



STATUS CHECK IV

# Pennsylvania Rural Health Care

August 2005

Prepared by

**[Pennsylvania Rural Health Association](#)**

P.O. Box 1632

Harrisburg, PA 17105-1632

(717) 561-5248

*Website Version*



## Introduction

There are more people living in rural areas in Pennsylvania than in many other states in the nation. Twenty-three percent of the state's population live in areas that are designated as rural and, except for Philadelphia, every county in Pennsylvania has areas classified as rural, and four counties are 100 percent rural. Forty-eight of Pennsylvania's 67 counties are considered rural based on population density. These distinctions bring with them some significant challenges we must first recognize and acknowledge before they can be addressed. These challenges must be addressed through visionary leadership and collaboration.

The following issue briefs characterize some of these unique challenges across the health care continuum in the delivery of quality health services in rural areas of the Commonwealth. While some of the issues are larger than others, all are significant. All impact the health and well-being of a significant portion of Pennsylvania's population, as well as the future of vulnerable local economies.

Like the issues this status report presented in 1997, 1999, and 2003, the information presented here is not intended to paint a bleak picture of rural Pennsylvania. Instead, this document is intended to raise awareness and begin dialogue among those who can make a difference in the availability of quality health care in rural areas of Pennsylvania through policy, regulation, legislation, activism, or involvement.

The economic, cultural, social, geographic, and demographic characteristics of rural communities are sufficiently different from those of urban and suburban communities to require special consideration in both state planning and legislation. Rural areas, by definition, must contend with sparse populations and geographic barriers and, by circumstance, must also contend with significant health professional shortages to address populations who are generally older, sicker, and poorer. Because of these factors, rural providers and rural health care delivery systems have less ability to reduce fixed and variable costs and absorb or spread losses. They also have a greater reliance on—and thus, vulnerability to—government programs such as Medicare and Medicaid.

Many positive things are happening despite the challenges, but much more needs to occur to ensure access to quality health services for all rural Pennsylvanians. “Rural” should not mean “less” in terms of access to quality health care services across the continuum.

“Rural” should not mean “less” in terms of access to quality health care services across the continuum.



# An Overview of Rural Pennsylvania

*Note: There are many different definitions of the term “rural” used at the federal and state levels. For the purposes of this report, the definition of “rural” that is used is the definition established by the Center for Rural Pennsylvania, which defines any county as “rural” if the county has a population density of less than the statewide density of 274 persons per square land mile. Any county that has a population density of 274 persons or more per square land mile is considered to be urban. All data, regardless of their origin, have been analyzed using this definition.*

Rural Pennsylvania is large and its characteristics are quite diverse. According to the U.S. Census Bureau, Pennsylvania has one of the nation’s largest rural populations. In 2000, it was estimated that the Commonwealth had more than 2.8 million rural residents. Except for Philadelphia, every county in Pennsylvania has areas classified as rural, and four counties are 100 percent rural. Forty-eight of Pennsylvania’s 67 counties are considered to be rural based on population density.

Generally speaking, rural Pennsylvania is homogenous. Non-whites make up four percent of the state’s rural and small-town population. According to the U.S. Census Bureau, nearly a quarter of the state’s rural population is under 18 years old, and the percentage of senior citizens age 65 and older in rural areas is about 16 percent of the population.

Changes in the rural population can be seen more clearly if the population is grouped together by generational cohort. Baby boomers (anyone born between 1945–65) make up close to 30 percent of the rural population. This generation is the economic dynamo of most communities. People in this age bracket are primarily the ones buying the houses and having children. They are also the state’s largest taxpaying group. Between 1990 and 2000, there was a five percent increase in the number of rural boomers.


In rural Pennsylvania, about one-third of households can be classified as “middle class” (\$35,000–\$74,999). Census Bureau data show that half of all rural households had incomes of less than \$35,000 in 1999. In urban counties, 41 percent fell into this income range. The average household income in rural Pennsylvania was \$44,007, while in urban counties the average was \$56,147. The federal Bureau of Economic Analysis data show that the rural per capita income was \$23,977 in 2002; in urban areas, it was \$33,980. This income gap between urban

Rural areas have fewer financial resources to address critical educational and infrastructure needs.

Rural and small towns in Pennsylvania have poverty rates above that of Philadelphia’s 23 percent poverty rate.

Although employment is up in rural areas, wages and salaries have risen very little.

If you work in rural Pennsylvania, chances are that your company employs fewer than 10 workers.



and rural areas grew during the 1990s. Lower income means that rural areas have fewer financial resources to address critical educational and infrastructure needs.

Poverty is also more prevalent in rural areas. According to the Census Bureau, nearly 12 percent of Pennsylvania's rural population had incomes below the poverty level in 1999. In urban areas, 11 percent fell below this threshold. At the municipal level, 32 rural and small towns in Pennsylvania have poverty rates above that of Philadelphia's 23 percent poverty rate.


Although employment is up in rural areas, wages and salaries have risen very little. Between 1998 and 2002, the number of jobs in the state's rural counties rose nearly three percent, faster than the state rate of about two percent. In terms of workforce size, health care and social services are the largest employers after the manufacturing sector.

If you work in rural Pennsylvania, chances are that your company employs fewer than 10 workers. Analysis of County Business Patterns for Pennsylvania shows that about three-fourths of the establishments in rural counties employ fewer than 10 workers and more than half employ fewer than five. Only 13 percent of rural establishments employ 20 or more workers. In many rural counties, the largest employers tend to be either hospitals or schools.

In Pennsylvania's rural counties, almost a half million adults do not have a high school diploma or equivalent. This represents nearly 20 percent of the 2.4 million rural residents who are 25 years old or older. Likewise, just 15 percent of rural residents have a four-year college degree or higher. In urban areas, the figure is 25 percent. Moreover, with a more comprehensive network of community colleges and universities, more than 22 percent of urban adults have an associate's degree or some type of college experience. In rural areas, just 19 percent do.

Pennsylvania has the sixth largest population in the nation, but it ranks toward the bottom in the percent of its college-age population enrolled in higher education. Although rural post-secondary participation rates have been on the rise, they still lag behind the state average. To attract new businesses while retaining existing industry, rural Pennsylvania needs a well-educated workforce.

Access to medical care is limited in many rural areas. In 1999, rural Pennsylvania had roughly one physician for every 619 residents, as compared to one for every 260 residents in urban areas of the Commonwealth. According to the most recent data, there are nearly 16,838 primary care physicians in Pennsylvania. Less than 12 percent of these physicians practice in rural areas.



Analysis of behavioral survey data suggests that rural residents are less healthy than their urban counterparts. According to the Behavioral Risk Factor Surveillance System (BRFSS) surveys, fewer rural residents regularly exercise, a third are overweight, and nearly 60 percent are at risk for having a sedentary lifestyle. In general, the results show that rural adults are in poor physical condition and have more health risks than urban adults.

Traditional market forces have not been very effective in making health care both available and affordable to rural residents. According to BRFSS data, an estimated 12 percent of rural residents lack medical insurance, as compared to less than nine percent of urban respondents. The number of HMO enrollees has increased dramatically, especially in rural areas. In 2003, more than 1.1 million rural residents were enrolled in an HMO, or more than one-third of the total population. In 1994, this figure was less than 300,000.

But, despite these challenges, rural Pennsylvania remains a beautiful and varied landscape, populated by residents committed to small town life. Rural residents stay because where they live is considered to be home. It is incumbent upon rural champions to advocate for their way of life.

In Pennsylvania's rural counties, almost a half million adults do not have a high school diploma or equivalent.

To attract new businesses while retaining existing industry, rural Pennsylvania needs a well-educated work force.

Access to medical care is limited in many rural areas.

Rural adults are in poor physical condition and have more health risks than urban adults.



# The Role of Health Care in Economic Development

Most rural development and health care experts agree with the hypothesis that a rural area needs a quality health care sector if it is to expand and prosper. Businesses need a dependable, productive labor force, a labor force that is healthy and has access to readily available health care services. A quality health care sector also can be very important in helping communities attract and retain job-creating businesses. Employees and management may offer strong resistance to relocate if they are asked to move into a community with substandard services.


Data show the importance of the health care industry to rural areas. The hospital is one of the largest employers in a rural community. Each health care dollar generally “rolls over” about 1.5 times in a rural community. Every five jobs in health care generates four jobs in the local economy. In general, because rural health care is usually provided at a lower cost, health care dollars spent in rural communities will go further.

Health care is big business. In 2003, Pennsylvania’s rural health care industry employed more than 150,000 workers, or nearly 13 percent of the rural workforce. Hospitals and medical centers are among the top three employers in more than 60 percent of the state’s 48 rural counties. In 2003, rural hospitals received nearly \$4.2 billion in net patient revenues, or nearly \$11.5 million per day. That year, the average rural county generated more than \$87 million from health care. Unfortunately, more than 50 percent of these health care dollars leave rural areas to be spent in metropolitan markets.

Pennsylvania’s rural residents often head for the city for their health care because there aren’t enough services locally, their health insurance penalizes them unless certain physicians or hospitals are used, the individual believes that bigger is better, or the person needs the specialized services provided by sub-specialists at tertiary care institutions. This exodus of health care dollars means that there is less money to reinvest in local, rural health care systems. For example, if 70 percent of health care expenditures were made locally, total dollars generated in the community would be \$108,604,125. Once reinvested in the community, total expenditures resulting from local health purchases could be as much as \$163,000,000.

Hospitals and medical centers are among the top three employers in more than 60 percent of the state’s 48 rural counties.

Therefore, it is incumbent on rural providers and rural communities to work together to build local economies that support and are supported by local health care.



The sustainability of rural hospitals and rural health care is threatened for many reasons, including new and expensive technology, limited opportunities for economies of scale, limited numbers of local primary care physicians, discriminatory payment schedules, the ever-increasing costs of regulatory compliance and accreditation, and the increasing costs of a highly educated workforce.

Therefore, it is incumbent on rural providers and rural communities to work together to build local economies that support and are supported by local health care. Closure of a local hospital significantly affects a community's ability to attract and retain business. It often also results in "brain drain," where the more highly educated and trained individuals – often a rural community's most valuable resources – leave.

