2008 Pike County Community Health Needs Assessment

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Executive Summary

The purpose of a community health needs assessment is to involve the community in examining local data and gaining local perspectives about health needs. It includes information and lessons learned from past assessments, identifies current health problems or issues, and makes recommendations for future health planning and programming. In August 2008, the Illinois Institute for Rural Affairs (IIRA) at Western Illinois University was contacted by the Illini Community Health Care Foundation about working in partnership with the Pike County Community Health Partnership (PCCHP) to conduct a health assessment. The outcome was to be a comprehensive document that illustrates health needs and services gaps and identifies three to five of the most pressing health needs in Pike County and the rationale for choosing those health needs.

The current health assessment included an examination of demographic, business/economic, environmental, and health indicator data. The IIRA also collected primary data through telephone interviews with local health and social service providers and focus group interviews with community residents. The goals of the interviews were to identify how health and service providers perceive healthcare provision in the county, including unmet needs, and to assess residents' knowledge about and perceptions of existing programs. Forty-seven out of 64 health and social service agencies participated in the telephone interviews. Twenty-four residents participated in the focus groups.

Major findings from the current countywide health assessment indicate that Pike County is losing population, particularly young children and persons over the age of 65. It has a growing population of persons between the ages of 45 and 64. Poverty rates are higher in Pike County than in the state, and wages and job opportunities are lower. Pike County residents lack access to health and dental care because local providers do not accept Medicaid and/or new clients. This disadvantages low-income individuals and their families. Many Pike County residents, particularly the older residents, are reported to be underinsured. Lack of public transportation and a shortage of volunteers make getting medical care and social services difficult. Rising prices are making it difficult for people to afford health care.

Still, older residents report they are satisfied with local health and community services. The Pike County Health Department provides a number of programs that residents value. And Pike County has an active and engaged group of health and social service agencies that are working together to improve the quality of life and health of Pike County residents.

The health priorities identified in the 2008 Countywide Health Assessment are as follow:

• Coordination of services, including the coordination of local health providers, local health and social service providers, and local providers and regional providers

- Transportation, both in the county and within the region
- Mental health/psychiatric services
- Dental care/oral health
- Food, housing, and preventative health programs

Coordination of services is necessary so that Pike County residents get the care they need. Lack of transportation prevents residents from getting health and social services. There is a shortage of mental health and dental care providers in Pike County, and local residents need medical, dental, and mental health services to achieve wellness and improved quality of life. Though poverty is difficult to eliminate, Pike County residents could benefit from access to nutritious food, safe and decent housing, and preventative health programming. This health priority is consistent with goals set in previous health assessments.

Acknowledgments

Significant portions of the "Purpose Statement" and "Background" sections of this 2008 Pike *County Community Health Needs Assessment were taken from the Community Health Needs* Assessment – Pike County, Illinois (July 2005) and the Community Health Plan – Pike County, Illinois 2005-2010 manuscripts written by Jan Bleich, RN, Community Health Promotion Coordinator with the Pike County Health Department. These documents were instrumental in framing the issues discussed in this health assessment. The author would like to thank Professor David Rohall, Director of the Western Survey Research Center, for his assistance with the provider interviews and his student workers for the many telephone interviews they conducted. The author also thanks Ruth Thompson, MA, and Emily Hart with the Illinois Institute for Rural Affairs for their assistance with the focus groups and other aspects of the project. It was a pleasure to work with Michele Westmaas and Margaret Leahr with the Pike County Community Health Partnership before, during, and after data collection. I am thankful for their assistance with setting up the focus groups and other preparatory work that truly facilitated the process. I also want to acknowledge the time and thought given by residents and health and social service providers to the questions posed to them about health and quality of life in Pike County. It is my sincere hope that this community health needs assessment can inform the comprehensive health planning process in Pike County.

Cynthia B. Struthers, PhD Illinois Institute for Rural Affairs Western Illinois University Macomb, Illinois October 2008

Purpose Statement

The purpose of a community health needs assessment is to involve the community in examining local data and gaining local perspectives on the health needs in the county. With the knowledge gained during the current health assessment, we can look back at previous assessments for lessons learned, examine and identify current health problems, and use all the information to develop a community health plan to collaboratively address Pike County's health needs for the future. Through this process, the health of the Pike County community will be improved.

Background

Beginning in 1994, Illinois health departments were mandated to complete the Illinois Project for Local Assessment of Needs (IPLAN) process to meet recertification requirements. The IPLAN Organizational Capacity Assessment, Community Health Assessment, and Community Health Plan for Pike County were completed in 1994. Health priorities established at that time were (1) unintentional injuries, (2) heart disease, and (3) malignant neoplasms. This plan was implemented from 1994 to 1999. The plan was analyzed and evaluated during the IPLAN process of 1999.

In 1999, the second round of IPLAN resulted in the *1999-2004 Pike County Community Health Assessment and Community Health Plan.* Community health priorities established during this period were (1) adolescent health, (2) access to care, (3) injuries (unintentional and family violence), (4) cancer, and (5) cardiopulmonary disease.

Some of the positive outcomes from the 1999-2004 *Pike County Community Health Assessment and Community Health Plan* were as follow:

- *The identification and collection of data on teen health-related behaviors.* This information and the receipt of grant funding led to the development of two programs aimed at addressing teen health-related behaviors; a comprehensive sexuality education program and the Heart Smart for Teens program which was implemented in all five county school districts at the junior high level.
- *Implementation of the Access to Care initiative.* This led to a 49.0 percent increase in KidCare enrollees from 1998 to 2003. The Illini Community Health Care Foundation was developed during this period. The foundation is devoted to health and wellness issues in Pike County and is currently funding several health- and wellness-related projects.
- Several community programs were held to increase community awareness of domestic violence and teen dating violence. Illini Community Hospital added a sexual assault nurse examiner during this period, and the number of clients served by the Quincy Area Network Against Domestic Abuse (QuANADA) increased from 111 in 1998 to 146 in 2004.

- *Lung cancer deaths in the county decreased between 1997 and 2001.* The percentage of women over the age of 40 having annual mammograms increased between 1998 and 2002. Unfortunately, the percentage of adults who smoke increased by almost 3.0 percent over this same period and the percent of adults eating five or less servings of fruit and vegetables decreased. Colorectal cancer screening programs and community education programs to promote healthy lifestyles and prevent cancer are still needed.
- *Several programs were implemented to improve cardiopulmonary health.* A County Wellness Program is available to Pike County employees, and the accessibility to exercise and weight loss programs has expanded. Screenings and education for hypertension, diabetes, cholesterol, and obesity are available.

The community health assessment process provided an opportunity to establish health priorities and develop programming to specifically address these goals.

In September 2004, the designated Pike County Health Department IPLAN Coordinator and health department management staff began to meet regularly to establish a process for community involvement for the third round of IPLAN. Their goal was to achieve a true community health assessment and community health plan rather than a health department health assessment plan. A list of key stakeholders with broad community representation was developed, and they were invited to participate in the health assessment process. In addition, an outside facilitator was brought in to guide the process and the group. Twenty-five community groups (and approximately 28 individuals) came together to participate in the 2004 *Community Health Needs Assessment* process. The following three community health priorities were established by the community group:

- 1. Adolescent health, including specific problems related to sexuality, substance use/abuse, and mental health issues;
- 2. Poverty/access to care issues, including an increase of resources and knowledge, access to care, and improved housing; and
- 3. Lifestyle issues such as sedentary lifestyles, poor nutrition, and tobacco use.

The Adolescent Health subcommittee established objectives and strategies consistent with the *Healthy People 2010* objectives of the Centers for Disease Control (CDC) for adolescents and young adults that include substance use/abuse, mental health, and reproductive health. They specified two outcome objectives: (1) to improve the reproductive health of Pike County adolescents as measured by a reduction in the incidence of chlamydia and by a reduction of the teen birth rate; and (2) to establish a consistent method to gather longitudinal data on adolescent behaviors (such as substance use/abuse and mental health indicators) in Pike County youth. The subcommittee also used the *Guide to Community Preventive Services* to identify population-based interventions to

promote health and to prevent disease, injury, and premature death. These interventions include education and counseling; service delivery and referral; media campaigns; youth development programs; and programs to strengthen family, social networks, and other support systems.

As part of the process for addressing adolescent health programming, the subcommittee identified 26 programs or resources already available to Pike County residents. These programs ranged from public swimming pools and recreation programming, to Boy and Girl Scouts, church youth groups, and formal mental health services and preschool programs, to private music and dance lessons. The subcommittee also identified 16 interventions they considered "necessary for development." These included providing transportation options to increase participation in sports or other extracurricular activities, creating mentoring programs, fostering parental involvement, seeking grant funds to increase programming, and supporting and promoting existing youth center programming.

During the priority setting process, state and national press coverage was released highlighting Nebo, Illinois, in southern Pike County as an example of rural poverty. A profile of poverty in Nebo was presented at the 2005 Poverty Summit, facilitated by the Heartland Alliance for Human Needs and Human Rights and later published in a report. This attention to poverty in southern Pike County in part led to the development of the Poverty and Access to Care subcommittee. According to the Illinois Department of Public Health (IDPH)-Center for Rural Health, Pike County is designated as a Health Professional Shortage Area (2008). This designation not only reflects a shortage of healthcare provision, but it also reflects important social and demographic characteristics of the population such as educational attainment, Medicaid enrollments, per capita income levels, and child poverty levels, in addition to rates of residents who are uninsured and underinsured, Medicaid enrollee to Medicaid physician vendor ratios, and rates of hospitalization for uncontrolled hypertension or asthma. Additional factors influencing poverty and access to care issues for residents of Pike County are (1) the lack of a public rural transportation system and (2) the presence of only one dentist in Pike County who accepts patients with Medicaid. According to Patricia McIntosh (2008), Executive Director of the Illini Community Health Care Foundation, this dentist has not accepted new Medicaid patients in ten years.

Based on this information, the Poverty/Access to Care subcommittee identified both outcome objectives and impact objectives consistent with *Healthy People 2010* objectives. The two outcome objectives include (1) to improve access to health care as measured by a reduction in the number of hospitalizations for uncontrolled hypertension and (2) to improve access to health care by development of a public rural transportation system serving Pike County residents. The two impact objectives include (1) to reduce poverty in Pike County by reducing the percentage of children living in low-income homes to less than 33.0 percent and (2) to improve housing conditions and housing options by reducing the percentage of renters unable to afford housing to less than 25.0 percent.

The intervention strategies identified by the Poverty/Access to Care subcommittee were (1) increase knowledge of available resources and increase available resources, (2) increase access to care through transportation, and (3) improve housing. This subcommittee identified and developed a list of existing resources and services currently available in Pike County. The list included 37 resources and service organizations that ranged from a social services resource directory; general assistance; Meals on Wheels and senior meal sites in Pleasant Hill, New Canton, and Barry; area churches; GED classes at the local community college; to monthly social service/ interagency meetings. The subcommittee also made recommendations for resources and/or strategies that needed to be explored. The recommendations included increased community awareness of existing resources and increased community collaboration, use of after-school programming and a Salvation Army type organization, creation of a rural public transportation system, improved access to dental care, coordination with Habitat for Humanity, and economic development.

