about healthy behavior increases the likelihood they will implement healthier behaviors.

• **Make healthy choices convenient:** Participants believed that implementing healthy behavior is not convenient. Making healthy choices more convenient, participants believed, will make it easier for residents to implement healthy behaviors.

• **Make quality affordable childcare readily accessible:** Participants felt that it is important for parents to know their child is being cared for in a daycare program that nurtures their healthy development. Participants were under the impression that quality childcare should focus on exercise, learning and offer healthy nutrition.

**PROBLEM IDENTIFICATION:**
During the discussion group process, professionals with young children discussed three community health needs and concerns affecting themselves and their children in their community. These were:

1. Access to primary and preventive healthcare
2. Healthy behaviors
3. Resident involvement

**ACCESS TO PRIMARY AND PREVENTIVE HEALTHCARE:**
Professionals with young children perceived that access to quality primary care in their community can be limited in the areas of availability of after-hours medical services, physician workforce, continuity of care, same-day medical services, medical insurance coverage, patient navigation, patient/doctor communication and family priorities.

**Perceived Contributing Factors:**

- Participants were under the impression that medical care, including pediatric medical care services is limited after normal business hours, and at times residents are being directed to seek emergency medical care for non-emergent issues, which may lead to the overuse of emergency medical services. Additionally, participants believed that the nearest urgent care clinic is over an hour’s drive from their
Participants felt that the co-pays for emergency medical care can be unaffordable for some residents.

- Participants believed that there are a shortage of pediatricians including pediatric psychiatrists and a high turnover rate of the pediatricians that are available in the community limiting the continuity of pediatric medical care and availability of same-day pediatric medical appointments for some residents.
- Participants were under the impression that there is a shortage of primary care physicians, which leads to long periods of unavailability when trying to schedule medical appointments and difficulty securing same-day medical appointments.
- Participants believed that it can be difficult to navigate the healthcare system for some residents (i.e., seniors) due to limited understanding of the system as a whole. Participants felt that residents may find themselves getting bounced around without the right education about the system.
- Participants believed that there is a shortage of available dental providers, including specialists in their community. Additionally, participants believed that dental coverage can be limited at times.
- Participants were under the impression that insurance restrictions can limit the access residents have to healthcare (i.e., in-network and out-of-network providers, co-pays, deductibles, etc.). Participants were not aware of any attempts on the part of insurance companies to educate their consumers.
- Participants gave the impression that seniors may not always understand the directives of their physician and often may not seek clarification.
- Participants perceived that physician/patient communication may be limited, which participants believed may be due to limited awareness on the part of both parties about how to communicate with one another. Participants felt that at times the information that is available from the healthcare industry can be difficult for some residents to comprehend.
- Participants were under the impression that physicians are leaving the state because of the risk of litigation, unaffordable malpractice insurance and restrictive regulations.
- Participants believed that affordable health insurance is limited for residents that do not qualify for health insurance through the public assistance office, while at the same time do not make enough money to afford private health insurance. Participants believed that the limited access residents have to health insurance also limits their access to medical care.
- Participants perceived that balancing work and life may affect the health of a family (i.e., work/school hours restrict availability for medical appointments, increased stress, health and prevention become less of a priority, etc.)
- Participants were under the impression that schools do not want children missing time including time needed to attend a medical appointment with their pediatrician, which can be difficult due to limited hours of operation.

**Mitigating Resources:**

Professionals with young children identified the following existing resources in their community that they felt could improve the access to primary and preventive healthcare:

- ‘My Geisinger’ is an internet-based program that helps residents navigate the healthcare system.
- Many insurance companies waive the co-pay for preventive services.
- Fast Track at Geisinger Medical Center can be used to gain emergency treatment
- Some daycare programs offer speech therapists and behavioral therapists free of charge.
**Group Suggestions/Recommendations:**

Professionals with young children offered the following as possible solutions to help improve the access to primary and preventive healthcare in their community:

- **Increase preventive efforts:** Participants were under the impression that preventive care is not readily available for all residents. Participants felt that increasing the amount of preventive care all residents receive could decrease the utilization of healthcare resources and increase the access residents have to emergency medical services and primary medical care.