### **Key Questions and Issues:**

What can be done to increase the percentage of health care delivered locally in rural communities?

What can be done to provide the availability of and access to training facilities for continuance training in rural communities?

What does it take to attract investment to sustain locally available access to high quality health care?

How can quality be assured while allowing flexibility in how regulations are met and care is delivered?

How can rural areas participate in the arena to resolve the issue of high malpractice settlements and its effect on retaining health care practitioners?



## Areas of Medical Underservice

In the past 30 years, there has been a significant increase in the number of primary care health professionals in the United States, such as physicians, certified registered nurse practitioners, nurse midwives, and physician assistants. Despite this trend, many rural and inner city areas have been, and continue to be, medically underserved. The federal government has instituted a variety of programs to address this situation. As part of that response, and in order to provide structure to these programs, the federal government has developed definitions of areas of medical underservice. Three such definitions are currently being used: the Health Professional Shortage Area (HPSA), the Medically Underserved Area (MUA), and the Medically Underserved Population (MUP).

The initial purpose of the HPSA, formerly known as the Health Manpower Shortage Area, was to delineate practice sites for participants in the National Health Service Corps, but it is now used for a number of programs. Criteria for HPSA designation require that a rational service area exhibit: (1) a lack of provider access in surrounding service areas; and (2) less than one primary care physician per 3,500 residents or, in special circumstances, less than one primary care physician per 3,000 residents. Designations are granted for three years and are not permanent. Benefits of designation include National Health Service Corps participation, improved Medicare reimbursement, Rural Health Clinic eligibility, eligibility for the Pennsylvania Primary Care Provider Loan Repayment Program, and enhanced federal grant eligibility.

Like the HPSA designation, the MUA and the MUP designations are used for a variety of programs, but unlike the HPSA designation, the MUA and MUP designations consider three factors in addition to the ratio of population-to-primary care physician. The three additional factors are the percent of population over 65, the infant mortality rate, and the percentage of population below the poverty level. These four factors are then weighted and combined using a predetermined formula to compute an index of medical underservice.

Almost eight percent of the state's population resides in an area designated as a Primary Care HPSA; 11.4 percent live in an area designated as a Dental HPSA, and 12.9 percent of the state's residents live in a Mental Health HPSA. Almost 16 percent of the population resides in areas designated as either a MUA or MUP. Residents of an area of underservice are more likely to be rural, of minority status, poorly educated, living in poverty, and have limited access to transportation.

Nearly 8 percent of the state's population resides in an area designated as a Primary Care HPSA.

11.4 percent live in an area designated as a Dental HPSA.

12.9 percent of the state's residents live in a Mental Health HPSA.

Nearly 16 percent of the population resides in areas designated as either a MUA or MUP.



### **Key Questions and Issues:**

What kind of programs could be developed, using the federal shortage designation as an eligibility criterion, to enhance access to health care in underserved areas of the Commonwealth?

What impact will a change in the definition of “rural” have on the designation of areas as either HPSAs, MUAs, or MUPs?

If changes in designation status occur, what impact will those changes have on access to care for residents of rural areas?



## Recruitment and Retention of Primary Care Providers

Primary care traditionally provides initial access to the health care delivery system. Through primary care, the majority of personal health care needs are integrated, including physical, dental, mental, emotional, social, and health promotion and disease prevention. In Pennsylvania, more than half of the state's primary care providers practice in the five most urban counties in the state: Allegheny, Bucks, Delaware, Montgomery, and Philadelphia.

There is a shortage, as well as a maldistribution, of primary care providers in Pennsylvania. In 1999, rural Pennsylvania had roughly one physician for every 619 residents. In urban areas, the ratio is one physician for every 260 residents. This gap widens even farther when focusing on primary care physicians. Traditionally, primary care includes those physicians who practice general/family, internal, or pediatric medicine. According to the most recent data, there are nearly 16,838 primary care physicians in Pennsylvania. Only 12 percent of these physicians practice in rural areas. That means there is one primary care physician per 1,316 rural residents and 1 per 654 urban residents.

In early 2005, through the Primary Health Care Practitioner Program, the Pennsylvania Department of Health placed the 500th primary care practitioner in underserved rural and urban areas. This successful program, begun in 1992, has two components: educational loan repayment and the J-1 Visa Waiver program. Physicians, dentists, certified registered nurse practitioners, physician assistants, and nurse-midwives are eligible if they agree to practice for up to four years in a federally designated primary care Health Professional Shortage Area (HPSA) in Pennsylvania.

While some progress is being made in alleviating rural Pennsylvania's critical physician shortage, the problem remains significant. Primary care access and provider shortages in the state have resulted in areas of 61 of 67 counties being designated as HPSAs, Medically Underserved Areas (MUA), or both.

Furthermore, nearly 26 percent of primary care physicians in Pennsylvania are aged 55 or older, indicating that many may soon retire. Equally troublesome is the lack of affordable malpractice insurance coverage, which strongly influences new physicians choosing training and practice sites in other states, and in established physicians deciding to relocate their practices from Pennsylvania to other states.

There is a shortage, as well as a maldistribution, of primary care providers in Pennsylvania. In 1999, rural Pennsylvania had roughly one physician for every 619 residents. In urban areas, the ratio is one physician for every 260 residents.

This is especially disturbing when we consider that most physicians choose to practice within a 20-mile radius of where they completed their residency training. Also, there are an increasing number of examples of Pennsylvania-born and trained physicians leaving the state to practice elsewhere. Documentation indicates that as many as 20 percent of physicians will leave primary care practice in Pennsylvania.

### Key Questions and Issues:

What additional support systems could be developed to encourage primary care practitioners to locate and stay in rural underserved areas of the Commonwealth?

How can Pennsylvanians contribute to a solution to the malpractice insurance problem?

How can appropriate rural health care candidates be identified and supported?

Other states rely heavily—with significant patient acceptance and cost savings—on non-physician providers. How can Pennsylvania decrease the barriers that currently exist in the use of these providers?

Additional factors affecting access to primary care physicians are a lack of continuing medical education, a lack of time for self and family coupled with long work hours, professional isolation, undesirable community factors, limited educational systems, a lack of practice coverage, and a lack of technology and trained personnel.

Other evidence of primary care physician shortage exists. Pennsylvania's Community and Migrant Health Centers, which traditionally serve medically underserved areas, currently have in excess of 35 physician and other health care professional vacancies. Almost 66 percent of patients served by these entities are uninsured or underinsured.

This poses a great challenge to the Commonwealth and must be addressed through the collaborative efforts of health care providers, educators, business leaders, managed care organizations, community leaders, state officials, legislators, and others. The Pennsylvania Department of Health, through its Bureau of Health Planning, continues to promote this process. The Bureau coordinates a variety of programs directed at the recruitment and retention of primary care practitioners and oral health providers. These include the provision of technical assistance in obtaining shortage area designation, primary care community challenge grants, J-1 visa waivers for primary care physicians, a loan repayment program, and the development of a recruitment clearinghouse. In addition, the bureau provides financial support for other programs that support rural primary care needs, such as the Medical School Generalist Physician Initiative, the Governor's School for Health Care, the Pennsylvania Area Health Education Center Program, and the Pennsylvania Office of Rural Health.

Many of these programs extend beyond primary care physicians to include non-physician providers — that is, certified registered nurse practitioners, nurse midwives, and physician assistants. These providers present another option to extend quality primary care to those who need it.



# The Use of Non-Physician Providers to Enhance Primary Care Access

The physician assistant (PA) and nurse practitioner (NP) professions have been in existence for more than four decades. The profession of nurse midwifery (CNM) has an even longer history in the provision of health care to women. The role these professionals play in improving patient access to quality medical care has been recognized throughout the country. Research indicates that PAs, NPs, and CNMs are efficient, cost effective, and competent practitioners and are highly accepted by patients. Research has also demonstrated that non-physician providers can manage 60–80 percent of patients’ primary health care needs.

However, despite these proven attributes, recognition by policymakers and inclusion as primary health care providers in legislation, regulation, and policy in Pennsylvania has not always demonstrated the important contribution they make, particularly in underserved areas of the Commonwealth.

Nurse practitioners, physician assistants, and nurse midwives are a vital asset to rural health systems and many rural communities are increasingly exploring their use for primary health care services. For example, in communities where the population base is too small to support a physician, a PA or NP is often a more feasible option. In communities unable to support two physicians, a PA or NP working in a collaborative relationship with a physician can help prevent burnout and increase productivity.

PAs and NPs are educated in primary care, health promotion, and disease prevention. They take health histories, perform physical exams, diagnose and make decisions for appropriate management and treatment of common illnesses and injuries, manage chronic health problems, order and interpret lab tests and x-rays, and provide preventive service and education. They practice in many sites, including public and private health centers, hospital clinics and emergency rooms, physician’s offices, migrant health centers, public housing clinics, in mobile clinics, and a variety of other sites where primary health care is delivered.

CNMs are skilled health care professionals who provide primary health care to women. This includes assessment, treatment, and if required, referral to a specialist. Caregiving includes preconception counseling, care during pregnancy and childbirth, normal gynecological services, and care of the peri- and post-menopausal woman.

Pennsylvania is the third largest employer of non-physician providers and the majority of these individuals work in primary care. Traditionally, they also are more likely than physicians to work in rural and other underserved areas. Unfortunately, practice barriers still exist that limit the most effective and efficient use of these professionals. Removing these barriers could have a significant impact on improving primary care access in rural areas of the Commonwealth.

They may co-manage, with physicians, the care of women with high-risk pregnancies. With physicians, they co-manage the care of women with high-risk pregnancies and deliver babies in hospitals, birth centers, or in the home to women with low-risk pregnancies.

PAs, NPs, and CNMs meet required educational criteria for their profession and are licensed to practice by their respective boards. In Pennsylvania, PAs and CNMs are licensed by the State Board of Medicine and NPs by the State Board of Nursing. PAs are licensed to practice medicine with physician supervision, which includes a written agreement for practice responsibilities; NPs and CNMs practice autonomously, but must have a written collaborative agreement with physicians including availability for consultation and emergencies, referrals, drug protocols, and other mutually agreed upon assistance.

