CHAPTER 4 ISSUE SUMMARIES AND POLICY RECOMMENDATIONS

Chapter Four includes the executive summaries of the papers contributed by the State Health Plan authors examining, in depth, each of the nine strategic issues identified through the planning process, as well as the recommended policies developed around each issue. While not a comprehensive list of issues and policies, the areas selected represent a baseline perspective on where we stand, what we know, and what we can do to bring about desired changes in the state's health care resources.

The issues were chosen as a result of a survey sent to approximately 300 people in the state and further defined by an advisory group composed of business representatives, payors, regulators, consumers, providers, and organized labor. The nine issues that are addressed are access, accountability, at-risk populations, coordinated health-related information networks, financing and cost control, promotion of a coordinated health care system, public health, quality of care, and rural health.

The policy recommendations reflect regulatory and allocation decisions involving health care facilities, services, workforce, technology, data, and funding. The scope of the policies covers six major areas: legislation, regulation, taxation, collection and reporting of data and information, funding of public programs, and purchase of heath care services. Each recommendation has been further assessed and ranked by urgency of implementation (Phases 1 through 3) and value (A through D) to the system as a whole. The intent is to reinforce and strengthen the health care infrastructure, while focusing resources on the collection, analysis, and reporting of health care information to improve health status and the quality of life.

The selection of the issues and policies was made with the full recognition that there are many other important areas that impact health status and the health care system. Some areas have not been included herein because they are addressed in the Healthy People 2010 initiative or are adequately addressed by other agencies in the state at the present time. Future State Health Plans will address additional issues.

I. Promotion of a Coordinated Health Care System

Issue Summary

There is growing recognition that market reform is needed if the health care infrastructure that West Virginians depend upon is to be preserved, much less improved. Today's health care environment places a premium on efficient organization and delivery of care, demonstrated quality, and improved access at a reasonable cost. Consolidation, integration, and closures are some of the market-driven responses to tighter reimbursement policies and to the shift from the high-cost inpatient care setting to the less expensive outpatient setting. These forces, plus population and economic dynamics in the state, are such that stresses on the health care system are likely to continue to increase. Hence, there is a strong need to organize the health care system to be more efficient and more responsive to the full array of community needs.

One feasible approach to addressing this need is the move toward integrated health care networks, which can provide a continuum of care as efficiently and effectively as possible. Coordinated community-oriented delivery systems, integrated both horizontally and vertically, can improve operating efficiencies and quality without sacrificing access to care. There is a relatively large number of small hospitals, long-term care centers, primary care centers, clinics, public health departments, and personal care homes around the state. Operating efficiency, as well as improvements in quality, access, and the array and sophistication of services available, is more likely to be achieved if these often disparate services are linked in integrated, well-coordinated systems of care. Collaborative efforts of public and private health care officials will be needed to determine how best to move quickly in this direction, with as little disruption as possible.

Many of the steps necessary to permit, and then encourage, the formation of health care networks have been identified and are being discussed among industry officials and policy makers. Because of the nature of the existing state health care infrastructure, which contains a large public provider component, the system's substantial reliance on public payments, and the state's comparatively large underinsured and uninsured populations, initial leadership and guidance should come from public officials.

One important characteristic of a coordinated health care system is an integrated health information system. The electronic patient record is an unusually important, if not essential, component of an integrated health care system. Consideration should be given to using planning and regulatory tools to promote public-private community-based coalitions to pursue health service coordination where this is feasible. The West Virginia Health Care Authority (WVHCA), working with other interested parties, should promote the gradual implementation of electronic records and linkage across health provider settings.