More recently, the Mid-America Institute on Poverty of Heartland Alliance (2008), hereafter referred to as Heartland Alliance, has placed Pike County on a Poverty Warning List. Heartland Alliance uses four county-level indicators to assess the well-being of residents of Illinois: (1) high school graduation rates, (2) unemployment rates, (3) teen birth rates, and (4) poverty rates. These indicators are not mutually exclusive—that is, educational attainment levels and unemployment can affect poverty status. Persons with less education are more likely to be poor and the like. Heartland Alliance assessed counties' well-being using a point system. The higher number of points a county receives out of eight items (two for each indicator), the worse off they are considered to be. Points are given to counties if the rate on a given indicator is higher than the state average and/or if they have worsened since the previous year. Pike County received six points out of eight. This indicates that well-being in Pike County declined. Data for Pike County from the Heartland Alliance report will be discussed in more depth later in the report.

A final subcommittee formed around Lifestyle Issues. The IPLAN data system makes it clear that physical inactivity, poor diet, and tobacco use are leading causes of premature death and major contributors to disabilities that result from heart disease, cancer, diabetes, osteoporosis, obesity, stroke, and arthritis. According to the American Cancer Society (Bleich 2005), while about 5.0 to 10.0 percent of cancers are hereditary, meaning that these people inherit genes that are linked to cancer, and 2.0 percent of cancers are the result of environmental pollution, the majority of cancers are caused by damage to our genes through factors such as diet, tobacco use, and exposure to sunlight. These findings suggest that adopting healthy behaviors can reduce cancer risk.

The *Healthy People 2010* national health objectives include focus areas on cancer, diabetes, heart disease and stroke, nutrition and overweight, physical activity and fitness, and tobacco use. Outcome objectives include reducing the incidence of lung cancer cases to no more than 10 per year by 2010, and reducing the incidence of colorectal cancer cases to no more than 10 per year by 2010. Impact objectives include increasing the percentage of Pike County adults who get the recommended 30 minutes of moderate physical activity at least five days per week to 45.0 percent

and increasing the percentage of Pike County adults who eat five or more servings of fruits and vegetables per day to 26.0 percent. In addition, the subcommittee would like to see a decrease in the percentage of Pike County adults who smoke tobacco to 20.0 percent and see a decrease in the percentage of mothers who smoke during pregnancy to less than 15.0 percent by 2008.

The Lifestyles Issues subcommittee identified ten programs that could promote more physical activity, ten programs that could improve nutrition, and 12 programs that could reduce tobacco use. The following intervention strategies were identified to increase physical activity: community-wide campaigns, school-based physical education, social support, and enhanced access to places for physical activity. Nutrition intervention strategies included school-based nutrition programs and community approaches to increase fruit and vegetable consumption. Intervention strategies aimed at reducing tobacco use included smoking bans and restrictions, increasing the unit price for tobacco, media campaigns with other interventions, healthcare provider reminder systems with education, and telephone quit line support with other interventions. Fifteen interventions were identified as necessary by the Lifestyle Issues subcommittee. The list included increased interagency/organization communication and partnering to enhance programming, bike/walking trail development, exploration of funding opportunities for specific programs like Heart Smart for Teens, and other interventions geared to education about and encouragement for healthy eating and programming to stop smoking.

2008 Pike County Community Health Needs Assessment Process

In August 2008, the Illinois Institute for Rural Affairs (IIRA) at Western Illinois University was contacted by the Illini Community Health Care Foundation¹ about working in partnership with the Pike County Community Health Partnership (PCCHP) to conduct a health assessment of Pike County. The PCCHP is "a group of organizations, agencies, and individuals working collaboratively to strengthen the health and wellness of Pike County citizens by creating new and enhancing existing health services and programming" (see www.pikehealthpartnership. org/about.html). The PCCHP is the ongoing partnership organization formed during the 2004-2006 Pike County Health Department's IPLAN process. The vision of the PCCHP is that "all enjoy the highest degree of health, wellness and quality of life possible," and their mission is "to collaboratively strengthen the health and wellness of those served in Pike County."

The goal of the 2008 Pike County Community Health Needs Assessment is to identify countywide health needs, problems, and disparities. The strategy and objective is to conduct a countywide community health needs assessment that will be the basis for a comprehensive health planning process. The anticipated outcome is a comprehensive document that illustrates health needs and service gaps and identifies three to five of the most pressing health needs in Pike County and the rationale for choosing these three to five needs.

In coordination with the PCCHP Coordinator and Steering Committee, the IIRA submitted a proposal for the health assessment that specifies that they would collect and examine

existing secondary data on Pike County that would include demographic, business/economic, environmental, and health indicator data. In addition, the IIRA would collect primary data in Pike County through telephone surveys with health and social service providers and through focus groups with community residents and/or community leaders. The protocols for the telephone interviews and the focus groups will be discussed in more detail in the following section of the report. The goal of these data collection efforts was to identify how health and social service providers perceive healthcare provision in the county, including unmet needs, and to assess residents' knowledge about and perceptions of existing programming. This was important because previous IPLAN efforts have identified a number of programs and resources they believed would help them address health access and services in Pike County. This community health assessment report will be used as a basis for an upcoming comprehensive health planning process. In addition, the PCCHP needed information from Pike County residents in order to complete grant applications to fund health programming efforts.

Community Health Status and Community Health Problems

The following section will document demographic and socioeconomic data for Pike County individuals and households that are known to impact health and health access. This will be followed by some business and economic indicators as well as existing environmental conditions that could facilitate or prevent improving health and healthcare access. Finally, some specific health indicators will be discussed. The information presented here is consistent with the concerns that have been raised in previous IPLAN processes. This allows for some consistency between reporting years; however, new issues will be raised as appropriate.

Demographic and Socioeconomic Characteristics

Though Census 2000 statistics are now almost ten years old, they provide some baseline countylevel demographic and socioeconomic data. In 2000, the population of Pike County was 17,384. Current population estimates put the population of Pike County at 16,707 (U.S. Census Bureau 2008). The median age of Pike County residents is 39.8 which is higher than the State of Illinois or U.S. median age. The percentage of children in Pike County less than 5 years of age is 5.8 percent, which is lower than the state and national percentage. The proportion of persons 65 years and over is much higher in Pike County than in Illinois and the nation as a whole. Disparities appear when educational attainment rates are compared. The percentage of Pike County residents with less than a high school education is 20.4 percent, the state rate is 18.6 percent, and the U.S. rate is 19.6 percent. In addition, though 44.0 percent of Pike County residents have high school diplomas, only 10.0 percent have completed a bachelor's degree or higher. The percentage of Illinois residents with a bachelor's degree or higher is 26.4 percent. There is a slightly higher percentage of family households in Pike County compared to the state and national rates, and these households are less likely to have children living in them. The percentage of femaleheaded households in Pike County is consistent with the state and national percentages, but more Pike County single-family households have children under the age of 6. One interesting

characteristic of Pike County households is the percentage of grandparents who are responsible for a grandchild. Though the actual number of households with grandparents living with children is small, only 195 households, 52.3 percent indicate that they are responsible for at least one grandchild. The percentage for the state is 40.2 and for the nation is 42.0. Table 1 provides a summary of this information.

	Pike	State of	United
General Characteristics	County	Illinois	States
Population	17,384		
Median age (years)	39.8	34.7	35.3
Under 5 years (percent of population)	5.8	7.1	6.8
65 years and over (percent of population)	19.2	12.1	12.4
Average household size	2.4	2.6	2.6
Average family size	2.9	3.2	3.1
	Pike	State of	United
Social Characteristics	County	Illinois	States
Educational attainment			
Less than high school	20.4	18.6	19.6
High school graduate (or equivalent)	43.8	27.7	28.6
Bachelor's degree or higher	9.9	26.4	24.4
Household type			
Family households	69.5	67.6	68.1
With own children under 18 years	43.9	48.8	48.2
Under 6 years only	9.5	11.4	11.2
Married-couple families			
With own children under 18 years old	41.2	47.3	45.6
Under 6 years only	8.5	11.4	10.8
Female householders, no husband present			
With own children under 18 years old	58.4	56.0	58.6
Under 6 years only	13.1	11.0	11.9
Grandparents living in households with one or more grandchildren			
Grandparent responsible for grandchild	52.3	40.2	42.0

Table 1. Demographic and Socioeconomic Characteristics (Pike County, State of Illinois, and United States) – Census 2000 Data

	Pike	State of	United
Economic Characteristics	County	Illinois	States
In labor force (population 16 years and over)	56.4	61.2	59.7
Male (employed)	61.5	67.3	65.8
Female (employed)	51.6	55.5	54.0
Median household income in 1999 (dollars)	31,127	46,590	41,994
Median family income in 1999 (dollars)	38,583	55,545	50,046
Per capita income in 1999 (dollars)	15,946	23,104	21,587
Families below poverty level	9.8	7.8	9.2
Individuals below poverty level	12.4	10.7	12.4
Married-couple families with related children under 5 years (percent			
below poverty level)	7.1	6.4	8.5
Householder 65 years and over (percent below poverty level)	7.4	3.3	4.1
Families with female householder with related children under 5 years	52.6	43.6	46.4
(percent below poverty level)			
Family who received Supplemental Security Income (SSI) and/or	34.7	49.6	50.2
public assistance			

Source: U.S. Census Bureau 2008

Table 1 also illustrates how Pike County residents compare to residents in the rest of the state in terms of labor force participation, median incomes, and poverty levels. Pike County residents have lower rates of labor force participation than the state as a whole. Median household income figures from 1999 indicate that Pike County residents have significantly lower incomes than other residents of the state. Median family income figures for 1999 were \$38,583 in Pike County, \$55,545 in Illinois, and \$50,046 nationally. The percent of Pike County families living below poverty level is 9.8 while the percent in the state is 7.8. The poverty rate for individuals in Pike County is 12.4 percent compared to 10.7 percent in Illinois. Living below poverty level is also more likely to occur when the householder is 65 years old or older, and the Pike County poverty rate for persons over the age of 65 is twice the rate for the state. Female-headed households in Pike County are more likely to live in poverty—52.6 percent compared to 43.6 percent in Illinois and 46.4 percent nationally.

Census data indicate that Pike County residents are older, less likely to have more than a high school education, less likely to have young children at home except if they are single mothers, and that grandparents are increasingly likely to be caring for young children. Many Pike County residents are economically vulnerable. Labor force participation rates are lower, median household and family incomes are lower, and a higher percentage are living in poverty compared to the rest of the state. Not only are Pike County residents more likely to be poor, but they are less likely to receive Supplemental Security Income (SSI) and/or public assistance.