Pennsylvania is the third largest employer of non-physician providers and the majority of these individuals work in primary care. Traditionally, they also are more likely than physicians to work in rural and other underserved areas. Unfortunately, practice barriers still exist that limit the most effective and efficient use of these professionals. Removing these barriers could have a significant impact on improving primary care access in rural areas of the Commonwealth.

Some barriers are attitudinal – many individuals and communities are unaware of, or misunderstand, the capabilities of non-physician providers. Likewise, physicians may not be well informed about the education, competencies, and licensure of NPs, PAs, and CNMs. One study has shown that the physicians most resistant to these professionals have not had the experience of practicing with them.

Other barriers that prohibit non-physician providers from practicing and subsequently from providing services to clients include restrictive state regulations controlling the scope of practice and policies by third-party payors that limit or exclude reimbursement for primary care services.

### **Key Questions and Issues:**

What state statutes, regulations, and policies restrict the use of these professionals as primary care providers?

What process is necessary to create job opportunities in health centers, hospitals, and other institutional settings to increase patient access to nurse practitioners, physician assistants, and certified nurse midwives?

What incentives can be provided to physicians practicing in communities that cannot support two physicians to collaborate with non-physician providers to increase patient access and productivity?



For example, nurse midwives continue to struggle to change state regulations that will give them authority to write prescriptions and to directly admit laboring women into hospitals. Secondly, although PAs, NPs, and CNMs are reimbursed for their services by Medical Assistance and Medicare, negotiations for inclusion as providers of care, as well as reasonable levels of reimbursement for services provided in managed care organizations and other commercial health insurance companies, continue to be problematic and at the option of the individual insuring company.

It is essential to expand the inclusion of nurse practitioners, physician assistants, and nurse midwives in the continued development of an effective primary care infrastructure that assures access to quality health care for all populations, especially those in rural underserved areas. To do this will require removing legislative and institutional barriers to practice that will result in the creation of more job opportunities.



## The Use of Telehealth Services

Too few primary care practitioners and the need to travel long distances for specialty care have made it difficult for many rural residents to receive the care they need when they need it. One tool for improving the road to rural health care is telemedicine. Modern telecommunications technology provides an opportunity to improve access to primary and specialty care for rural residents. For example, it is now technologically possible for rural patients to have consultations with distant specialists without leaving their communities.

Evaluation of the cost savings from telehealth shows that it can be substantial. For example, data from a large telehealth project in Georgia indicate that 81 percent of the patients who receive care through telehealth services have not required a transfer to secondary or tertiary centers. Given that the average cost of a bed-per-day is generally much less in a rural hospital, the findings suggest that substantial savings could be made by providing quality health care through the rural hospital. In addition, the study's authors estimate that an increase of a single patient per day to the rural hospital census represents a net cash flow of \$150,000 per year for the hospital. This is revenue that is staying in the rural community, enhancing not only the fiscal stability of the rural hospital, but also the socioeconomic fabric of the community.

Telehealth holds promise as a tool for improving the rural health care system, but will require adequate telecommunications and human infrastructures to be effective. Telehealth can foster the growth of integrated health care systems that serve both rural patients and rural providers. It can provide rural patients with access to comprehensive health care services, both in their community and from distant providers. Rural practitioners could find their practices less isolated because telemedicine facilitates frequent contact with distant colleagues.

As is often the case, however, technological capabilities have outpaced the ability of providers to position themselves for their use. In addition, the rate of technologic progress has surpassed the ability of policymakers to address regulatory and payment issues that affect the development of rural telemedicine systems. Resolution of these issues must occur before we can tap telemedicine's full potential.

Telehealth holds promise as a tool for improving the rural health care system but will require adequate telecommunications and human infrastructures to be effective.



### **Key Questions and Issues:**

How can the costs of transmission be lowered to make telemedicine more economically feasible for rural providers? For example, should phone charges be distance insensitive for essential services like health care?

Should Medical Assistance consider paying for telehealth consultations for rural beneficiaries? If so, under what circumstances?

Could telehealth be used to enhance access for rural Medical Assistance beneficiaries in other ways? For example, should the Commonwealth consider the establishment of a statewide technology system for the Medical Assistance program to enhance recipient access to health care information, to reduce the burden on providers and managed care organizations, and to supplement and enhance the existing primary care infrastructure?

How can the licensure issues be addressed when a patient resides in one state and the physician in another?



## Rural Hospitals and Health Care Across the Continuum

Hospitals are key providers of health care in rural areas. Rural hospitals provide inpatient services vital to the health and well being of residents in isolated communities. In crisis situations, the time it takes to reach a hospital can mean the difference between life and death.

The role of rural hospitals extends beyond emergency assistance. Local hospitals provide general acute care services close to home and family. In addition, primary care providers are more likely to locate in a community that has easy access to a hospital. Hospitals also attract nurses and other health care specialists. Rural hospitals act as anchors for a broad range of health and human services in the communities they serve.

Hospitals are major contributors to a local economy. In many rural communities, hospitals are one of the largest employers. Hospitals are also important consumers of local goods and services. In addition, the availability of quality local health care is an important factor in attracting new businesses to the area.

A 1992 report by the Center for Rural Pennsylvania, *Critical Access Hospitals: Hospitals Pennsylvania Cannot Afford to Lose*, identified those institutions that provide vital inpatient medical care not readily available to a community from other hospitals. Closure of these facilities would leave the largest gaps in access to health care. All but one of the 25 counties dependent on these hospitals are rural. The report also found that the financial condition of many of these hospitals is tenuous and that the long-term viability of these important organizations is uncertain.

While not all small rural hospitals must survive to meet community needs, a new paradigm is necessary for ensuring the future of small rural hospitals that serve the public interest through access to needed health care services. The question is not whether government should be involved, but how it should be involved. The marketplace needs adjustments and assistance from the public sector to sustain health care access in rural areas. Many small rural hospitals play a critical role in ensuring access to basic health care services across the continuum. It is in the public interest for these hospitals to receive the necessary support to revitalize their capacity for meeting those basic health care needs that are not met through public health, community health centers, or the private practice of medicine.

Rural hospitals act as anchors for a broad range of health and human services in the communities they serve.

The Medicare Rural Hospital Flexibility/ Critical Access Hospital Program in Pennsylvania addresses this need for a new paradigm. It provides for very small (less than 25 beds), very rural, and very financially vulnerable hospitals to convert to designation as a Critical Access Hospital (CAH). Through this designation, CAHs receive cost-based reimbursement plus 1 percent from the Medicare program. This is especially important since CAHs serve a disproportionately high percentage of Medicare patients. As of July 1, 2005, nine hospitals in some of Pennsylvania's smallest rural communities have been designated as CAHs. CAHs with two or more years experience in the program have improved their operating margins from an average of negative \$60,000 to a positive \$500,000 from fiscal year 2001 to fiscal year 2004.

### **Key Questions and Issues:**

Should the state determine which hospitals are necessary for geographic or economic access? If so, how?

Could a state capita-funding program be developed for these safety net facilities for renovation, expansion of outpatient space, needed equipment, and to develop technology linkages with urban-based institutions?


Is it possible to base financial assistance to small rural hospitals on their ability to address the health care needs of the communities they serve and outcomes of and quality of care delivered?

Should supplemental funding for technical assistance be developed to promote the viability of rural hospitals? Technical assistance could include internal support for financial management, management information systems, and human resource development. Technical assistance also could include external support in developing community leadership and mobilizing community resources.

How might payment and regulatory policy in one area of the continuum impact other areas of the continuum?

Should Pennsylvania, when evaluating proposed policy, regulation, and legislation, routinely analyze the potentially disproportionate impact of the proposals on rural areas, particularly because of the significant interdependence of all elements of the health care continuum and all areas of the rural economy?

The accompanying Medicare Rural Hospital Flexibility (Flex) Grant Program funds collaborative efforts between the CAHs and their community partners to improve personal and population health and emergency medical services. One of the most impressive activities these hospitals have been engaged in has been a performance management program using the Balanced Scorecard framework where hospitals benchmark their performance and are involved in across-the-board performance improvement initiatives.



Health Information Technology has also been improved at these hospitals through the help of the Flex Program. Through networking with larger hospitals that have more human and financial capital, these small rural hospitals and their communities are benefiting from more advanced technologies than would normally not be available.

Pennsylvania's network of hospitals provides the anchor for health and human services in many rural areas of the Commonwealth. To ensure that rural residents have continued access to health care in Pennsylvania, policymakers need to consider the unique needs and impact of decisions on these important providers.

Rural hospitals serve as the anchor for access to care across the health care continuum, a continuum that includes ambulatory care services, rehabilitation, home care, long-term care, behavioral health services, and hospice. In many rural counties, these services are only available because the local hospital has developed them in response to local need. In many rural counties, the ability of the hospital and others to provide these services has been threatened by the significant impact of the federal Balanced Budget Act (BBA) of 1997.

The BBA resulted in significant cuts to the health care system at large, as well as to each element of the continuum. In the first year after its passage – with only 15 percent of its impact implemented – over two-thirds of Pennsylvania's hospitals were not covering expenses with operating revenues. Home health agencies have closed, yielding to the dual pressures of payment cuts and data collection requirement increases. Skilled nursing facilities are reluctant to take medically complex patients for fear that the inadequate reimbursement rates will jeopardize the continued viability of their organizations. Rehabilitation providers are trying to help patients reach their potential while living within the financial confines of an arbitrarily set limit on benefits.

In rural areas, the loss of any provider across the continuum is felt more profoundly. Diminishing access to any element of the health care continuum can have a devastating impact on other components of the health care system. For example, the closure of rural home health agencies unable to withstand federal changes to the Medicare program has increased the burden on the remaining agencies. It has also increased the length of hospital stay for some patients, leading to both greater costs to the hospitals that are receiving a fixed payment and to a delay in return to home and family for the patient. It decreases the options available to patients and in some cases can result in a nursing home stay rather than a return to home after discharge.