- **Increase the number of local pediatric providers:** Participants believed that there is a shortage of pediatric providers in their community including dental, psychiatric and specialty services. Participants felt that incentives could be offered to attract primary care physicians, dentists and pediatricians to move into the area. Additionally, participants believed that the state could create an environment that makes it easier for pediatricians to practice medicine. Increasing the number of local pediatric providers could increase the access children have to healthcare services and limit the number of mentally disabled person being mismanaged due to limited resources.

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- **Increase the number medical facilities open after-hours:** Participants believed that the only medical care available after normal business hours is emergency medical care. Participants felt that increasing the number of medical facilities that are open after-hours would improve resident’s access to affordable medical care and decrease the utilization of emergency medical services for non-emergent issues.

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- **Provide basic consumer information to patients:** Participants believed that physicians and patients are not always communicating effectively. Participants believed that providers could educate themselves on talking with consumers (i.e., seniors) and consumers could educate themselves on communicating with providers. Insurers and providers could participate. Additionally, participants felt that insurance companies could offer resources that would help residents navigate the healthcare industry, including benefits explanations.

**HEALTHY BEHAVIORS:**
Professionals with young children perceived that healthy behavior in their communities is limited by resident awareness, access to healthy options and individual choices.

**Perceived Contributing Factors:**

- Participants believed that residents are not always practicing healthy behaviors and/or making the healthiest lifestyle choices.
- Participants were under the impression that healthy foods are not always easily accessible and/or affordable for some residents, which may cause some residents to choose more unhealthy options because they are more accessible and affordable.
- Participants believed that healthy activities may not always be affordable for some residents.
- Participants believed that physical activities are limited in public schools, which they felt generates unhealthy behavior when coupled with the impression of participants that the food served in public schools is not always healthy and often has a lot of sugar.
- Participants believed that residents are not always practicing healthy behaviors and/or modeling how to make healthy lifestyle choices for their child(ren).
- Participants believed that the physical activity of school-aged children can be further limited by the safety of the community where they live (i.e., if the community is not safe, children may not be able to play outside).

**Mitigating Resources:**

Professionals with young children identified the following existing resources in their communities that they felt could improve the practice of healthy behavior:

- The community has affordable programs that encourage healthy behavior (i.e., stepping out, other fit group, etc.).
- A new park recently opened with trails for walking and biking.

**Group Suggestions/Recommendations:**

Professionals with young children offered the following as possible solutions to help improve the practice of healthy behavior in their communities:

- **Increase awareness about healthy behavior:** Participants believed that families are often unaware of how to implement healthy behaviors in their own lives. Participants felt that there could be programs available in the community to teach parents and children how to prepare healthy foods. Increasing the awareness of residents about healthy behavior increases the likelihood they will implement healthier behaviors.

- **Make healthy choices convenient:** Participants believed that implementing healthy behavior is not convenient. Making healthy choices more convenient, participants believed, will make it easier for residents to implement healthy behaviors.

**Resident Involvement:**
Professionals with young children perceived that there has been a recent decline in the involvement of residents in the community, which they attributed to a shift in demographics to a more transient population, difficulty balancing work/life, and a decline in trust, manners and respect.

**Perceived Contributing Factors:**

- Participants believed that the demographics of their community are shifting to a more transient population due to the local prisons, which participants were under the impression has caused the rate of crime and traffic to increase.
- While participants did not feel their community is unsafe, participants were under the impression that there are safety issues to be aware of.
- Participants were under the impression that there has been a decline in the level of trust in the community causing children to be unable to play outside without supervision, and that residents need to be more aware of their environment.
- Participants believed that manners and respect in intrapersonal relationships has decreased.
- Participants believed that families require access to social networks for support.
- Participants were under the impression that many families require both of the parent(s) to work outside of the home, which can lead to work/life issues and increased stress.

**Mitigating Resources:**

Professionals with young children identified the following existing resources in their communities that they felt could improve the involvement of residents:

- State-administered performance rating system allows parents to identify quality childcare (i.e., Keystone Stars program)
- Subsidies for childcare are available for families with lower incomes (i.e., Child Care Information Services)
- Support system and resources for kids with special needs have increased a lot and is better for the kids.

**Group Suggestions/Recommendations:**

Professionals with young children offered the following as a possible solution to help improve the involvement of residents in their community:

- **Make quality affordable childcare readily accessible:** Participants felt that it is important for parents to know their child is being cared for in a daycare program that nurtures their healthy development. Participants were under the impression that quality childcare should focus on exercise, learning and offer healthy nutrition.