Other demographic and social trends will impact health and service needs in the future. The population of Pike County declined by 1.1 percent between 1990 and 2000, and between 2000 and 2007, the population is estimated to have declined another 3.8 percent (U.S. Census Bureau 2008).

Looking at the age structure reveals that the population of 1 to 4 year olds remained unchanged during this period, while the population of 5 to 9 year olds and 10 to 17 year olds declined. The age category with the most growth was persons between the ages of 45 and 64. The population of persons over the age of 65 actually declined between 1990 and 2000. These statistics suggest that Pike County is losing young families and long-time residents who support community life by purchasing homes and supporting local businesses, schools, and churches.

Single-person households grew slightly (2.9%), while married-person households with children declined by 12.3 percent. Both female- and male-headed households with children grew, 7.6 percent and 29.0 percent, respectively. Though the overall number of male-headed households is small and constitutes only 1.9 percent of all households in Pike County, individuals living alone and single-parent families tend to have lower household incomes than married-couple households. What is interesting is that the percentage of families with incomes less than \$34,999 actually declined between 1990 and 2000. Poverty rates declined to 12.4 percent, but this rate is still higher than the poverty rate for the state. The poverty rate for female-headed households with children under 18 is 25.0 percent. The poverty rate for persons 65 years old and older is 11.4 percent (MAPPING the Future of Your Community's Health 2007).

Though census figures indicate some positive trends in income and declines in poverty, poverty figures from a Heartland Alliance (2008) report describe a bleak economic picture of Illinois. The introduction to this report states that "the state of Illinois holds the distinction of having the worst budget deficit in the nation for 4 years running" (2). This deficit has consequences for those that rely on state social service programs and those who receive reimbursement from the state for services:

Across Illinois there is a growing gap between incomes and the cost of basic needs. Average weekly wages fell in 7 of the 11 job sectors in Illinois from 2001 to 2007. . . . [A]fter adjusting for inflation real weekly wages declined by \$32 for people working in the business service sector (and) \$16 for people working in the retail trade. (4)

During the same period, "energy costs rose 60%, education and communication 14.1%, food 15.4%, housing 13.6%, medical care 31.2%, [and] gasoline 92.7% (Heartland Alliance 2008, 4). Rising costs for basic needs and housing disproportionately impact households with lower and fixed incomes. When financial resources are tight, individuals and families have to make choices on what they will purchase and pay for.

Employment by Sector

Shifts in industrial employment occurred in Pike County between 1990 and 2000. Employment in agriculture, forestry, fishing, hunting, and mining declined by 39.2 percent, and manufacturing employment declined by 9.9 percent. Employment grew in the public administration sector by 34.4 percent, but the most growth occurred in the service sector. The service sector is the largest

employment sector in the county (MAPPING the Future of Your Community's Health 2007). The marginal growth in family incomes between 1990 and 2000 and the growth of the service sector likely reflect the movement of women into the labor market. With the current downturn in the economy, these economic gains have likely been reduced.

The six largest employers in the area are (1) the four local school districts (420 employees), (2) Ketterman Communications (200 employees), (3) Illini Community Hospital (185 employees), (4) Smith Oil Company (171 employees), (5) the Illinois Department of Corrections (138 employees), and (6) Pike County government employees (130). A brief look at 2007 Illinois School *Profile* for Pikeland CUSD 10 indicates that teachers there who have an average of 16.9 years of experience make on average \$39,996 annually compared to teachers with only 12.9 years of experience across the state who average \$58,275. This difference can be explained in part because teachers in Pike County have fewer master's degrees, but it also reflects that wages generally are lower in rural counties. Only 17.3 percent of Pikeland CUSD teachers have graduate degrees compared to 52.3 percent of teachers in the state. Because wages and salaries are lower in rural places, there are often fewer benefits to investing in more education. This may be especially true as the cost of higher education continues to increase. These lower wages in the county make it more difficult to recruit persons with college educations and professional degrees.

Environmental Profile

The following section examines community water supplies, community wastewater treatment, solid and hazardous waste disposal, housing and residential issues, and some general environmental issues. This information was supplied by Ms. Jane Johnson, the Environmental Health Director at the Pike County Health Department. It includes information for Pike County and the individual communities of Pittsfield, Barry, Griggsville, Pleasant Hill, Perry, Valley City, New Salem, El Dara, Baylis, New Canton/Kinderhook/Hull/Milton, Pearl, Detroit, and Florence.

The most common source of municipal raw water supply reported in the above Pike County communities is groundwater. Eleven of 13 communities get their raw water from groundwater, while one community reported surface water. Nine communities reported that their residents obtain their drinking water from municipal treatment plants, and two reported that their drinking water comes from wells. In one community, 100.0 percent of residents use private wells; in eight communities, 2.0 percent of residents use private wells; and in three communities, 5.0 percent use private wells. Possible sources of pollution that may directly impact raw water supplies are agricultural chemicals (all 13 communities and the county), animal waste (three), soil loss (one), and septic systems (two). Twelve of 13 communities are currently reported to meet the quality standards established by the Safe Drinking Water Act.

Community water treatment methods used include a treatment plant (one community), ponds/ lagoons (five communities), and on-site septic systems (five communities). Five communities are reported to have sufficient capacity to treat wastewater needs, one community is reported to have insufficient capacity, and one community is reported to have a long-range wastewater treatment plan.

Only one community is reported to have a regular solid waste collection program, while 14 communities use a sanitary landfill for the disposal of solid waste. There appears to be no community-based recycling effort. None of the communities or the county as a whole are reported to allow open burning of solid waste. Eleven of the 14 communities do not have a separate hazardous waste collection program, though two communities participate in some periodic collection of hazardous waste.

Housing and residential concerns that can impact community and individual health include whether or not communities have a housing code for existing structures. Only two communities indicated they have housing codes. None of the communities are reported to have a housing inspection program in operation, and none of the communities have an ongoing lead inspection and abatement program.

There are a few general environmental issues reported that could impact community quality of life. Only three communities appear to have an emergency response plan in place in the event of a hazardous chemical incident, and only two have a plan in place in the event of a natural catastrophe. Thirteen communities reported that agriculture is a likely source of pollution. Six communities reported refuse burning, and one reported manufacturing as a likely source of air pollution. The airshed is not regulated. Two communities reported that offensive odor is a public nuisance in their community. Three communities are reported to have occupational health and safety concerns. Three communities consider their swimming areas safe for use for various water sports and activities, while nine say their swimming areas are not safe.

Drinking water, waste treatment, and solid waste removal all impact local quality of life. Housing quality can also affect health and safety concerns. Environmental quality and preparation for unexpected events could have significant impacts on community health. Many of the environmental factors reported indicate infrastructure needs in Pike County. Likewise, things like refuse burning have an impact on residents with asthma, and safe swimming areas can impact child and adult health.

Health Indicators

Using data from the Illinois Behavior Risk Factor Surveillance System (BRFSS), comparisons between a health indicator at the county and state level are possible. Table 2 summarizes responses to questions from Pike County and those at the state level. Only questions that appeared in both surveys are included—that is, some Pike County data from the 2005 Pike County Adults–3rd Round Illinois County Behavior Risk Factor Survey (BRFS) were not included in the 2007 Illinois BRFSS data. Topics are grouped loosely around a few core themes: Health Status, including perceptions of health, lifestyle, nutrition, physical health, and quality of life, and Health Conditions, including asthma, cardiovascular health, diabetes, HIV/AIDS testing, and information about immunizations. There are also items related to Health Care Utilization (access). Data from Pike County about oral health are included, though there was no state data from 2007.²

	% in	% State
Health Indicators	Pike County	of Illinois*
Health Status		
General health <i>(poor)</i>	5.5	3.8
Days mental health not good (for 8 to 30 days)	13.4	12.1
Days physical health not good (for 8 to 30 days)	13.2	12.4
Days health kept from doing usual activities (for 8 to 30 days)	11.3	13.7
Lifestyle		
Alcohol		
At risk for acute/binge drinking	16.4	19.9
Tobacco		
Smoking status – smoker	22.5	20.2
Weight control		
Overweight	35.1	37.6
Advised about weight	22.1	18.7
Are you trying to lose weight?	43.5	46.5
Nutrition		
Total servings fruits/vegetables per day (less than 3 servings per day)	50.3	42.1
Physical Activity		
Any exercise past 30 days	78.2	77.3
Work activity		
Mostly sitting or standing	38.7	65.3
Not employed	24.9	
Quality of Life		
Activities are limited by health problems	17.7	17.1
Need special equipment due to health	5.2	7.4

Table 2. Select Health Indicators from Illinois Behavioral Risk Factor Surveillance System
Round 3 (2004-2006) – Pike County (percent of yes responses <i>unless otherwise noted</i>)

	% in	% State
Health Indicators	Pike County	of Illinois*
Asthma		
Ever: Told you have asthma?	13.1	12.8
Cardiovascular		
Told blood pressure high	35.9	27.9
Now taking blood pressure medication	78.2	79.9
Ever: Told blood cholesterol high?	35.8	36.7
Diabetes		
Told had diabetes	9.1	8.8
HIV/AIDS/STD		
Ever had an HIV test?	27.7	34.9
Immunizations		
Have you had a flu shot (last 12 months)?	31.9	34.4
Have you ever had a pneumonia shot?	31.0	22.3
Healthcare Utilization		
Do you have healthcare coverage	87.7	85.0
Have a usual person as healthcare provider?	88.9	82.7
Could not see doctor due to cost past 12 months?	14.3	12.8
How long since last checkup?		
Within the last 12 months	71.4	66.9
Within the last one to two years	6.8	13.8
More than two years ago	20.0	19.3
Oral Health		
Last dental visit		
1 to 2 years	13.4	
More than 2 years/never	26.9	
Do you have dental insurance?	43.0	
In the last 12 months, could not afford dentist	16.8	
Why no dental visit past year?		
Cost	25.0	

*Percentages are not directly comparable; these are based on the 2007 Illinois BRFSS data. There were no 2007 Illinois BRFSS data regarding oral health care.

The Pike County and Illinois BRFSS data are not directly comparable because Pike County data is not collected each year. There are remarkably similar responses between Pike County and the State of Illinois on a number of health indicators, though some differences do exist. Pike County respondents are more likely to report eating less than three servings of fruits/vegetables per day. Pike County respondents also report a higher incidence of high blood pressure. Pike County residents are less likely to report ever being tested for HIV/AIDS, but they are more likely to report having had a pneumonia shot. Fewer Pike County residents reported having a checkup in the last one to two years (6.8%) when compared to the rest of the state (13.8%). The percentage of Pike County respondents who indicated that it has been more than two years since they have had a checkup did not dramatically differ compared to statewide responses (19.3%).