Historically, changes to payment or delivery policy for one element of the continuum have frequently been made with little regard for the "unintended consequences" to the rest of the health care system. Because of the significant linkages and interdependency of each element of the health care system to every other element of the system, as well as to the rural economy, it is essential that policy decisions not be made without a critical analysis of what the overall impact will be on the rural citizens of Pennsylvania.



## Access to Emergency Department Services

Many small and rural hospitals in Pennsylvania are experiencing increasing difficulty in securing physician coverage of their emergency departments. These facilities are also generally the primary point of access to health care services in economically depressed, rural communities for individuals without adequate health care coverage.


While physician recruitment to federally designated shortage areas has been a long-standing issue, the steady decrease in emergency department use by those individuals with health care coverage has given rise to a particularly difficult dilemma for many small and rural hospitals. Not only does the drop in utilization make these facilities even less attractive to potential physician recruits, it also drives up the financial burden on the hospital providing round-the-clock emergency services.

The appropriate use of physician assistants, certified registered nurse practitioners, and certified nurse midwives is a nationally accepted option to alleviate this situation. However, this option is not available in Pennsylvania due to restrictions placed on the use of physician extenders in emergency settings by current state regulations. This is especially true of the State Board of Medicine, which, for example, requires that a physician assistant may provide medical services in an emergency medical care setting only if the physician assistant is under the *direct supervision* of an approved physician.

The option of closing rural hospital emergency departments does not seem to be a viable one. Discontinuing emergency service does not alleviate the need for immediate medical attention. If a rural hospital were to cease providing the service, ambulance trips would need to be diverted elsewhere. This would take ambulances out of the community for an average of two hours per patient, leaving a rural community without ambulance or emergency coverage much of the time.

Guidelines approved by the American Medical Association and a policy statement from the American College of Emergency Physicians acknowledge off-site supervision of the physician assistant in the emergency department. Neighboring New York State has allowed physician assistants to work in emergency departments without on-site supervision with positive results in rural communities. Clearly, many believe that this role is within the scope of training and practice of non-physician providers and that quality of care is not being compromised.

Current state regulations inhibit flexibility of care delivery models, inhibit maximizing use of tele-medicine, and create artificial barriers to emergency care. There is a deepening concern that these continued restrictions will jeopardize access to emergency medical care to federally designated underserved areas in the Commonwealth.



Current state regulations inhibit flexibility of care delivery models, inhibit maximizing use of telemedicine, and create artificial barriers to emergency care. There is a deepening concern that these continued restrictions will jeopardize access to emergency medical care to federally designated underserved areas in the Commonwealth.

### **Key Questions and Issues:**

How can access to quality emergency services for rural residents of Pennsylvania be ensured?

Should Pennsylvania consider adopting a limited service hospital option under the federal rural hospital flexibility program?

Would offering emergency services through non-physician providers compromise the quality of emergency medical services?

How can current regulations regarding non-physician provider practice be changed to facilitate emergency services without compromising patient care?



## Maternal and Child Health

The future of any community depends on the health and well being of all of its citizens, especially children. Providing quality pre-natal and post-delivery care to mothers and ongoing care to infants and children should be an intrinsic goal of any community. Efforts need to be directed toward addressing the issues of low-birth weight births, lack of early prenatal care, births to single teens, infant mortality, child deaths, health insurance for children, and immunizations.

Pennsylvania's rural areas have a lower rate of teenage pregnancy than urban areas of the state. In 2002, only three percent of all reported rural pregnancies were to women under 18 years old, compared to four percent in urban areas. In addition, rural teenage pregnancies are more likely to result in a live birth (79 percent of the 1,166 reported pregnancies to rural women under 18 years of age in 2002). Less than one-fifth of these reported pregnancies were ended by either fetal death or induced abortion. In urban areas, 65 percent of the teenage pregnancies resulted in life births.

At birth, the average rural infant weighed more than the average urban baby. In 2002, only 7.2 percent of the rural births weighed less than 2,500 grams. During this same period, 8.5 percent of the urban births weighed under this amount.

About 16 percent of the babies born in rural areas in 2002 were to mothers who did not complete the 12th grade. In urban areas, 14 percent of births were to mothers who did not graduate from high school. And in 2002, 30 percent of all rural births were to unwed mothers, while in urban areas, over one-third of new mothers were unwed. Among unwed rural mothers, 26 percent were under 19 years old.

Slightly fewer rural mothers received little or no prenatal care (14 percent) than urban mothers (15 percent). These mothers did not receive health care until the second trimester or did not receive any health care at all. A higher percentage of rural babies are not born in a hospital. In 2002, 3.5 percent of rural births did not occur in a hospital setting, while two percent of the urban births occurred outside a hospital. Also, 14 percent of births in rural areas were not attended by a physician, while only eight percent of the urban births occurred without an attending physician.

Efforts need to be directed toward addressing the issues of low-birth weight births, lack of early prenatal care, births to single teens, infant mortality, child deaths, health insurance for children, and immunizations.

Nationally, when compared to urban children, rural children are more likely to be uninsured than their urban counterparts. In addition, rural children are more likely to need, but not receive, necessary dental care.

The Children's Health Insurance Program (CHIP) is a health insurance program designed to provide insurance coverage to children whose parents do not have health insurance provided either privately or through an employer and who are not eligible for Medical Assistance. CHIP provides access to health care, including regular check-ups and immunizations; prescription drugs; emergency care; diagnostic testing; certain dental, vision, hearing, and mental health services; and up to 90 days of hospitalization in any year. In addition, CHIP also covers durable medical equipment, rehabilitative therapies, drug- and alcohol-abuse treatment, and home health care. Children are covered by CHIP regardless of any preexisting medical conditions and can be covered from birth through their 19th birthday. To be eligible, children must be U.S. citizens or lawful aliens and, except for newborns, must have resided in Pennsylvania for at least 30 days. In addition, families must meet certain income guidelines to qualify for either the free CHIP program or the subsidized CHIP program. The subsidized program offers health insurance for a small deductible per month. In 2004, rural Pennsylvania had higher CHIP participation rates, about five percent of all children, compared to about four percent in urban areas.

### **Key Questions and Issues:**

How can access to maternal and child health services for rural Pennsylvanians be ensured?

What can be done at the state and local levels to ensure access to health care for pregnant women and children to increase their access to quality health care?

When reductions are made to programs that support maternal and child health services, is the future of the state put at risk?

Does the state's CHIP program have an adequate provider network to ensure that newly insured children can receive adequate preventive care in a timely manner?

How do we ensure that rural families are educated about the need for regular, preventive medical care, including prenatal care?



## The Rural Elderly

In addition to having one of the largest rural populations in the nation, Pennsylvania has the added distinction of ranking second in the percentage of elderly residents. Rural northern and central Pennsylvania (the “T-bone” of the state) has one of the largest concentrations of older people in the United States.


Rural elderly face the same challenges of age as their urban counterparts, but these challenges are often compounded by the greater isolation they experience. Lack of public transportation translates into a greater reliance on others for access to basic supplies and services. A shortage of health professionals translates into undiagnosed and untreated conditions. Inadequate financial resources translate into delays in care until expensive emergency care becomes unavoidable. Geographic isolation often translates into malnutrition, loneliness, and depression. For many rural elderly, we can also add poverty to the list of challenges. Poverty, in many cases goes unnoticed because it disguises itself in the cloak of the scenic rural countryside.

Any of the above can compromise the ability of the rural elderly to maintain their independence and remain in their own homes. If supportive care becomes necessary, rural areas often lack some of the alternatives – such as adult day care, personal care homes, and low-income group housing – offered by their urban counterparts. Unfortunately, even if these alternatives are available, nursing home placement often becomes inevitable for the poor elderly because of the lack of government subsidies for options like personal care or assisted living.

The question that confronts rural advocates is how to address the health care needs of a burgeoning elderly population. This is critical, not just for rural Pennsylvania, but also for the nation as a whole. We are seeing a demographic revolution or “age wave,” which is expected to reach tidal wave proportions. A radical transformation of the health care delivery system will be needed to meet the challenges of an aging population. Anyone who doubts this should look at the impact of the growing elderly population on rural Pennsylvania.

Rural health care providers are struggling financially, largely because they serve a disproportionately elderly population and rely heavily on Medicare and Medical Assistance. In addition, many of the struggles of rural providers to provide adequate staffing are a reflection of demographics that include a growing elderly population coupled with a declining younger population base.

A radical transformation of the health care delivery system will be needed to meet the challenges of an aging population.



This results in an inverted pyramid of low resources and low populations to meet the significant and escalating needs of a growing elderly population.

### **Key Questions and Issues:**

In what ways could the options available to rural elderly requiring supportive care be enhanced?

How can the growing needs of a growing elderly population be adequately addressed with declining resources?

What innovations to the organization and delivery of care should be considered?



## Migrant Farm Worker Health Needs


Each year, approximately 14,000 to 15,000 migrant farm workers enter Pennsylvania to assist in harvesting the Commonwealth's fruit, vegetable, and mushroom crops. The crops harvested make a significant contribution to the Commonwealth's economy. In 2000, the 310 million pounds of apples produced in Adams County alone had an estimated value of \$35 million.

Migrant farm workers work where few other Americans will. Their jobs carry no promotions, raises, perks, or returned benefits. The cost of health insurance is too expensive to make it feasible for most farm owners to insure their farm workers and Medical Assistance excludes them because of residency requirements. Ironically, Medical Assistance only will cover the migrant farm worker when emergency care is needed. Emergency care is also the most expensive type of health care.

Most migrant farm workers do not have phones or transportation and few have money to pay a doctor or a hospital. Without resources, migrant farm workers are forced to rely on the migrant health program funded by grants from the federal government. In Pennsylvania, the migrant farm worker grant is managed by the Keystone Health Center in Franklin County. Keystone uses grant funds to contract with eight health care facilities across the state to provide primary care to the migrant farm worker population. Funds through other state departments also support programs that address migrant agricultural safety and prevention programs.

Due to limited funds, the services offered by Keystone do not include hospital care, visits to specialists, pharmaceuticals, dental care, and non-routine laboratory or x-ray procedures. Limited pharmaceutical and dental care services are provided at some sites.