Promotion of a Coordinated Health Care System

- -- Use planning and licensing, certificate of need, and reimbursement incentives to promote the system coordination and integration. Build monitoring and enforcement mechanisms into the process. (A1)
- -- Incorporate prospective planning by developing and issuing an assessment of service-specific needs statewide annually, as an update of the State Health Plan. (B2)

II. Access

Issue Summary

Rugged, mountainous terrain, a limited highway system that makes travel comparatively difficult, a low population density reflected by many small, scattered pockets of population, plus a large proportion of medically underserved residents — all these describe a state where ready access to health care is a major problem. Adding to this challenge are low family income levels, high poverty rates, low education levels, relatively poor health status generally, a comparatively old (and aging) population, and low levels of private health insurance coverage.

Access to health care is defined as the ability to afford, to reach, and to pay for care when it is needed. The essential resource base, i.e., the personnel, facilities, and the equipment necessary to provide adequate care, simply does not exist in many West Virginia communities. Where resources are readily available, the problem may be the inability to reach or to afford the services. In other cases, the limitation may be a lack of knowledge of the need to seek care or how to do so effectively. These circumstances reflect deeply entrenched economic and social problems that will change only gradually, over a number of years. Near-term approaches that may be productive likely involve steps to ensure the stability, efficiency, and operational flexibility of the existing health care system, in particular the small rural hospitals, the local health departments, and the primary care centers.

Practical steps that might be taken to improve access in the near term include:

- Developing a systematic program to ensure that the state and its residents obtain all federal health aid and support for which they are eligible.
- Expanding and developing Medicaid waiver programs where cost effective.
- Encouraging indigenous coordinated systems of care.
- < Undertaking necessary planning studies to establish benchmarks for use in planning and in system monitoring and evaluation.

Because there is necessarily such a strong reliance on the public health system and on both direct and indirect public support of the private health care system (e.g., critical access hospitals), responsibility and accountability for initiating efforts to maintain and improve access rest primarily with public officials and programs. The most effective way to encourage other key interested parties to share this responsibility, and to accept some measure of accountability, is to establish a collaborative, population-based planning process that can assess fully the current health care delivery system, public and private, and how it operates. This will entail a series of sequential analytical planning studies to establish baseline operations and measures and to document the current linkages among services and facilities. The results of these studies should become the foundation for policy formation, with true accountability likely to evolve from the process.

Access

- Improve health care coverage by (1) increasing access to insurance and managed care to the currently uninsured, including persons in need of end-of-life care, long term care, and behavioral health services; (2) identifying barriers to successful implementation of the Physician Assured Access Services (PAAS) program; (3) modifying insurance and managed care regulations that give priority to existing health care providers in rural areas; (4) supporting and expanding the Mountain Trust Fund; and (5) fully implementing the Children's Health Insurance Program. (A1)
- Require collaboration at the state, regional, and local levels to address complementary roles of various agencies in promoting public/private partnerships targeting infrastructure for access to health care. Collaboration and planning within local communities are essential to ensure the maximization of all resources. For example, communities could use facilities such as schools for clinics. (A1)
- Develop methods to define, measure, and track health indicators aimed at measuring access to needed health care. Develop data-sharing agreements and protocols with neighboring states in order to address the issue of migration for care. Track, analyze, and report finances, quality, utilization, outcomes, and health status information to determine relationships between outcomes, cost, and access. (A2)
- -- Improve access to health care providers by (1) supporting programs targeting physician recruitment and retention; (2) supporting communities to "grow their own"; (3) supporting programs that will train residents and students in rural, underserved areas, and (4) promoting the development of provider networks in rural areas. (A2)
- -- Improve access to transportation to services, especially in rural areas, by (1) supporting social services agencies in developing transportation programs for the elderly and other needy groups; (2) examining the feasibility of using school buses for transportation to health services, and (3) assisting communities in maintaining emergency/medical transport systems. (A2)
- -- Promote access to health care services by alternative methods, including offering nontraditional hours of operation, services, and providers. (B2)
- -- Promote community collaboration to provide inventories of essential transportation services within each community. (B2)
- -- Provide community input to mission and service of health care system. (B2)
- -- Promote collaboration of state agencies to assure and strengthen the safety net (core level of services), including community health centers. (B2)