Dental Care/Oral Health

Pike County Behavioral Risk Factor Survey (BRFS) data indicate that almost 27.0 percent of respondents have not seen a dentist in two or more years, and 43.0 percent of them report they do not have dental insurance. Seventeen percent did not seek dental treatment in the last 12 months (at the time of the survey) because they could not afford to see a dentist. Twenty-five percent did not visit the dentist in the past year due to cost. Improving oral health is a focus area of the *Healthy People 2010* campaign of the CDC. In Illinois, a statewide task force called IFLOSS is actively promoting good oral health practices and prevention and is seeking to address access issues across Illinois.

Numerous studies link poor dental hygiene and untreated dental problems to other health conditions. A study by researchers at the University of Kentucky linked tooth loss and oral disease to dementia in later life, though researchers caution that more study is needed (Sass 2007). Studies also link gum disease to cardiovascular disease (American Academy of Periodontology 2008) and diabetes (Diabetes Care 2008). Other studies illustrate how poor oral health can lead to other diseases (Wood 2004) and that oral health problems are a port for bacteria entering the bloodstream that are related to cardiovascular disease, premature births, diabetes, HIV/AIDS, and osteoporosis (Mayo Clinic 2007).

Socioeconomic factors increase the likelihood of poor oral health. According to a report published by the IFLOSS Coalition (2007), oral disease is more common among persons with low incomes and less education, the elderly, persons with disabilities and chronic diseases, and the underinsured. Low-income persons are more likely to suffer dental decay and periodontal disease that leads to tooth loss and infections, cardiovascular disease, and diabetes. Pregnant women with poor dental health run the risk of having pre-term/low-weight babies. Dental problems not only begin early, but many Illinois children suffer from preventable oral health problems and lack of preventative care.

Pike County is a federally designated primary care Health Professional Shortage Area (HPSA) based on geographic criteria and a federally designated dental HPSA due to low income. Pike County is also a federally designated mental health HPSA based on geographic criteria (IDPH–Center for Rural Health 2008). These designations are important because they allow Pike County to participate in state-funded programs.

Well-Being Indicators

In addition to examining health indicators and oral health, other measures of well-being are pertinent to understanding health and service provision in Pike County. Heartland Alliance

(2008) has identified four key indicators to assess well-being in each Illinois county: (1) high school graduation rates, (2) unemployment rates, (3) teen birth rates, and (4) poverty rates. Illinois counties were evaluated using a point system, with a higher number of points indicating a worse score. Points were assigned to counties if their rate on key indicators was higher than the state average or if the condition indicated by the indicator had worsened since the previous year. Counties with scores of 6 to 8 on the eight indicators examined were placed on a Warning List. Pike County was one of 30 counties placed on the Warning List.

		Point Change		Point Change in		Point Change in		Point Change
	ISBE High School	in Grad Rate from	Teen Birth	Teen Birth Rate from	Unemployment	Unemployment Rate from	Poverty	in Poverty Rate from
	Grad Rate, 2006-2007	Previous Year	Rate 2005	Previous Year	Rate, August 2007	Previous August	Rate 2005	Previous Year
Pike Illinois	85.2% 85.9%	-6.4% -1.9%	11.7% 9.7%	-0.6% -0.2%	4.6% 5.2%	0.2% 0.7%	14.3% 12.0%	1.7% 0.1%

Table 3. Pike County Well-Being Indicators (Heartland Alliance 2008)

Table 3 indicates that graduation rates in Pike County have gone down, and teen birth rates are higher than the state average even though they have gone down more during this period than the state rate. Unemployment rates in the county remain lower than the state, but poverty rates have increased. Pike County's score on well-being indicators reflects lower graduation rates, higher rates of teen births, and higher poverty rates. The Heartland Alliance (2008) report illustrates other areas of concern for Pike County residents as well. Child poverty as defined by looking at the rate for persons under the age of 18 is 19.6 percent compared to the state rate of 16.5 percent. Monthly earnings of new hires in 2004 to 2005 declined by \$233.00 in Pike County compared to an increase of \$73.00 among new hires for the same period in the state. Average wages in Pike County are significantly lower than average wages per job in the state—\$23,924 compared to \$45,032. In addition, graduation rates for low-income students have declined, and the percent of children eligible for free or reduced lunches has increased.

Though this information is not directly related to the health indicators discussed previously, lower graduation rates, teen birth rates, and poverty rates impact personal health and health access. Health access will continue to decline as economic conditions worsen. A recent article in the *Chicago Tribune* (Garcia 2008) indicated that the Governor of Illinois, Rod Blagojevich, cannot expand state-subsidized health care without lawmakers' approval. This could mean that families who recently signed up for the state's FamilyCare insurance program may lose this health coverage. This will further reduce access to health care for Illinois families. The State of Illinois is facing some significant economic issues that will impact health care.

Provider Interviews and Focus Groups with Community Residents

This section will discuss the process that was used to collect data from healthcare service providers and residents of Pike County to help the PCCHP identify goals for their comprehensive planning process. The IIRA proposed telephone interviews and focus groups as methods of data collection. Because the timeframe for collecting primary data was short, the PCCHP Steering Committee and IIRA chose to conduct phone interviews with health and social service providers rather than send out questionnaires as in the past. Previous countywide health assessments have relied on mailed surveys. The advantage of mailed surveys is that it allows respondents an opportunity to reflect on their answers prior to returning. A disadvantage of mailed surveys is that unless the research design allows for repeat mailings or other follow-up, response rates can be low. Due to the IIRA's short timetable for completing the health assessment prior to the PCCHP beginning their comprehensive planning process, telephone interviews were conducted. In an effort to encourage participation in this year's health assessment process, health and social service over a two-week period.

A list of 31 healthcare practices/health service providers and 33 social service agencies were identified for inclusion in the study. Every health and social service agency on the list was called at least twice, and some were contacted as many as four times seeking participation. Responses were received from 47 health and social service agencies for a response rate of 71.0 percent.³ The telephone interviews consisted of eight questions and took about 15 minutes to administer. A copy of the interview schedule is included in the Appendices to this report. A discussion of major findings from the telephone interviews will follow a discussion of findings from the focus groups.

Focus Groups

In addition to the health and social service provider interviews, the IIRA asked the PCCHP to set up three or four focus groups with local community groups. The goal was to collect input from residents of Pike County for the health assessment. Because time was short, the decision was made to ask groups that already had regular meetings scheduled in late August or early September to participate. The decision was made to hold focus groups with a goal of including five to 15 people per three (or four) focus groups. This would provide a minimum of 15 (or 20) participants to a maximum of 45 (or 60).

This means these were *convenience samples* and not randomly selected interviews with county residents. Convenience samples are also referred to as *haphazard*, *fortuitous*, or *accidental* samples wherein a researcher simply selects a number of people to interview about a topic of interest (Singleton, Straits, Straits, and McAllister 1988). In this case, *convenience* refers to contacting existing groups to see if they would be willing to take part in a focus group wherein responses would be used in the countywide health assessment. An attempt was made to identify groups

whose members lived throughout the county. The identification and selection of groups to contact was made in coordination with the PCCHP Steering Committee.

Focus groups were held with senior citizens, parents of young children, and representatives from local churches. In all, 24 people participated in the three focus groups. Most focus group participants lived in Pittsfield, with only three people indicating they lived elsewhere in Pike County. Characteristics of focus group participants are (1) over half of them were married, (2) they ranged in age from 23 to 84, (3) just over half owned their own homes while six of them rented, and (4) seven of them had children under the age of 18 at home. Eight participants had incomes of less than \$29,999, six had incomes of \$30,000 to \$39,999, and the rest had incomes over \$40,000. Though incomes do cluster between \$30,000 to \$39,999 a few of the participants had very low incomes.

Focus group participants were asked five open-ended questions (see Appendices). They were asked about the advantages and disadvantages of living in Pike County, what health or social services are available to residents of the county, if there were health or environmental concerns in the area that worried them, and what programs or services would enhance good health and wellbeing in Pike County. This section of the report will focus on the advantages and disadvantages of living in Pike County, and what health or environmental concerns worry them.

Senior citizens who participated in the first focus group felt an advantage of living in Pike County was that it was safe. They particularly liked living in Pittsfield because it was "right in the middle of everything"—there was little traffic, people were courteous to one another, it was cheaper to live in Pike County than the other places they had lived, and they saw having a local hospital as an advantage. About a third of this group had lived in large cities, such as St. Louis, and had moved back to Pittsfield because of the positive features mentioned above. They did, however, see a number of disadvantages to living in the county and expressed concerns about air quality, specifically people who burned trash and other things; high gasoline prices; and having to depend on other people for transportation. Though they believed the hospital was convenient for persons living in Pittsfield, it was difficult for people who lived out of town to get there. Transportation to specialized health care was even more difficult because it was located outside the county. One woman mentioned how difficult it was to have to ask for transportation to weekly and/or monthly medical appointments.

When asked about health and environmental issues that worried them, the problem of large hog farms came up. Participants were worried about the waste these hog confinement operations generated and the impact the waste would have on groundwater and wells. This group also mentioned concerns about run-off from agricultural chemicals into groundwater and rivers and about cattle operations. Burning within the city limits also came up as an environmental concern. According to participants, whatever was being burned not only smelled bad but seemed to cause respiratory problems and allergic reactions. No one was sure what was being burned, but the air quality was so bad at times, they did not open their windows or go outside. A final concern was

how expensive everything was getting. This group was keenly aware that their incomes were fixed while prices for everything from food to gas to medicine were going up.

Participants in the second focus group were between the ages of 23 and 50, and most were parents of young children. They saw the advantages of living in Pike County to be low crime, that people knew each other, and good schools. Knowing your neighbors or being known to "everyone" was actually seen as both a good and bad thing. One woman mentioned she was happy her husband's job was in Pike County.

This group was much more vocal about the disadvantages of living in Pike County. The biggest disadvantage to living in the county was having to go to Jacksonville, Quincy, Springfield, or St. Louis to get medical and dental care for themselves and their children. One mother talked at length about the problems she had getting her son's autism diagnosed. By the time she finally had a diagnosis, he was getting too old for some early intervention programs. Participants in this group were also upset that local dentists did not accept their child's medical card. They also complained about the lack of an OB/GYN doctor, and they did not like having to see a different doctor every time they sought local medical treatment. Each time they sought local health services, they would have to repeat their entire history with a new doctor.

Parents with young children were also concerned that there was nothing for their children to do in the winter. They were wary of taking their young children to local parks because of teenagers loitering about, and they were concerned about drug and alcohol use at the parks. A lack of public transportation was also seen as a disadvantage of living in Pike County, and focus group participants were very concerned about rising gas and food prices.