Although the state benefits from the income generated by migrant farm worker labor, the workers must rely on the federally-funded migrant health program for their health care.



## **Key Questions and Issues:**

Should programs for the poor that are designed to expand access to health care programs or services specifically include migrant farm workers?

Should Medical Assistance coverage be granted to migrant farm workers through a waiver of residency requirements or the requirement that migrant farm workers seek permanent employment before qualifying?

Should the Pennsylvania Department of Health contribute supplemental funds to existing statewide migrant farm worker programs to expand access and services at existing migrant farm worker provider sites?

Should mandated Medical Assistance managed care include specific provisions for migrant farm worker coverage?



## Health Insurance

In 2003, about 13.4 percent of Pennsylvania's non-elderly population had no health insurance. The likelihood that one is uninsured is based on a number of factors, including poverty and ethnicity. Adults are more likely to be uninsured than children. Compared to their urban counterparts, rural residents are older, poorer, and more likely to be uninsured and stay uninsured for longer periods of time. Employer-sponsored insurance is less common in rural areas, in part, because of the greater prevalence of small business, lower wages, and self-employment. As a result, government-sponsored programs and public policies have primarily been responsible for providing health insurance for rural Pennsylvanians and particularly for the expansion of managed health care to those residents.


In January 2005, there were 133,993 children enrolled in the Pennsylvania Children's Health Insurance Program (CHIP). However, approximately five percent of CHIP enrollees in rural areas do not have access to managed care programs and are served through fee-for-service plans. Twelve counties in Pennsylvania offer only one health plan option, compared to their urban counterparts, which offer a choice of two to four health plans.

Pennsylvania's adult Basic Insurance Program, initiated in 2002 from the tobacco settlement fund, offers comprehensive health benefits to adults between the ages of 19 and 64 who are employed in low-wage jobs without health insurance. However, it is under-funded and cannot reach the large numbers of uninsured in the state. In September 2004, out of 94,000 individuals on the waiting list, 35 percent lived in rural counties. Of this number, approximately 64 percent were women.

Nearly 80 percent of Medical Assistance recipients in Pennsylvania are enrolled in managed care. The greatest managed care enrollment is in the southeast and western portions of the state. The lowest enrollment has been in the rural counties of northcentral Pennsylvania. However, Access Plus, an enhanced primary care case management program for Medicaid eligibles, is being implemented in 42 counties, mostly rural, in northern and central Pennsylvania. Of the more than 500,000 Medical Assistance recipients who receive care through the Medical Assistance fee-for-service program and the family care network, it is expected that approximately 235,00 in these counties will be eligible to enroll.

In 2003, about 13.4 percent of Pennsylvania's non-elderly population had no health insurance.

In addition to the financial burden that may result from a lack of health insurance, the uninsured are less likely to have a regular source of health care and are more likely to delay or not seek treatment.



Most elderly are covered by Medicare. However, Medicare is limited in its coverage and requires considerable out-of-pocket payments – a burden for many of the elderly in or near poverty. HMO options for the elderly are scarce in rural Pennsylvania.

Managed care plans face several challenges when expanding to rural areas.

There are smaller risk pools due to lower population density. Providers may be resistant to managed care or may not have the capacity to expand their patient base. Longer distance is required to obtain tertiary and specialty care and public transportation is almost nonexistent. Although there are fewer providers with whom the plans can contract to become part of their network, it is more of an administrative burden to contract with one physician rather than with an organization that represents a network of providers.

In addition to the financial burden that may result from a lack of health insurance, the uninsured are less likely to have a regular source of health care and are more likely to delay or not seek treatment.

### **Key Questions and Issues:**

How do we ensure that the health care infrastructure, including critical access and safety net providers, is not damaged by managed care expansion?

What role can telehealth play to increase access to specialty care?

What can be done to encourage preventive health care for the uninsured and avoid costly emergency treatment and hospital admissions?



## The Effect of Malpractice Issues on Health Care Delivery

As stated in other sections of this document, access to health care for many rural residents is limited by a number of critical issues. Rural health care in Pennsylvania is confronting yet another challenge that affects access for many residents. Pennsylvania physicians and hospitals are facing a catastrophic crisis in the lack of availability and decreasing affordability of medical malpractice insurance, which negatively impacts access to care. This crisis is affecting a very fragile system with very little room for recovery.

Soaring medical malpractice liability insurance rates are driving physicians out of Pennsylvania. According to a September 2002 survey by The Hospital & Healthsystem Association of Pennsylvania, 63 percent of physicians are retiring early, closing practices, limiting the types of patients they see, or moving out of the state. In regions where there may be only a handful of practitioners, the malpractice issue is creating a legitimate health care catastrophe.

Rising malpractice insurance premiums threaten access to quality care by:

- Increasing the practice of “defensive medicine” to ward off potential lawsuits and exposing patients to additional risks and increasing costs;
- Reducing the reporting of adverse events and potential errors to quality improvement groups out of fear of litigation. This lessens identification and correction of such events before anyone is hurt; and
- Avoiding practicing high-risk specialties due to cost, such as trauma care, obstetrics, and orthopedics.

The rising costs of malpractice insurance for doctors and hospitals is raising the cost of health care that all residents pay through, taxes, insurance premiums, and out-of-pocket expenses.

The medical malpractice insurance crisis did not originate overnight and does not have a simple solution. The issue is multifaceted and has been building for years. Huge jury awards, the economic downturns, flaws in the insurance industry, current legal policies, and rapidly increasing medical malpractice premiums contribute to the current threat to Pennsylvania’s health care system.

According to a September 2002 survey by The Hospital & Healthsystem Association of Pennsylvania, 63 percent of physicians are retiring early, closing practices, limiting the types of patients they see, or moving out of state.

In regions where there may only be a handful of practitioners, the malpractice issue is creating a legitimate health care catastrophe.



The malpractice crisis affects not only the availability of health care, but also the economy of the Commonwealth since employers want to locate in a state that has good health care at a reasonable cost in order to have healthy, productive employees. A task force has been established at the state level and charged with developing short and long-term solutions. Any recommendations will require years to implement. The health system may not be able to wait that long.

### **Key Questions and Issues:**

How can the effect of medical malpractice insurance premium rates on rural health care services be assessed?

Will rural areas be more adversely affected by the rising costs of medical malpractice?

Are there special measures that can be implemented in rural areas to ease the medical malpractice crisis in those areas and lessen its effect?

How can rural advocates address this issue with state and federal legislators?



# Behavioral Health Services

## Mental Health Services

In any given year, mental disorders affect 22 percent of American adults. This figure refers to all mental disorders and is comparable to rates for physical disorders. Severe and persistent mental disorders – i.e., schizophrenia, manic depressive illness, and severe forms of depression, panic disorder, and obsessive compulsive disorder – affect 2.8 percent of the adult population, or approximately five million people. Conservative estimates indicate that about 12 percent of the nation’s children (or nearly eight million) under the age of 18 are in need of mental health services. At least three million children are seriously mentally ill.

In the United States today, the stress level has increased, driven by two major factors. First, the fear of terrorism and the events of the war in Iraq have caused much concern. Second, security levels are higher, which affects how paperwork is processed, leading to delays in treatments because of delays in paperwork.

The human costs of mental illness – pain, grief, and lives disrupted and lost – cannot be calculated in purely economic terms. These illnesses affect not only individuals, but also employers, coworkers, families, friends, and communities.

The direct cost of treating all mental disorders in 1990 was \$67 billion, which is 10 percent of the \$670 billion the nation spent for all health care. When indirect costs (such as lost productivity, deaths, lost employment, vehicular accidents, crime, social welfare, and other costs) are included, the total costs of all mental disorders in 1990 totaled \$148 billion.

Severe mental disorders account for \$20 billion of the \$67 billion in direct treatment costs, plus another \$7 billion for long-term nursing home care. Indirect and related costs bring the total costs for severe mental disorders to \$74 billion per year.

Mental illness is the third most limiting (in terms of ability to perform a major daily activity) of all disabling diseases, behind only cancer and stroke. When disability is considered in the context of the ability to work, mental illness is the most limiting disease. More than three-quarters of those whose disability is attributed solely to mental illness are unable to work.

Stabilizing psychiatric medications, therapy, and support services needed to keep people healthy and living in rural communities may be decreased. This has the potential to result in increased hospitalizations, an increased use of emergency room services, increased homelessness and isolation, higher rates of family violence and child abuse, increased physical health illnesses, and an increase in crime and incarceration with all of its associated costs.

In Pennsylvania, 23 of the state's 45 county mental health programs have been designated as rural. County mental health programs coordinate the provision of mental health services at the county level through various combinations of direct service provisions and subcontracts with local providers. Pennsylvania is moving towards a state-wide Medical Assistance managed behavioral health care system. The five southeastern counties are currently serving as managed care organizations for the HealthChoices behavioral health initiative, as are 10 counties in the southwest. Many rural counties will not be phased in until the end of the expansion schedule.

### **Key Questions and Issues:**

How can incentives be introduced into the system to recruit and retain qualified behavioral health care practitioners in rural areas?

How can current regulatory barriers be altered to allow flexibility in how behavioral health treatment options are structured while maintaining quality and achieving positive outcomes?

How can public and private partnership models be employed to address the financial concerns relating to the provision of managed behavioral health care services to the Medicaid population?

How can transportation systems be improved to enhance needed access to services?

How can the community be educated about obtaining mental health treatment?

### **Substance Abuse Services**

Drug and alcohol abuse are major problems confronting America. In 1994, more than 25 million people were estimated to have used an illicit drug in the past year; 3.9 million used cocaine, and about 350,000 used heroin. A large proportion of illicit drug users are marijuana users. Additionally, about 140 million people aged 12 and older were estimated to have used alcohol in the past year, and about 73 percent of high school seniors surveyed had consumed alcohol in the past year. Most alarming is the dramatic increase in drug use, especially heroin and methamphetamines, among Pennsylvania's rural youth.

Federal, state, county, and local governments and the private sector together reported contributing several billion dollars annually to substance abuse treatment and prevention programs, with a large portion going to treatment services. From fiscal year 1990 through 1994, federal funding jumped from \$2.8 billion to \$4.4 billion, with the departments of Health and Human Services, Veterans Affairs, and Education accounting for about 83 percent of this



amount. Combined state, county, and local expenditures increased from about \$1.3 billion to about \$1.6 billion. Although data on private sector funding for substance abuse treatment are very limited, available sources indicate funding of more than \$1 billion in 1993.

Generally, treatment services include diagnostic assessment, detoxification, and counseling for people who have abused alcohol, other drugs, or both. Prevention activities focus on individuals who may be at risk for alcohol or other drug problems. These activities include providing information and education about alternatives to and consequences of alcohol abuse and illicit drug use.

In addition to substance abuse treatment and prevention programs, taxpayers spent more than \$40 billion to pay for federal, state, and local prisons in 1994. More than half that amount can be attributed to drug and alcohol abuse and the crimes and diseases associated with it.

## **Behavioral Health Concerns in Rural Pennsylvania**

Several issues have been identified that affect the delivery of behavioral health services to Pennsylvania's rural population. Major issues affecting the provision of appropriate and necessary services include:

- Shortages in appropriately trained and credentialed treatment professionals;
- Inadequately developed continuums of care that offer a wide range of treatment options and levels of care;
- Insufficient transportation systems to permit access to services;
- The ability for a county mental health/substance abuse program to serve as the managed care organization and to assume financial risk in the statewide expansion of Medical Assistance behavioral health managed care;
- Lack of knowledge on how to obtain treatment;
- The "stigma" associated with having a mental illness, especially in small communities;
- Decreased compliance to medication treatment due to the costs of medication;
- Limited authorizations for both outpatient services and inpatient admissions by managed health care organizations; and
- Lack of choice in choosing a provider due to providers not accepting all major health plans (Medical Assistance, HMO Plans, etc).



In the current state of fiscal challenges, state and federal behavioral health budgets have been slashed. Medical Assistance services are being curtailed, especially for those with behavioral health problems. These individuals may not qualify for Medical Assistance because they do not meet the definition of “disabled,” do not work at least 100 hours a month, or are slightly over income for eligibility.

How will individuals who need these services be affected? Stabilizing psychiatric medications, therapy, and support services needed to keep people healthy and living in the community may be decreased. This has the potential to result in increased hospitalizations, an increased use of emergency room services, increased homelessness and isolation, higher rates of family violence and child abuse, increased physical health illnesses, and an increase in crime and incarceration with all of its associated costs.



## Rural Health Disparities


The demographic, geographic, economic, and quality of life issues unique to rural areas can have a significant impact on the health status of rural Pennsylvanians. For example, mountainous terrain and winding roads create issues for rural health systems. Ready access to referral facilities and ambulance transportation is critical, but become especially significant when ice and snow make driving hazardous. Travel time to all types of health care providers is generally longer in rural areas. Unlike the public transit systems that serve most urban areas, public transportation is either sporadic or nonexistent in rural Pennsylvania. The growing proportion of elderly rural Pennsylvanians prompts a discussion about the ever-changing demands on the rural health system to provide services to a changing population. In addition, the unmet transportation needs of the elderly speak to the issues of appropriate and timely access to health services. The economic base of rural Pennsylvania is such that resources may or may not be available in the same proportion as elsewhere in the state. Disparities in educational status, employment, and income may require the development of specialized approaches to health improvement. The rapid population growth in some rural communities may have an impact on available services as well as creating a mix of established residents and new arrivals, with varying expectations on local health and human service delivery systems.

On average, incomes are lower in rural Pennsylvania. This fact is illustrated by the adjusted per capita income from federal or state transfer payments, the average household income, the proportion living at or below 200 percent of poverty level, and the percentage of households reporting income less than \$25,000 in 1999 (the latest year for which data are available), which all demonstrate poorer conditions in rural Pennsylvania.

The rural workforce has a different makeup than the rest of the state. Lower percentages of workers have professional and management jobs, and a higher percentage are employed in the service industry. A much higher percentage is employed in manufacturing and industrial positions. Unemployment remains higher in rural areas, as compared with the rest of the state.

A review of the Centers for Disease Control and Prevention's (CDC) Health Status Indicators showed several areas with statistically significant differences between urban and rural areas. The death rate per 100,000 population due to heart disease, cerebrovascular disease, motor vehicle crashes, suicide, and work-related injuries is higher in rural areas.

Based on an analysis of responses to questions asked in the the Pennsylvania Department of Health's Behavioral Risk Factor Surveillance System, three disparities between rural and urban health status are evident: current smokeless tobacco use is higher, a higher number of residents did not graduate from high school, and a much higher percentage of residents keep firearms in or around the home.



Based on an analysis of rural/non-rural differences in responses to questions asked in the Pennsylvania Department of Health's Behavioral Risk Factor Surveillance System, three disparities between rural and urban health status are evident. In rural areas, current smokeless tobacco use is higher, a higher number of residents did not graduate from high school, and a much higher percentage of residents keep firearms in or around the home. This last statistic also correlated with the higher suicide rate in rural areas. Firearms were involved in more suicides than in non-rural areas.

### **Key Questions and Issues:**

How can awareness of the cause of poor health increase among populations at risk?

How can individuals be informed about what they can do to protect their own health and/or the health of their children?

What can local systems do to address both individual health and population health?

In what ways can rural advocates better articulate the unique needs and issues related to rural health care and quality of life? How can the message be communicated that rural Pennsylvanians are, in many ways, a disparate population?

Review of data from other state agencies, such as the Department of Aging, the Department of Transportation, and others, revealed a higher instance of elder abuse and neglect, alcohol-related automobile deaths, poor dental access for low-income residents, and access to mental health services as important differences in the health status of rural and urban residents.



## Oral Health Issues

Great disparities in oral health care delivery, services, and health status exist among rural Pennsylvanians. Significant barriers to care include financial, geographic, social, and cultural components, as well as a serious oral health provider shortage and maldistribution, as demonstrated by the high numbers of Dental Health Professional Shortage Areas identified in the state. In 2000, the Pennsylvania Department of Health's Bureau of Chronic Diseases and Injury Prevention began to develop an Oral Health Plan for Pennsylvania that includes current activities, as well as new program ideas and recommendations.

The important role of oral health in overall physical health is not yet widely understood. The Pennsylvania Department of Health and the U.S. Health Resources and Services Administration have identified oral health as a root cause and contributor to chronic diseases. The Pennsylvania Department of Health's Special Report and Plan to Improve Rural Health Status identified lack of access to oral health services as a critical health issue for rural areas of Pennsylvania. This report indicates that, just as disparities exist in certain disease categories of physical health, similar disparities exist for oral health. In addition, good oral health may improve the quality of life by freeing an individual from chronic pain or facial disfigurement.

According to 1996 statistics, the Pennsylvania Department of Public Welfare's Office of Medical Assistance reports that approximately 40 percent of all licensed dentists in Pennsylvania are enrolled in Medical Assistance. Of those enrolled, only 54 percent actually participate in the program; approximately 50 percent of those provide 99 percent of all dental services rendered to eligible Medical Assistance recipients. A small percentage of these dentists practice in rural areas.

For children under 21 who are eligible for Medical Assistance, there is a severe under-utilization of dental services. Between October 1998 and September 1999, 831,466 children under age 21 were eligible for dental services under the Medical Assistance program. Only 21 percent received any dental service, with only 17 percent receiving any preventive dental service. While this may be due, in part, to a lack of access to dental providers, an absence in this population of viewing dental care as a health care priority could account for much of this poor showing. Programs are needed to address both access and population education about the benefits of good oral health and how it is achieved.

The Pennsylvania Department of Health's Special Report and Plan to Improve Rural Health Status identified lack of access to oral health services as a critical health issue for rural areas of Pennsylvania.

This report indicates that, just as disparities exist in certain disease categories of physical health, similar disparities exist for oral health.

According to the Pennsylvania Oral Health Needs Assessment, dental caries remain a significant condition among Pennsylvania's children in both urban and rural areas. Caries (decay) rates show a steady increase with age; there is also significant variation among health districts. Untreated dental caries remain a serious problem

for many children. The percentage of Pennsylvania's six-to-eight year olds with untreated decay was, on a statewide average, six percent (+3) higher than the Healthy People 2010 objectives. Regionally, the northwest district in particular, especially among six-to-eight year olds, has significantly higher rates of both caries and untreated caries.

Statewide, according to the *Pennsylvania Oral Health Needs Assessment*, the rate of children's annual dental visits was quite high (87 percent), but those children who did not visit the dentist had much higher rates of untreated dental disease than those children who had a dental visit in the previous 12 months (39 percent vs. 18 percent, respectively). Children from disadvantaged economic backgrounds had the highest rates of dental disease and the most untreated dental disease. The most troubling finding from this study was the significant economic gradient that seemed to exist for dental caries. Children from the poorest families are two times more likely to experience dental caries (58 percent vs. 27 percent) and three times more likely to have any untreated dental caries (33 percent vs. 10 percent) than children from the wealthiest families. This strongly suggests that access to preventive and restorative dental care, as well as effective preventive oral health education, is lacking for these poor children and their families, in both rural and urban areas.

### **Key Questions and Issues:**

How can access to dental services in rural areas be expanded?

What programs can be put in place at the state level to increase dental providers' participation in the Medical Assistance program?

How can effective dental health programs be established or enhanced in rural areas?



## Rural Pre-hospital Emergency Medical Services


Emergency medical services (EMS) system development in Pennsylvania has shown marked progress since the enactment of Act 45 of 1985, the Emergency Medical Services Act. There are nearly 42,000 individuals in the Commonwealth trained and certified to provide pre-hospital emergency care, nearly 3,000 physicians recognized as medical command physicians to direct advance emergency calls in the field, and nearly 1,000 licensed ambulance services. More than 95 percent of Pennsylvania residents have 911 access for emergency services.