This group also expressed concern about the growing number of hog confinement operations in Pike County. One participant said that two hog confinements had been built on either side of her property. The smell of ammonia was so bad she could no longer open her windows or hang her laundry out. And, like the previous group, this group was concerned about the well and groundwater contamination that could result from more hog farms in the county. Though they had no statistics to prove this, their perceptions were that more people were affected by cancers, asthma, sinus problems, and allergies.

The final focus group described the advantages of living in Pike County as low crime, a sense that people looked out for each other, and that residents had some accountability to each other. The disadvantages they mentioned were having to drive everywhere (for everything), limited access to health care, nothing for kids to do, and drug and alcohol use in the county. A specific health and environmental concern was the flooding the county had experienced this year, which they believed led to more mold, allergies, and mosquitoes. They also mentioned farm chemicals and run-off as an environmental concern.

Perceptions of health and dental care varied among focus group participants. Overall, older residents of the county expressed a number of positive perceptions of the community. Although they were pleased to have a local hospital, lack of transportation and a lack of volunteers prevented them from getting to the hospital and interfered with their ability to seek specialized treatment outside the county.

Though seniors said shopping in the area was "limited," Pittsfield has two independent grocery stores and a Wal-Mart. Two pharmacies would deliver medicine for a \$3.00 fee, and one would mail residents their prescriptions. Seniors were very pleased with the Pike County Health Department and felt it provided many good programs. For the most part, seniors felt there were a number of dentists in the area. If, however, someone had Medicaid, they needed to drive to Jacksonville or elsewhere for services. According to one participant, two out-county dentists, one in Barry and one in Winchester, did accept Medicaid, but if you did not have Medicaid or dental insurance, it was prohibitively expensive to see a local dentist: "If you don't have Medicaid or some kind of insurance, he [the dentist] charges \$109 per tooth."

Families with young children have a much more difficult time seeing the advantages of living in Pike County. Though they acknowledged the availability of a variety of health and social services, they have experienced firsthand the shortage of health specialists and dentists—especially those who accept "the card" (this refers to the KidCare or All Kids state health insurance program). Even if local health providers accepted their health card, these families had difficulty paying upfront fees and medical co-pays. Rising costs were forcing them to choose between basic household expenses and health care. Rising gas prices will make obtaining services harder and more expensive, and they were of particular concern for this population that relies on medical and dental services from outside the county.

According to these respondents, it was only this last year that they were able to take their children to a dentist who would accept their state medical card. The dentist was quickly overwhelmed with low-income patients, and now families must wait months to get appointments. They were aware of another dentist that would accept medical cards, but based on their own negative experiences with that dentist, they would not take their children there.

Parents were aware of the reasons why local dentists (and doctors for that matter) would not accept new patients and their children with the state insurance card:

They don't want to mess with the paperwork, and they don't get paid. The state used to be 3 to 4 months behind (with reimbursements) now they are 6 to 9 months. People can't operate. I understand. They can't operate and live off of that.

The problem for parents is that their children need dental care and they cannot depend on it being available: "Our dentist that we use in Quincy, she is just booked, she is overbooked."

When dentists and doctors are overbooked, children have to wait and do not receive routine or preventative care.

Though parents of young children were more critical of Pike County than older residents, they did feel a connection to the area. They wanted to live here rather than somewhere else. They wanted local dentists, many of whom were long-time residents, to see the need to provide dental care to other long-time residents who happened to have low incomes or lacked insurance. Focus group respondents want and need affordable dental and health care, and they want healthcare providers who connect with and are tied to the local area and people. Low-income families feel disconnected and marginalized in the current health system. They feel they have to fight and struggle to find the health care their children need. Parents of young children saw a significant difference between the number and type of programs available to their children and those available to the elderly.

Middle-aged women report that once their children are grown, they are left with no safety net of health insurance or benefits. Women who no longer have children at home and who are too young for Social Security are bereft of any health and social programming geared to their needs. Consequently, the women in this category who participated in the focus groups said they have to work more than one job to have sufficient incomes to meet their basic needs.

Members of the third focus group brought a more nuanced perspective to understanding health care and health access in Pike County. Those who had moved to Pike County from elsewhere were keenly aware that they and their family had experienced a decrease in health care. They mentioned that they saw a "revolving door" of doctors in and out of the area. Clergy were aware that residents had to go outside the county for specialized testing and major surgery. They expressed particular concern for the large "senior populace" in Pike County. They were aware that local dentists were expensive and that children in Pike County had limited access to dental care.

What the focus groups indicate is that different populations have different access and experiences with local health and dental providers. The seniors who participated in the focus group were generally happy with the services that they participated in, but they were aware that many other seniors were going without. Younger residents of Pike County are frustrated and stressed trying to work, raise their children, and find the services they need. Though some participants in the focus group were receiving some social services, it was a struggle to get what they needed. The more frustrated they get with local service providers, the more they simply seek services outside the county.

Provider Interviews

Though some healthcare providers were reticent about participating in the telephone interviews, responses were eventually received from 47 people.⁴ These responses were broken down into three groups: (1) a "doctor group," which consists of doctors, dentists, nurse practitioners, and pharmacists (11); (2) an "other health care group," which consists of other healthcare professionals (i.e., eye care, chiropractors, health program administrators, and others) (14); and

(3) a social service providers group (22). Though the telephone interview schedule consisted of eight questions, only the findings from three of these questions will be discussed. The three to be discussed most directly related to what health and social service providers believe needs to be done to improve their practice or services, what resources they need to do this, and their perceptions of the most important health issues in the county.

The first question to be discussed is "How could your practice or programs be improved to better meet the needs of residents in Pike County?" Doctor group responses ranged from "nothing" to information sharing among health professionals, to having a complete list of people and agencies to make referrals to, to psychiatric services. When asked how could their practice be improved, it was clear that mental health services (including psychiatric services); parenting programs; and coordination and cooperation between medical, dental, and mental health providers in the county would help the doctor group better meet the needs of residents of Pike County.

The other healthcare group answered the question somewhat differently based on the type of services they offered. The "other healthcare group" is made up of healthcare service providers who are not doctors (MDs or DOs), nurse practitioners, dentists, or pharmacists. Eye care providers answered that they needed to have a doctor available more hours and more days of the week and better access to specialized care. Persons who administer specific health programs needed more funding to meet current needs and more money to expand their programs. The other healthcare group also mentioned that they needed to market their programs better. Not only did they feel that the formal healthcare sector did not understand what their services were, but that the public did not know what services were available. The two most salient issues that emerged among the other healthcare group were (1) better marketing and (2) increased public awareness of available services. The need for cooperation among health service providers also surfaced.

Social service providers identified five ways their programs could be improved to better meet the service needs of residents of Pike County: (1) more funding, (2) more volunteers, (3) transportation, (4) information about health care and other social service programs so that program workers would know where to refer clients, and (5) better coordination between service agencies. Demand for social services is rising, while funding for many programs is declining. A lack of volunteers is hampering what programs social service agencies are able to offer. Transportation is a major barrier to service provision and access.

The second question to be discussed is "What resources would help you better meet the health (or social service) needs of residents of Pike County?" Responses among the doctor group ranged from "don't know" to "make people play together." Making people play together would, in the words of the respondent, force more cooperation among healthcare providers which would lead to being better able to meet the health needs of residents of Pike County. The doctor group mentioned a need for more dentists who take public aid; cooperation among providers; and, to truly improve health, a need for psychiatric, dental, and medical care. One respondent said the resource that would help them the most would be an in-house social worker.

The resources identified by other healthcare providers were better coordination with other healthcare providers, more care (increased availability of doctor/specialists), increased funding, and increased public awareness of programs and access to programs. Social service providers mentioned funding, transportation, more volunteers, and collaboration among providers. Responses indicate that coordination of services and sharing information about programs among service providers could have positive impacts for residents of Pike County. It is also clear from responses that treating medical conditions without also treating dental needs and mental health issues will not resolve health problems. There are many existing social service programs that are trying to improve the quality of life of Pike County residents, but they do not know where to refer their clients, they do not have enough funding to meet local needs, and access is a problem. Health and social service providers need to increase public awareness of their programs and services. Table 4 includes a list of the responses to Questions 4 and 5.

Q5 – What resources might help you better meet	
the health (or social service) needs of residents	
of Pike County?	
Public assistance	
Another dentist that takes public aid	
If we had more time	
Make people play together; cooperation; goals to	
avoid duplication of services	
More specialists	
Nothing	
Better continuity of care: medical, dental, and	
mental	
None	
By incorporating psychiatric services	
A social worker (in-house)	
Joint education with other doctors and hospital;	
education programs geared to the public; better	
communication with other practices	
Available specialized services	
Having a doctor available more often	
Funding; bring health providers together	
Expand; have more doctors	
No answer	
More insurance coverage	

Table 4. Health and Social Service Provider Comments (Abbreviated Form)

Q4 – How could your practice or programs be	Q5 – What resources might help you better meet		
improved to better meet the needs of residents	the health (or social service) needs of residents		
in Pike County?	of Pike County?		
Better marketing	Better ways to market services to general public		
More funding	More funding		
Don't know	Improved transportation; dental care (who take)		
	Medicare and Medicaid		
More staff (psych)	Money		
More public awareness	More awareness		
More funding	More funding; cuts are coming (which will lead) to		
	less services		
Clients need work	Transportation		
More volunteers	More funding		
Money	Money		
Transportation	Transportation		
No answer	Free clinic; transportation		
More volunteers; other sites in the county	More volunteers		
Money	Computer with Internet		
Public awareness; offer different leaders	Literature; network of places to refer patients		
More advertising	Coordination with other programs; more volunteers		
Organizational development; volunteers; money	Money; more volunteers		
More money; better participation	More money; more volunteers		
Money; transportation to get to workshops	Money; transportation		
Can't get dental exams for families (lack of dentists	Dental care; collaboration among health providers		
that take Medicaid)			
More money to offer more programs	Money; wider range of programs		
More space; affordability; more public support	Money		
No answer	Referrals from other providers		
Don't know	Doing good		
More outreach	Money; better housing for clients		

The third question that needs to be examined is what doctors, other healthcare providers, and social service providers identified as the "three most important health issues in Pike County." Ninety-four responses were recorded. Some respondents did not answer the question, while others provided two to six responses. Some comments specifically reflected health issues that their practice or program dealt directly with and that could be addressed with screening programs and awareness campaigns—for example, breast exams/mammograms and rectal exams. The rest of the responses have been clustered into categories that are similar to the way the health indicators were organized in Table 2. Though some attempt was made to break the responses down by doctors, other healthcare providers, and social service providers, there was

so much overlap it made no sense to do that. The categories identified are Access, Specific Health Conditions, General Health, Special Populations, and Service Delivery.

Access had 26 responses. Respondents identified access issues, such as no insurance, the underinsured, and Medicaid, as one of the most important health issues in Pike County. They also said Pike County residents cannot afford health care and that the cost of health care and medicine are important health issues. Transportation was also frequently mentioned as an important health issue. Lack of transportation affects local access, and it impacts access to health services elsewhere. Respondents also specifically mentioned the lack of mental health, dental, surgical, and obstetrics and gynecology services as health issues in Pike County.