For the most part, however, EMS in rural areas has not achieved the same level of advancement that it has in urban areas. This can be attributed to, among other factors, sparse populations that cover large geographic areas, making the cost of providing emergency care more expensive; a lower capacity of local governments in rural areas to fund programs; a shortage of trained health professionals with a greater reliance on volunteer attendants; and low volume and profit potential leading to an inability to attract private sector EMS services when public services are absent. As health care delivery services decline in rural areas, especially through hospital closures and the loss of physicians, the availability of EMS becomes even more critical to the population.

Accident-related mortality is 18 percent higher for rural residents. These excess deaths are due primarily to motor vehicle accidents and, while they do not occur more frequently in rural areas, they are more likely to be fatal. Motor vehicle accidents are the leading cause of death among men ages 15–24 in non-metropolitan America. The lack of adequate EMS systems in many rural areas is a contributing factor in the death rate from motor vehicle accidents and other forms of trauma.

By legislative mandate under Act 45, the Pennsylvania Department of Health has been allocating 30 percent more of the Emergency Medical Services operating fund to rural areas of Pennsylvania than urban areas. Some of this support has been targeted to expanding the use of automatic external defibrillators (AED). Across the U.S., about 20 percent of basic life support services utilize AEDs; in Pennsylvania, that figure is more than 50 percent. This initiative, in combination with a “bystander care program” to train truck drivers on the delivery of first responder care when they come upon accident victims, is designed to significantly reduce mortality rates in rural areas. The Department of

EMS in rural areas has not achieved the same level of advancement that it has in urban areas.



Health also is in the process of developing pre-hospital stroke treatment protocols that adopt currently available advanced medical treatments for use in the pre-hospital setting.

While rural EMS problems are formidable, many of the difficulties with these systems can be alleviated with a commitment from state government to provide additional resources, innovative legislation, and system-wide planning. Initiatives like those introduced by the Pennsylvania Department of Health begin to ease the rural-urban disparity. Additional ways to address this issue need to be evaluated continually.

Adequate pre-hospital care in rural communities requires the development of integrated and cooperative systems of care. It requires a fair exceptions process to provide flexibility to local communities in meeting the intent of regulation and law. It requires sufficient reimbursement to support EMS system development and health professional recruitment, retention, and education. And it requires awareness, acknowledgment, and attention to the inherent differences between service delivery issues in metropolitan vs. rural areas.

### **Key Questions and Issues:**

How can policies be developed that support enhancing the quality of care given, yet allow for flexibility in rural areas as to how the intent of regulation and law is met?

How can we be sure that statewide policy recognizes the inherent differences between urban and rural areas of the Commonwealth?

How can we encourage improved outcomes and enhanced quality while recognizing and supporting the large volunteer component of our rural EMS delivery system?



## The Status of Public Health

Public health has been called a system of “organized community efforts aimed at the prevention of disease and promotion of health.” Its work is often described as three core functions: assessing the health needs of a population, developing policies to meet these needs, and assuring that services are always available and organized to meet the challenges at the individual and community levels. Different aspects of the core functions may be delegated to, or voluntarily carried out by, private-sector professionals and organizations. However, ultimate responsibility and accountability for them rests with governments at the local, state, and federal levels.

Ultimately, a healthy population needs clean air and water, safe food and housing, access to accurate and timely information regarding health and safety, and an adequate supply and distribution of competent health professionals. These conditions for a healthy community depend upon a strong public health infrastructure, which includes a well trained and accessible public health workforce. Such a workforce is comprised of a complex network of individuals possessing a variety of technical backgrounds including nursing, health education, sanitation, medicine, public administration, and epidemiology, among others. The common thread that ties these individuals to the public health workforce is their commitment to addressing the health needs of the population, as opposed to individual health needs.

Because of the broadly defined nature of the public health workforce, it is difficult to determine exact numbers of workers engaged in public health activities in the United States. Compounding the difficulties in determining precise numbers is the fact that each state has developed their public health infrastructure independently, thus creating dramatically different systems. Current best estimates, however, place the number of public health workers nationally at 448,254, or 156 public health workers per 100,000 community members.

Pennsylvania’s public health worker per capita ratio is the lowest among states, with 37 public health professionals per 100,000 community members. In part, this can be traced to historical decisions regarding infrastructure development that have led to Pennsylvania having only 10 independent health departments, all located in urban areas. The remainder of the state lacks a locally-based governmental public health infrastructure. Therefore, the organizational mechanisms to support and develop additional public health workers in an expedient fashion

A more clearly delineated system that is capable of assessing public health needs and events will be critical.

are by in large absent. It should be noted that this does not necessarily mean that public health services are entirely lacking in rural areas. Rather, hospitals, state department of health district offices and county clinics, voluntary service organizations, and other community-level entities have assumed a number of

public health functions over time. However, this has created a lack of uniformity in the public health services across communities. Further, there is little coordination among state-level agencies, the few independent health departments, and the organizations delivering public health services in rural areas. Without a coordinating entity, it is difficult to assess these organizations' efforts, coordinate policy developments, and assure that essential public health services are being provided to all of Pennsylvania's citizens.

A number of public health problems that Pennsylvania faces may be exacerbated because of this lack of organizational coordination. At the very least, it is safe to say that a more clearly delineated system that is capable of assessing public health needs and events will be critical in assuring that the following challenges are addressed:

- In 2002, Pennsylvania ranked 19th in the nation for overweight and obesity;
- Pennsylvania ranked 8th for low birth weight infants;
- Pennsylvania ranked 43rd in the nation for the teen birth rate;
- Pennsylvania ranks in the top 90 percent among states for carcinogenic and non-carcinogenic air and water releases; and
- Rural areas nationally face statistically significant disparities in such areas as deaths resulting from heart disease, cerebrovascular disease, motor vehicle crashes, suicide, and work-related injuries as compared to urban areas.

### **Key Questions and Issues:**

Communities with independent health departments have access to qualitatively different services than those that lack these entities. Does this contribute to the health inequities faced by our rural citizens?

How can we build an effective local public health infrastructure in communities that lack independent health departments?



# Bioterrorism and Emergency Preparedness

While many consider rural communities to be at low risk for terrorist attacks, they are home to a number of the targets considered desirable to potential terrorists – both foreign and domestic. Rural targets are attractive because of their perceived vulnerability, part of which stems from the sense of security felt by many rural residents. However, terrorism, particularly bioterrorism, should be a serious concern to rural communities for the following reasons:

- Rural areas are the center of agricultural production in this country and could be targeted in order to contaminate the nation’s food supply;
- The headwaters for much of the urban water supply are found in rural areas;
- Rural communities are home to many high-profile terrorist targets including nuclear power facilities, uranium and plutonium storage facilities, U.S. Air Force missile silos, chemical manufacturing plants, and petroleum refineries, among others;
- A mass exodus from urban communities in response to a terrorist attack or other emergency situation requires a strong rural response capacity. Few, if any, rural hospitals have the capacity to handle large numbers of individuals seeking care and rural communities often lack HAZMAT units and decontamination equipment and facilities;
- The proliferation of hate groups in rural areas is a concern in terms of “home grown” terrorism. Early identification of terrorist threats will require a strong rural preparedness infrastructure, including training to recognize early signs of biological and chemical experimentation;
- Infectious disease agents may be targeted towards smaller communities with less ability to recognize and track bioterrorist threats. To prevent the spread of these agents, a strong public health infrastructure and adequate training will be necessary; and
- Many interstate transport companies are located in rural communities and provide transit of hazardous materials via routes that intersect rural areas.

Terrorism, particularly bioterrorism, should be a serious concern to rural communities.

The bioterrorism and emergency response network in rural Pennsylvania involves numerous state, regional, and local organizations. Among these are nine regional counter-terrorism task forces, 16 regional emergency medical service councils, six Pennsylvania Department of Health district offices, and three regional offices of the Pennsylvania Emergency Management Agency. At the local level are a myriad of additional agencies, organizations, and individuals, including county emergency management coordinators, community hospitals and medical providers, local police and fire departments, etc., all of which are integral to rural safety. A key to assuring

an adequate response among these entities will be a coordination of efforts, which is made difficult by the sheer number of partners, many of which have responsibility for overlapping regions.

Rural Pennsylvania's lack of local governmental public health infrastructure creates additional emergency preparedness challenges by reducing local access to public health professionals, including epidemiologists and health educators. Many of the models and tools that have been designed to address issues of local preparedness, including *Public Health Ready* and the Center for Disease Control's *Local Public Health Preparedness and Response Capacity Inventory*, rely on the existence of a local public health agency. In lieu of having a local public health agency to rely upon, the rural response network in Pennsylvania has to identify what organization(s) in a given community have the responsibility for emergency preparedness planning, public health surveillance and epidemiological investigation, laboratory testing, communications and information dissemination, risk communication, and education and training.

### **Questions to ask and issues to address relative to bioterrorism and emergency preparedness in rural Pennsylvania:**

What are the implications of overlapping coordinating entities and the diversity of partners at the community level for public health and emergency planning efforts?

Who is ultimately responsible for public health and emergency planning efforts at the local level? Do they understand and welcome this responsibility? And, what resources at the state and regional levels can they access for local planning efforts?

How do rural communities access public health professionals for community planning efforts in the areas of preparedness planning, public health surveillance, risk communication, etc.?

Would a stronger local public health infrastructure better enable rural communities to protect their citizens in the event of a bioterrorism threat or other health-related emergencies?