Specific Health Conditions also had 26 responses. Though cancer surfaced seven times as an important health issue, mental health when combined with drug and alcohol abuse/stress/ domestic violence surfaced eight times. Other specific health concerns included oral health, diabetes, cardiovascular disease, asthma, and brain injury. If specific health conditions and access issues are combined, mental health emerges as the most important health issue in Pike County.

The *General Health* category (15) includes lifestyle, nutrition, physical activity, and quality of life. Concerns were expressed about smoking and drinking, poor nutrition, lack of exercise and physical activity, obesity, and people who do not seek dental care. Though there appears to be a general awareness that cost and lack of insurance prevent people from seeing a dentist, there is also a belief that people simply choose not to go to the dentist.

Some respondents identified *Special Populations* as presenting particular health issues such as geriatrics, teen pregnancy, persons with disabilities, and children. It is not clear whether people responded this way because of the specific healthcare needs these populations require or whether these specific populations represent some risk for the county. As mentioned previously, teen pregnancy rates are used as an indicator of well-being. It is indicative of an at-risk behavior in a county. A growing elderly population does increase the demand for specific specializations and other services like transportation, so the identification of special populations can be linked to problems of access. The presence of special populations means there is a need for different specializes and different programming.

Service Delivery also arose as a health issue. Some providers simply said that Pike County residents receive inadequate care. The lack of healthcare providers across the board means residents do not get all of the care they need. They do not get enough preventative care, and they do not get enough follow-up care. When they have to go outside the county for specialized care, they may not be able to follow through with treatment due to problems finding transportation. Local healthcare providers do not appear to be working together, and it is not clear whether they work any better with healthcare providers elsewhere. County residents may not follow through with treatment if money and transportation are limited.

Problems of service delivery overlap with service coordination and access. Pike County residents need medical, dental, and mental health services, and in the absence of local services, they sew together a patchwork of care for themselves and their families—if they are persistent and can afford to do so. Local healthcare providers may be left out of this patchwork altogether. Pike County residents go without basic services if they lack insurance or cannot find providers who accept the health insurance that they have. Though most focus group participants felt they were able to get the healthcare services they need, they were concerned that other residents (e.g., the elderly, persons with disabilities, and other low-income families) were going without basic care. Some residents of Pike County are likely going without specialized care if they have to find the specialist themselves and if they lack transportation. There was some concern that local physicians were not making referrals, which left residents trying to find their own care or make their own arrangements. Table 5 summarizes what health and social service providers identified as the most important health issues in Pike County.

Q7 – What do you see as the three most important health issues in Pike County?				
Access – 26				
No dental insurance	Medicaid card	Residents can't afford health care		
Cost of health care	Transportation access	Geriatric/underinsured		
OB/GYN	Cost of medicine (care)	Access to mental health		
Transportation	Finances	Lack of information regarding treatment		
Lack of insurance	Lack of insurance	Lack of dental care		
No local surgical facilities	Family transportation to doctor	High cost of medical services and medicine		
Lack of money	Financial need	Transportation		
Elderly without insurance	Lack of local doctors and services	Getting to the health department		
Elderly without insurance	OB/GYN			
Specific Health Conditions – 2	6			
Cancer and smoking-related illness	Heart disease	Diabetes		
Cancer	Oral health	Mental health		
Cancer	Oral health	Mental health		
Substance abuse	Stress	Alcohol		
Diabetes	Cardiovascular disease	Cancer		
Cancer	Dental care for families	Diabetes		
Cancer	Brain injury	Cancer		
Asthma	Mental health	Domestic violence		
Drug/alcohol	Heart problems			

Q7 – What do you see as the three most important health issues in Pike County?		
General Health – 15		
People who let their teeth go	Procrastination	Smoking and drinking
Obesity	Obesity	Smoking
Lifestyle choices	Nutrition/physical	Smoking
Nutrition/exercise	Obesity	Obesity
Tobacco use	Nutrition/awareness (WIC)	Unhealthy lifestyles
Special Populations – 15	-	
Teen pregnancy	Child health	Teen pregnancy
Geriatric care	Teen behavior/psych	Geriatric care
Teen pregnancy	Geriatric care	Large elderly population
Teen pregnancy	Disability	Geriatric services
Needs of the elderly	Unwed mothers	Disabilities
Service Delivery – 5	-	
Inadequate care	Inadequate coordination of care	Preventative care
Lack of resources to expand care	Outpatient	
Issues Specific to Practice – 3	-	
Breast exams/mammograms	Rectal exams	Pap smears
Items Not Categorized – 4		
Pediatric therapeutics	Geriatric limitations	Car accidents
Recurrent illness		

Provider Network Profiles

From the information provided in the health assessment, healthcare services in Pike County are typical of small rural communities. Services are being provided by a small network of service agencies, social service organizations, and the county. The following section includes information on the hospital, emergency medical services, the Pike County Health Department, mental health services, and nursing homes in Pike County.

Illini Community Hospital

Pike County has a critical access hospital that provides the community with access to primary medical care and a variety of specialists. Illini Community Hospital is part of the Blessing Care Corporation of Quincy, Illinois (see www.blessinghospital.org). The hospital cares for individuals with Medicare, Medicaid, private pay, and commercial insurance, with over half of patient revenues coming from Medicare recipients. Each year, the amount of unpaid charges has continued to increase, which can put financial strain on the institution. It is not only a medical institution; it is also a major employer in the community, employing 183 residents of Pike County. This is an area to continue to monitor.

The community has general/family practitioners, a pediatrician, internal medicine, and general surgery physicians available. The hospital also reports the availability of specialists to the community in the areas of pediatrics, OB/GYN services, cardiology, oncology, orthopedics, gastroenterology, ophthalmology, urology, and pulmonology. As specialists visit the community, it is necessary to review referral patterns, utilization, and coordination with local providers. For example, in the case of obstetrics and gynecology services, Illini Community Hospital has a provider, but it does not offer OB delivery services. In this instance, referral patterns are important to examine for market share. It is highly likely that community residents will choose a pediatric provider where they deliver. Understanding and exploring how community members choose practitioners is important to the overall utilization of services.

According to the health assessment tools, providers are not anticipating retirement in the near future. This is crucial for rural communities as it is becoming more difficult to recruit new providers. Pike County does have an advantage due to the proximity to two major cities as well as the great hunting available in the county.

Quincy Medical Group

The Quincy Medical Group based in Quincy, Illinois, provides primary care to many rural communities in west-central Illinois. Quincy Medical Group provides a variety of health services and medical specialties to residents of Pike County through offices in Barry, Pleasant Hill, and Pittsfield (two locations). Specialty medical services include family practice, internal medicine, pediatrics, gastroenterology, general surgery, hematology/oncology, and orthopedic surgery. Through their Pike County Family Practice office in Pittsfield, they offer digital mammography and X-ray services. Quincy Medical Group also provides lab services for their Pike County patients.

The mission of the Quincy Medical Group is "to serve patients through quality health services provided by people who care" (see www.quincymedgroup.com). The core values of the Quincy Medical Group include a customer focus, a people orientation, a group practice philosophy, protection of the physician-patient relationship, and health promotion through improving health status and maintaining financial stability. More information about their history, mission and core values, doctors, and services can be found at their website. Quincy Medical Group has a long history of providing medical services in Pike County and has a significant patient base.

Pike County Ambulance Service

Emergency medical services (EMS) are provided through the Pike County Board by the Pike County Ambulance Service. They have paid paramedics and EMT staff on duty to provide care 24 hours a day/seven days a week. This is accomplished through the use of two advance life support units staffed with paramedics and EMTs as well as three basic life support units staffed with EMTs and First Responders. They are financially supported by service fees and a public safety sales tax. EMS is a vital component for healthcare services, but it is also a cost center that struggles with volume in rural areas. EMS referral patterns and protocols are important to examine to ensure the use of services locally.

EMS in Pike County uses Illini Community Hospital for most calls. Depending on the level of trauma, Blessing Hospital in Quincy, Illinois, is also used. The closest trauma center is located in Springfield, Illinois. Patients are usually taken to the local hospital first for stabilization and transferred if necessary. Pike County Ambulance Service responds as needed in the community. The majority of their service calls are related to elderly illnesses and in conjunction with care provided at the three nursing homes in the community.

EMS in rural areas continues to struggle with maintaining adequate staff and volunteers. Due to state mandates, it has become more difficult to maintain licensure for paramedics and EMTs. This includes the high amount of continuing education hours required for volunteer staff. It is also becoming more difficult to recruit and maintain the amount of paid paramedics. Paramedics are hard to find, leaving facilities understaffed. For Pike County, the grow-your-own method can assist with future paramedics. As the community educates children on health careers, they should include paramedics and EMTs.

Pike County Health Department

The Pike County Health Department offers a variety of public health and health education services as well as other vital environmental health services. The health department also has a Medicare Certified Home Health Agency which provides homemakers; certified home health aides; registered nurses; physical, speech, and occupational therapists; and registered dieticians for area residents.

Public health and health education services offered by the Pike County Health Department include maintaining vital records; administering maternal and child health programs; conducting health promotion programs; and reporting, testing, and immunizing against communicable diseases. Maternal and child health programs include the following:

- Family case management
- Lead screening
- Breastfeeding support
- WIC (federal Women, Infant, & Children Program)
- Safe Kids Chapter/Western Illinois Chapter FS4JK
- Family planning
- Teen parenting services
- Vision/hearing screenings
- All Kids application agent

Health promotion and education is a vital component of the Pike County Health Department, and it participates in the following health promotion programs:

- Cholesterol/diabetes screening
- Blood pressure clinics
- Monthly diabetic support group/newsletter
- Diabetes self-management and nutrition education
- Health and wellness prevention programs
- Tobacco prevention/cessation programs
- Bone density screening

The Pike County Health Department also provides environmental health services with food inspection and sanitation services, tanning inspections, well and sewage inspections, and nuisance control. It works closely with various entities in the community to provide health programming.

Mental Health Center of Western Illinois

Mental Health Center of Western Illinois (MHCWI) has offices in Brown, Hancock, and Pike Counties. Pike County services include outpatient programs, case management, and substance abuse programs. The outpatient programs include counseling, crisis intervention, and psychiatric services. The substance abuse program includes counseling and prevention education.

Even though services exist, there are identifiable gaps in mental health services in the county. For many rural areas, mental health services have a higher volume of patients than they have the capacity and staff to appropriately serve. Some of the services listed by the MHCWI are not available to Pike County residents. The eligibility requirements for various services are available on the MHCWI website at www.mhcwi.org.

Nursing Home Services

Pike County is serviced by three nursing homes located throughout the county. Areas of concern for these facilities include transportation to and from medical appointments, health providers willing to see patients in the various facilities, and lack of education among the public on how they will pay for long-term care. For all three facilities, transportation was identified as an area that needed improvement to better meet the needs of residents.