# Rural Health Resource Directory

## Primary Contacts:

**Pennsylvania Rural Health Association**, P.O. Box 1632, Harrisburg, PA 17105-1632; (717) 561-5248; Contact: John George, President

*The Pennsylvania Rural Health Association is dedicated to enhancing the health and well being of Pennsylvania's rural citizens and communities. Through the combined efforts of individuals, organizations, professionals, and community leaders, the association is a collective voice for rural health issues and a conduit for information and resources.*

**Pennsylvania Office of Rural Health**, 202 Beecher-Dock House, University Park, PA 16802; (814) 863-8214; Contact: Lisa Davis, Director

*The Pennsylvania Office of Rural Health (PORH) was established in 1991 at The Pennsylvania State University as a joint federal-state-university partnership. One of 50 state offices of rural health in the nation, PORH seeks to improve the health of the state's rural communities and their residents through education, outreach, advocacy, applied research, and special projects with a focus on the interrelated content areas of rural health, agricultural health and safety, and community and economic development. PORH is funded by the U.S. Department of Health and Human Services, the Pennsylvania Department of Health, and Penn State, and receives additional extramural funds to conduct applied research and implement special projects.*

## Additional Resources:

**Center for Rural Health Practice**, University of Pittsburgh at Bradford, 300 Campus Drive, Bradford, PA 16701; (814) 362-5050; Contact: Michael Meit, Director

*The Center for Rural Health Practice identifies and articulates rural health issues and engages the University of Pittsburgh's colleges and schools, including those for the health sciences, in addressing those issues and formulating policy recommendations for the improvement of rural health systems. It is recognized that a systems approach to improving health includes partners in government, academia, private-sector organizations, professionals, and communities.*

**Center for Rural Pennsylvania**, 200 North Third Street, Suite 600, Harrisburg, PA 17101; (717) 787-9555; Contact: Barry Denk, Director

*The Center for Rural Pennsylvania's mission is to preserve and enhance the Commonwealth's rural communities by serving as the focal point for rural policy development within the Pennsylvania General Assembly.*



**The Hospital & Healthsystem Association of Pennsylvania**, P.O. Box 8600, Harrisburg, PA 17105-8600; (717) 564-9200; Contact: Cheri Rinehart, Vice President, Integrated Delivery Systems

*The mission of The Hospital & Healthsystem Association of Pennsylvania (HAP) is to advance the health of individuals and communities and to advocate for and provide services to members who are accountable to the patients and communities they serve. HAP believes that health care in Pennsylvania must focus on patients and the communities in which they live.*

**Pennsylvania Academy of Family Physicians**, 5201 Jamestown Road, Suite 200, PO Box 6685, Harrisburg, PA 17112; (717) 564-5365; Contact: John Jordan, Executive Vice President

*The mission of the Pennsylvania Academy of Family Physicians is to promote improved health of Pennsylvanians; to advance the specialty of family practice through education, advocacy, and communication; and to serve the unique needs of members with professionalism and creativity.*

**Pennsylvania/Delaware Area Health Education Center (AHEC) Program**, 30 East Granada Avenue, Hershey, PA 17033; (717) 531-4327; Contact: Linda Kanzleiter, Associate Project Director

*The mission of the Pennsylvania AHEC Program is to help communities meet their primary health care needs by creating a statewide infrastructure, bridging community and academic resources to facilitate the recruitment and retention of primary care providers in underserved communities through educational and training programs; develop an information and communication network to provide consultation, technical assistance, education and other support for community-based primary care practitioners; increase the number of individuals from minority and underserved communities who enter primary care and allied health professions; and evaluate and address public health needs of communities within and among the regions, and provide innovative responses to those needs.*

**Pennsylvania Department of Health, Bureau of Health Planning**, P.O. Box 90, Room 1033 Health & Welfare Building, Harrisburg, PA 17120; (717) 772-5298; Contact: Ambrose Potrzebowski, Rural Coordinator

*The Bureau of Health Planning is responsible for implementing the Department of Health's initiative to assist and encourage the development of community responsive systems of primary care through public and private partnerships. One of the main functions of the bureau's Division of Health Professions Development is the identification and designation of Health Professional Shortage Areas. This division also manages a primary care practitioner loan repayment program and the Community Challenge Grant program. The Bureau's Division of Plan Development is responsible for the development and implementation of the State Health Improvement Plan (SHIP) and the State Rural Health Plan. This division also collects data and issues reports on the health care workforce in Pennsylvania.*



**Pennsylvania Farm Bureau**, 510 South 31st Street, P.O. Box 8736, Camp Hill, PA 17001-8736; (717) 761-2740; Contact: Joel Rotz, Director, National Legislative Programs

*The Pennsylvania Farm Bureau (PFB) is a nonprofit lobbying organization for farmers in Pennsylvania. It is affiliated with the American Farm Bureau at the national level. There are 54 county farm bureaus located in 61 counties, with over 26,000 family members. The PFB is concerned about accessibility to primary care in rural areas, as well as emergency care, and is interested in working with others with the same concerns.*

**Pennsylvania Forum for Primary Health Care**, 1017 Mumma Road, Suite 209, Wormleysburg, PA 17043; (717) 761-6443; Contact: Henry Fiumelli, Executive Director

*The Pennsylvania Forum for Primary Health Care is the association of community and migrant health centers in the Commonwealth. The forum provides a way for administrators, clinicians, board members, and staff of these centers to share ideas with each other. The forum coordinates training and other services for centers and aims to improve the efficiency and level of care of all community and migrant health care centers.*

**Pennsylvania Medical Society**, 777 East Park Drive, P.O. Box 8820, Harrisburg, PA 17105-8820; (717) 558-7750; Contact: Jeffrey Greenawalt, Director, Educational and Scientific Affairs


*The purpose of the Pennsylvania Medical Society is to represent physicians in the Commonwealth. The society promotes the availability of quality care and programs for the health of the public; supports the advancement of medical science; maintains high standards of medical education; develops programs and services to enhance medical practice; upholds the ethics, integrity, and dignity of the medical profession; and advocates for the interests of the medical profession in matters having to do with legislation, regulation, and reimbursement.*

**The Pennsylvania State Nurses Association**, 2578 Interstate Drive, P.O. Box 68525, Harrisburg, PA 17106-8525; (717) 657-1222; Contact: Michele Campbell, Executive Administrator

*The purpose of the Pennsylvania State Nurses Association is to preserve and advance the identity, integrity, and continuity of the profession of nursing and to serve as the professional organization and the official voice for registered professional nurses in the Commonwealth.*

**The Pennsylvania Chapter of the American College of Nurse-Midwives**; Contact: Vivian Lowenstein, President

**Pennsylvania Public Health Association**, c/o Allegheny County Health Department, 3333 Forbes Avenue, Pittsburgh, PA 15213; (412) 578-8032; Contact: Gerald Barron, President



*The mission of the Pennsylvania Public Health Association is to improve the health status of the citizens of the Commonwealth through the advancement of the practice of public health. This is achieved by providing leadership and expertise on public health issues; educating policymakers, legislators and the public; developing partnerships and promoting collaborations; providing forums for discussions and discourse; providing mechanisms for knowledge exchange and networking; promoting standards for public health practice; and promoting the provision of public health services in all Pennsylvania counties.*

**Pennsylvania Rural Development Council**, 506 Finance Building, Harrisburg, PA 17120 (717) 772-9028; Contact: Bill Sturges, Executive Director

*The Pennsylvania Rural Development Council (PRDC) is a federal/state program comprised of over 150 members from federal, state, and local governments, private enterprise, and non-profit organizations. The council's mission is to promote economic development through task forces on health, education and training, economic development, communications, and transportation. Preserving a rural quality of life, removing barriers, promoting cooperation, and enhancing communication are also part of the mission statement. The PRDC meets quarterly across the state.*

**Pennsylvania Rural Electric Association**, P.O. Box 1266, Harrisburg, PA 17108-1266; (717) 233-5704; Contact: Russell Biggica, Economic Development Specialist

*The Pennsylvania Rural Electric Association (PREA) is the service organization for 14 electric cooperatives in Pennsylvania and New Jersey. Together, these nonprofit, locally controlled cooperatives provide reliable and affordable electric service to more than 600,000 rural homes and businesses. In addition to supplying power, PREA and its member cooperatives are aggressively involved in numerous economic and community development initiatives which help to ensure an improved economic vitality and quality of life in rural communities.*

**Pennsylvania Society of Physician Assistants**, P.O. Box 128, Greensburg, PA 15601, (412) 836-6411; Contact: Ronald B. Mezick, Jr.

*The Pennsylvania Society of Physician Assistants (PSPA) represents all physician assistants within the Commonwealth. The goals and objectives of the PSPA are to enhance quality of medical care to the people of Pennsylvania through a process of continuing medical education, both to the membership and the public, to provide loyal and honest service to the medical profession and to the public, to promote professionalism among its membership, and to promote the physician assistant concept.*



## References

[Center for Rural Pennsylvania.](#)

Coburn, A., T. McBride, and E. Ziller (2001). *Patterns of Health Insurance Coverage Among Rural And Urban*, Maine Rural Health Research Center.

[Environmental Defense Scorecard.](#)

Institute of Medicine, 1998. *The Future of Public Health*, National Academy Press, Washington, DC.

Kaiser Family Foundation [State Health Facts Online: 50 State Comparison.](#)

Pennsylvania Department of Health, 2000. Behavioral Health Risks of Pennsylvania Adults [webserver.health.state.pa.us/health/lib/health/tobacco\\_use\\_brfss\\_2000.pdf](http://webserver.health.state.pa.us/health/lib/health/tobacco_use_brfss_2000.pdf) and [webserver.health.state.pa.us/health/lib/health/overweight\\_brfss\\_2000.pdf](http://webserver.health.state.pa.us/health/lib/health/overweight_brfss_2000.pdf).

Pennsylvania Department of Health, Bureau of Health Planning, 2000. *State Improvement Plan Special Report To Improve Rural Health Status.*

[Pennsylvania Department of Health, Bureau of Health Statistics and Research, Maternal and Child Health Status Indicators.](#)

Pennsylvania Department of Health, Bureau of Health Statistics. 1999. *Special Report On Birth and Death Certificate Data.*

Pennsylvania Department of Health, County Health Profiles.

Pennsylvania Department of Health. [Health Status Indicators, Health Status Indicators by Department of Health District, 1998-2000.](#)

Pennsylvania Insurance Department. *Annual Report adultBasic 2004.*

[Pennsylvania State Data Center.](#)

Public Health in Pennsylvania: [Critical Issues for Challenging Times, An Issue Paper from the Deans of the Commonwealth's Schools of Public Health.](#)

Shields, M. and L. Davis (2000). *The Importance of the Health Care Sector on the Economy of Tioga County, Pennsylvania.* Penn State Cooperative Extension.

U.S. Health Resources and Services Administration, Bureau of Health Professions, National Center for Health Workforce Information and Analysis, 2000. *The Public Health Work Force Enumeration 2000.*