In general, nursing homes have been struggling financially over the past decade due to underfunding. Those nursing facilities with Medicaid beds are seeing decreased reimbursements and are waiting months for small payments. Maintaining quality nursing homes keeps elderly residents in the community as well as provides a necessary service for area residents and family members.

Recommendations and Priorities for Pike County

Pike County is at a critical juncture due in part to changing demographics. The loss of children, young families, and the elderly who tend to support the local economy through local purchases and participation in local programming, such as churches and schools, is a problem. It is hard to make the case for additional health services, particularly obstetrics and gynecology, pediatrics, or geriatrics, if Pike County is losing these populations. Other demographic and social changes such as a shift from married couples with children to single-parent households and older adults living alone increase the need for various health and social services. Poverty rates in Pike County are high and are likely to grow as economic conditions throughout the state change. Health care and social services do exist in the county, but they are already having a difficult time meeting the existing demand.

Young families and the elderly have different service needs. An aging population requires more access to health care and different specialties than do young families. This means that rural hospitals need to provide a broad range of specialties to meet these needs. Pike County faces a growing population of adults between the ages of 45 and 65 whose children are grown and who are too young to collect Social Security. This population is having a difficult time affording necessary healthcare services. Declining earning power, inflation, fixed incomes, and rising costs will impact whether Pike County residents spend money on health care and medicine at all. A recent article in the *New York Times* illustrates that individuals facing financial stress are cutting back on their medications and/or trying to stretch their current prescriptions to last longer—30 days of pills to 35 or 40 days, for example (Saul 2008). A variety of poor health outcomes are the likely result of this practice. The Associated Press (2008) reports more people are delaying getting care, the number of prescriptions being filled has dropped, and hospitals are reporting an increase in emergency room visits.

The State of Illinois is at a critical juncture as well. Though the Governor has specifically proposed healthcare programming aimed at providing children and families with insurance, this does not guarantee that children or adults get the services they need. When Pike County dentists and doctors do not accept low-income, uninsured, or children with the All Kids insurance card, then children go without services or their parents take them to another county for care. The State of Illinois is slow to reimburse dentists and doctors for the services they provide, so continuing to provide services is difficult. Funding for existing social programs is being cut, and new funding will be increasingly scarce. Competition for existing funds will increase as the pool shrinks.

Based on the information gathered in the health assessment of Pike County, five health needs have been identified. All of them are consistent with previously identified health and service needs from other IPLAN assessments of the county. They are also consistent with *Healthy People 2010* rural health priorities (see Gamm, Hutchinson, Dabney, and Dorsey 2003). Specifically, Pike County needs to focus on issues of access, mental health, oral health, and the development and funding of local educational and community-based programs. The formation and continued efforts of the Pike County Community Health Partnership will be essential to moving these five priorities forward:

- 1. *Coordination of Services*. Pike County, through the IPLAN process, the development of the Illini Community Health Care Foundation, and the PCCHP, has made tremendous strides to bring healthcare providers to the table; however, ongoing coordination is necessary. There needs to be more coordination and communication between healthcare providers. There also needs to be more coordination and communication between local healthcare providers, their clients, and health service providers outside the county. Local health and social service providers and Pike County residents need to know what programs and services are available and what populations are served.
- 2. *Transportation*. Better coordination of services, more healthcare services, and more social service programming are for naught if people cannot get to these services. A fundamental barrier to access is a lack of adequate and appropriate transportation.
- 3. *Mental Health/Psychiatric Services.* Though some counseling services are available in the county, there is a severe lack of mental health services in Pike County.
- 4. *Dental Care/Oral Health.* Low-income families, children, the uninsured, and the underinsured elderly are going without preventative and other dental care due to a lack of dentists willing to accept Medicaid and/or new clients.
- 5. *Food, Housing, and Preventative Health Programs.* It is impossible to address poverty and raise the standard of living through health programming alone, but it is possible to expand food and housing programs. The Pike County Health Department has a positive reputation for providing good and necessary preventative health programs. These programs, along with food and housing, could improve the quality of life for many Pike County residents.

Rationale

Coordination of Services

Pike County has gone to great lengths to identify existing health programs and social services, but people remain uncertain or do not know what programs are available or the populations that are served by existing programs. According to the provider interviews, social service providers do not know where to refer their clients for needed health or other social services. During these uncertain economic times, it will be necessary for social service providers to work together. Declining state funding will increase competition for grant funds, which could result in pitting one social service agency against another. Coordination and agreement around common goals could alleviate these tensions. Grant funds are often limited to certain uses and populations. Social service organizations need to work together so that families with children do not feel like they are competing for services with programs for the elderly. Cooperative programming such as intergenerational day care or reading programs could help alleviate the competition that can exist between younger residents and older residents. The focus groups revealed some resentment between these two groups. The provider interviews make clear that social service agencies need more money, more volunteers, and their clients need transportation. More coordination and pooling of resources are needed to maximize positive outcomes. Social service providers need to know what medical, mental, and dental services are available so they can refer their clients. Health service providers need to know what social services are available in the county as well.

Local health service providers need to coordinate their service efforts. If health providers know that Pike County residents need mental, dental, and medical treatment, they need to work together and with other community members to make this a reality. It is clear from their comments in the telephone interviews that they need to come together to establish goals that will enhance health provision and improve the overall health of Pike County residents. Local healthcare providers need "to play nice." There needs to be better coordination to improve service delivery and follow-up care. In the absence of coordination of care and follow-up services, Pike County residents are not getting the comprehensive care they need and are likely not filling prescriptions and getting specialized care.

Pike County healthcare providers need to connect with other doctors and health facilities in the region so that local residents get the comprehensive care they need. Local resources are not sufficient to meet local needs, so residents of Pike County would benefit from better coordination between local and out-county providers. Focus group participants complained that they could not get information or referrals from local doctors to address their medical needs. Since some residents are automatically seeking health providers outside the county, Pike County is hemorrhaging healthcare dollars. The focus groups show that parents are taking their children and their healthcare business to other counties, practices, and hospitals.

Part of the coordination effort has to be better marketing of local health and social service programs. The Pike County Health Department has a very positive reputation because of the many programs they have provided. Pike County residents value these programs but are dismayed that some programs that they had used and liked were discontinued. This reflects the provisional nature of some healthcare initiatives and programs and was a source of frustration to health department program providers. Illini Community Hospital received much more mixed reviews from county residents. Continued coordination of services and better marketing of existing programs are critical to improving care and health access for Pike County residents. The hospital in particular could benefit from better marketing of its programs.

Transportation

Previous health assessments have amply demonstrated that lack of transportation is a barrier to accessing health care. The need for transportation is only going to grow as 45 to 65 year olds age. If gas prices continue to rise, low-income households are going to have a more difficult time accessing care. Rising gas prices will be a problem for social service agencies as well. In addition, a lack of local volunteers is a problem for agencies that currently provide transportation.

According to the Rural Transit Assistance Center (RTAC) at Western Illinois University, Pike County is one of 24 counties in downstate Illinois without countywide funded public transportation (Heflin 2008; RTAC 2007). Pike County not only needs an in-county transportation system so that people can get the health care they need, but they also need transportation services outside the county as well. Health and social service providers and focus group participants see the lack of transportation as a barrier to accessing health care. Expanding local health or social service programming will not improve health or quality of life if Pike County residents cannot get to the program site or if services cannot be delivered to them. The concentration of services and programs in Pittsfield creates disparities in healthcare provision in the county.

Mental Health and Psychiatric Services

According to the 2004-2006 Pike County Behavior Risk Factor Survey (BRFS) data, 18.3 percent of the population report their mental health was not good for one to seven days in the last 30 days, 13.4 percent report their mental health was not good for eight to 30 days. The persons most likely to report that their mental health was not good were respondents between the ages of 25 and 44 and 45 and 64 and persons who were employed. Those who reported one to seven days tended to be male, had incomes of \$35,000 to \$50,000, or were married. Persons reporting longer periods of depression or stress were more likely to be female, between the ages of 25 and 44, and/or with incomes of less than \$15,000. Longer periods of stress or depression were reported by people who were divorced or separated. Though the amount of reported depression among those with higher incomes is surprising, the other characteristics are not. The younger women in the focus groups reported feeling stressed and frustrated by the competing demands and pressures in their lives.

The health provider interviews illustrated a need for more mental health services in Pike County. Rural physicians often lack the resources and expertise to treat mental health problems. Statewide groups like the Illinois Rural Health Association (IRHA) and the IDPH–Center for Rural Health have documented the lack of rural mental health providers in the state. IRHA has identified a number of reasons why rural mental health services are insufficient such as lack of psychiatrists (particularly child/adolescent) and substance abuse counselors and workers, long waiting lists to receive care, shortage of treatment facilities, and others (Illinois Rural Health Association [IRHA] 2005). Pike County, like many rural counties, is ill equipped to meet the mental health needs of its population. Without mental health services and dental care, it is difficult for physicians in Pike County to meet their clients' health needs. Recurrent illnesses did surface as a health concern in the county.

Dental Care/Oral Health

Lack of affordable dental care is a problem in Pike County, and children and their families are suffering because of it. Pike County needs to attract another dentist or dentists that accept Medicaid. Pike County needs additional dentists who can accept new clients. The linkages between good oral health and physical health are well documented, and it is apparent that physicians and other healthcare providers understand these links. The public, however, may not be making this connection. Though it seemed clear in the focus groups that seniors sought the medical care they needed, they seemed to indicate that dental care was optional. The high cost of dental care (or the absence of dental insurance) made people think twice about whether to see a dentist. When the cost of having a tooth pulled came up, various members of the focus group offered folk and personal solutions for removing a tooth. Dentists also indicated that people waited too long to come see them to get proper dental care.

Poor oral health and lack of preventative care for children sets them up for a lifetime of problems. Though the State of Illinois has mandated that children get dental exams, there is no one in Pike County who will provide these exams. Lack of dental care for children should be an area of concern in the county because it will impact their health over a lifetime.

Food, Housing, and Preventative Health Programming

Though previous health assessments have identified ameliorating poverty and increasing health access as goals, poverty remains entrenched in Pike County. Census data and the Heartland Alliance (2008) report document that significant numbers of Pike County residents live in poverty. Persons with lower incomes consistently have more health problems than persons with higher incomes. Persons with lower incomes tend to engage in more at-risk behaviors. The Heartland Alliance report documents that poverty in Pike County increased between 2000 and 2005.

It is impossible to eliminate poverty through health programming alone, but the county already has in place a number of social service programs that provide food and improve housing. The health department also provides a number of preventative health programs to low-income families and individuals, but their funds are limited. This programming needs to be maintained and expanded.

Low-income households, children, and the elderly need access to healthy and ample food and safe and decent housing. Increased access to nutritious food and the provision of housing assistance could stabilize low-income and at-risk families and have a positive impact on children's, teenagers', and families' health. Food and housing instability leads to stress and other health problems, so meeting these needs should have positive outcomes. Basic needs must be met before people can begin to meet other higher order needs. Though past assessments have emphasized a desire to reduce obesity and increase physical activity, access to safe and affordable food and housing have to be priorities to address poverty. It makes sense to continue to have health fairs and education programs to reduce obesity, prevent or treat diabetes and other health conditions, and get people to be more active, but these are often symptoms of poverty and not the root cause.

Improving housing requires addressing health and safety issues, and this should include weatherization and help with utility costs. Food, housing, and other assistance to poor families

and individuals need to be geared to meeting basic needs and stabilizing the population. Programs like WIC are very important to low-income women and children. The health department needs to continue immunizations and programs that promote healthy lifestyles. Parenting classes and improved mental and dental health programming could improve the quality of life of low-income rural residents.

Other economic and community development efforts should include reducing poverty and improving health care in Pike County, and the PCCHP should be a partner in these efforts. Promoting and enhancing food, housing, and preventative health programs needs to be part of a comprehensive strategy to improve the quality of life in Pike County.

Other Considerations and Conclusions

There are two additional items that surfaced during the current health assessment process that need to be included even though they fall outside the existing scope of work for the PCCHP and Illini Community Health Care Foundation. One issue is an environmental concern that has real consequences for quality of life for residents of Pike County, and the other reflects the political and economic conditions in the State of Illinois.

Air and Water Quality and Emergency Preparedness

Pike County residents have specific concerns about air and water quality. Without clean air and water, the overall quality of life in Pike County will deteriorate. The environmental profile compiled as part of the health assessment shows that many Pike County communities are not prepared for a cataclysmic event such as a chemical spill or natural disaster. The environmental profile indicates many Pike County communities are not prepared for a chemical spill, and only two are reported to have a plan in place in the event of a natural catastrophe. This lack of emergency planning or training is a concern in part because of the presence of large hog and cattle confinement operations in the county. The presence of confinement operations already has the potential to affect air quality and pollute groundwater, which were concerns that surfaced in the focus groups. Though well-managed farms and confinement operations should pose less threat to the environment, it is not clear what plans are in place if a natural (or manmade) disaster would occur.

Hog and cattle confinements pose another concern as well. Local residents report poor air quality as a result of the confinement operations in the county. A series of articles and research documents confirm the impact hog confinements have on air quality (Schrum 2005a; Schrum 2005b; Thorne 2007) and on workers (VonEssen 2004). These studies also document respiratory illnesses and other health problems associated with these farm industries. The focus groups show that residents are very concerned about the effect these operations will have on the groundwater and wells. One woman mentioned she already fought to prevent a hog farm from being built in her community. Focus group participants believed that more hog farms were being built in the county. A new hog confinement operation opened during the health assessment data collection process.

Though economic development and local jobs are vital to the county, the impact of more hog and cattle confinement operations on air and water quality and overall quality of life has to be considered. Another question that needs to be addressed is whether these operations are being sited near low-income households and vulnerable populations like children and the elderly. Respiratory illness has surfaced in previous IPLAN processes as a health concern in the county.

Another issue the PCCHP or health department needs to investigate is the irregular enforcement of burning bans. Burning bans are reported to be in place, but focus group participants complained specifically about burning in Pittsfield. According to the 2005 Pike County BRFS, the asthma rate in Pike County is 13.1 percent and the state rate is 12.8 percent. Though the rates are similar between Pike County and the state, 13.1 percent of the people in a small county are a significant number of people who suffer from asthma. The BRFS also shows that 17.4 percent of households with children between 5 and 17 years of age have asthma. Air quality and overall environmental quality have got to be included in achieving a vision where "all enjoy the highest degree of health, wellness and quality of life possible" (PCCHP pamphlet). If asthma and other respiratory illnesses are growing as a result of industrial farms and burning, then something must be done to address this health issue. Without clean air and water, the quality of life in Pike County will be greatly reduced and it will be difficult to attract or retain population.

Advocacy

Another priority for PCCHP or the Illini Community Health Care Foundation needs to be advocacy. Rural health departments, health clinics, and critical access hospitals have to be advocates for the populations they serve at the state and federal level. Rural healthcare providers need to regularly contact their congressmen and women about healthcare needs in rural Illinois. There are no quick and easy answers to fixing what is wrong in the existing healthcare system, but Pike County has an active network of individuals and agencies working together to address the healthcare needs in the county. Pike County has already identified a web of programs and resources in the county; now it needs to make sure it can continue to support and fund these programs and expand them as needed.

This can only be done if these needs and requests for funds are regularly placed before state and federal legislators. Pike County health care and social service providers also need to be active in state and federal health and other associations such as IRHA and the National Rural Health Association. Organizations such as these provide both educational and networking opportunities to rural health practitioners. They also increase the visibility of the healthcare needs in rural places and among rural people. The importance of advocacy and lobbying for more health care in rural places is vital to improving health in rural counties.

Pike County has taken seriously the mandate to identify health problems and adopt programming to address and reduce these problems. The formation of the Illini Community Health Care Foundation and the PCCHP can continue to facilitate better health programming

and practices in the county. This community health assessment does illustrate that Pike County is facing some significant demographic, social, and economic trends that increase existing demands and create new demands on the health and social service delivery system. Declining economic conditions in the state and the problems facing the state government do impact the health delivery system. Pike County, like many rural counties, needs to make do with even less as health and social service demands continue to increase. The good news is that Pike County has in place an organized group of health and social service providers committed to addressing health issues.

A couple of concluding comments about this assessment process need to be mentioned. This assessment does not include the perspectives of persons living outside of Pittsfield. Though an attempt was made to meet with groups with memberships beyond Pittsfield, only a few focus group participants lived in other communities in the county. This actually highlights access issues. If people in Pittsfield report problems getting to and from doctor appointments, persons in out-county areas are likely to have more problems due to rising costs of gas and transportation issues. Future communitywide health assessments need to include Pike County residents that live outside Pittsfield.

As the PCCHP moves ahead with their comprehensive planning process, they need to look at the spatial distribution of population and services around the county. And as the provider network profiles indicate, they need to understand and explore how community members choose practitioners and where they are seeking and utilizing services. Data indicate that Illini Community Hospital is facing financial strain due to unpaid charges, and the assessment indicates that they may be losing patients to other hospitals. Changing population dynamics impact EMS and nursing homes, and at the same time financial constraints at the state level and mandatory training requirements increase pressure on local resources. The hospital and Pike County Ambulance Service need to work together on referral patterns and protocols so that the hospital is used when appropriate. Understanding patterns of services are important to understanding service delivery and how local resources could be utilized more effectively and profitably.

The Pike County Health Department offers a variety of public health and health education services to county residents. These programs are vital to increasing health and wellness in Pike County. They need to continue to market and promote their programs. Social service programs also need to increase awareness of their programs. More public awareness and coordination of services are critical to maintaining the quality of life in Pike County.

Endnotes

- ¹ Founded in 2003, the Illinois Community Health Care Foundation is an independent notfor-profit 501(c)3 foundation solely dedicated to serving Pike County, Illinois, through grantmaking and fund development toward promoting and assisting organizations that positively impact the physical, mental, and emotional health of those seeking services in Pike County. The Illinois Community Health Care Foundation encourages initiatives that *improve lives through better health care* by supporting organizations engaged in disease prevention, treatment, and patient education; *enrich lives through healthier communities* by supporting organizations working toward providing health and human services to those populations in need; and *empower lives through better health education* by improving access to comprehensive and accurate health educational resources and learning opportunities (see their website: www. ichcf.org).
- ² The PCCHP Steering Committee specifically asked for information regarding dental care and oral health access.
- ³ Not all of these were in response to persistent phone calling. After two weeks of calling, participation from healthcare providers was remarkably sparse. Copies of the telephone interview questions were photocopied and delivered to underrepresented groups such as doctors and pharmacists, and nine additional surveys (from seven additional practices) were received via fax. The 71.0 percent response rate is based on the number of practices and agencies contacted from which at least one person answered the questions.
- ⁴ The original list of healthcare providers from PCCHP consisted of 47 individual physicians, nurse practitioners, chiropractors, dentists, eye care providers, the health department, the rural health clinic, and other providers of health services such as pharmacists. Twenty-five out of 47 people on the health provider list participated either over the phone or faxed their answers for a response rate of 53.0 percent. Twenty-two out of 33 social service providers responded to the telephone interviews, which resulted in a 59.0 percent response rate among that group. The overall response rate of individuals (rather than by practice or agency) was 58.0 percent.

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Appendix A

Pike County Health Assessment Health and Social Service Provider Interviews Service Provider Questions

Introduction: My name is ______ with the Illinois Institute for Rural Affairs at Western Illinois University. We have been asked by the Pike County Community Health Partnership to collect information from health and social service providers for a health assessment of Pike County. The information you provide will help Pike County develop a health services plan to identify and prioritize health needs in the area. Your participation in this interview is entirely voluntary. Any information you provide will be kept anonymous and confidential. The Illinois Institute for Rural Affairs will provide a final report to the Pike County Community Health Partnership of the information collected, but no identifying information will be used.

If you have any questions about the project, please call Cynthia Struthers at (309) 298-2282 or (800) 526-9943.

Do you have a few minutes now that I could ask you a few questions? Is there a time I could call back that would be more convenient? Call again at _____.

Agency:

Title or position:

- 1. Could you briefly describe your practice, program, or service?
- 2. How many days per week do you work in Pike County?
 - a. How many hours per day do you work in Pike County (or what are your hours of operation?)
- 3. How successful do you feel your practice or program is at meeting the health (or social service) needs of residents of Pike County?
- 4. How could your practice or programs be improved to better meet the needs of residents in Pike County?

- 5. What resources would help you better meet the health (or social service) needs of residents of Pike County?
- 6. What health and social service programming do residents of Pike County need?
 - a. Are there populations you feel are underserved in Pike County? Who are they?
 - b. What prevents Pike County residents from getting the health and social services they need?
- 7. What do you see as the three most important health issues in Pike County?
- 8. Are there any other comments you would like to make regarding health care and social services in Pike County?

Appendix B Pike County Health Assessment Focus Group Questions

Cynthia B. Struthers, PhD, and Ruth Burgess-Thompson, MA, Facilitators Illinois Institute for Rural Affairs, Western Illinois University August and September 2008

- 1. What are the advantages for you (and your family) of living in Pike County?
- 2. What are the disadvantages for you (and your family) of living in Pike County?
- 3. What health or social services are available to residents of Pike County?
- 4. Are there health or environmental concerns in the area that worry you?
- 5. What programs or services would enhance good health and well-being in Pike County for families with children? Families with aging relatives? Area youth?