III. Financing and Cost

Issue Summary

The levels of hospital costs and charges in West Virginia compare favorably with those in the South Atlantic Region and the United States, with West Virginia having lower cost per outpatient visit and charge per outpatient visit than all neighboring states and being second only to Maryland in charge per inpatient discharge. There are, however, concerns about the fairness of the payment system, access for individuals who lack health insurance or have inadequate insurance, and the preservation of health care providers that act as a "safety net" for the uninsured and underinsured. Only about 40% to 45% of West Virginians have private health insurance at any given time, because many residents are employed by small employers who are unable to obtain health insurance for their employees. The Mountain State has a high percentage of workers employed by small businesses — of the 39,000 businesses located in the state, 95% employ fewer than 50 people.

In addition to the uninsured and underinsured "working poor," many West Virginians are dependent on public health insurance programs. About 18% of the population are Medicare enrollees and nearly 20% are Medicaid recipients. Because of this, dependence on federal programs and monies is particularly strong. Medicare patients and revenues account for nearly half (48%) of all hospital volume and receipts and nearly 40% of primary care center volume statewide. Because about three out of four Medicaid dollars are federal matching monies, a substantial majority (60% to 65%) of health system revenues in the state are directly or indirectly federal. Dependence on Medicare will only increase as the state's population ages and as more of the small rural hospitals are designated as "critical access," making them eligible for cost-based reimbursement.

One area of concern about the state's dependence on Medicare monies is the impact of the Balanced Budget Act of 1997. The Balanced Budget Act was passed as a result of continued increases in health care spending by the federal government and as an attempt to control what Medicare was being required to pay out to providers, but there is growing recognition that these cuts may have gone too far too fast. According to some studies, Medicare spending changes could cause total hospital profit margins to drop below zero by 2002, from their current median level of just over 4 percent. Because of this, a plan currently being considered in both the House and the Senate would restore nearly \$15 billion dollars to the Medicare program over the next 10 years. The state, however, must be prepared to face future challenges such as the Balanced Budget Act as it plans for health care financing in the years to come.

Although state health officials have made a concerted effort to encourage the expansion of managed care, there is very little commercial managed care in West Virginia. Given the problems being experienced elsewhere with managed care in more attractive markets, and the recent widespread disenrollment of Medicare recipients by several plans nationally, it is difficult to see where or how growth will accelerate any time soon.

Most of the positive market changes many associate with managed care (e.g., lower hospital use rates, substitution of outpatient care for inpatient care, and less unnecessary capital spending) are not dependent on high managed care penetration levels. Reduction in inpatient use, the shift from inpatient surgery to outpatient surgery, and the introduction of more efficient operations and practices are likely to continue apace, even if managed care levels do not rise.

Financing and Cost

- -- Enable employees of small businesses, self-employed individuals, and uninsured persons to obtain health insurance. (A1)
- -- Make efficient use of new tobacco settlement revenues to support health and health-related projects. (A1)
- -- Determine the existing public and private health care providers sources and uses of revenue and assess the current and future impact of federal reimbursement changes on West Virginia health care providers. (A1)
- -- Provide incentives for preventive care and wellness by lowering health insurance co-payments for individuals who meet their personal health care goals. (A1)
- -- Address the adequacy of existing public health care provider payments, particularly Medicaid, including whether West Virginia is taking maximum advantage of the favorable federal/state match for Medicaid expenditures. (A1)
- -- Address the uninsured population's needs. (A1)
- -- Develop policies to enhance the role of the consumer as the purchaser of health care services. (A1)
- -- Expand managed care principles, where feasible, through the formation of provider-sponsored organizations and networks. (B2)
- -- Provide adequate reimbursement for health care providers to encourage use of technologies to improve health care. (B2)
- -- Assure adequate continuum of care resources by health care providers and payors to meet the needs of elderly and disabled persons. (B2)

IV. Accountability

Issue Summary

Accountability, an important non-clinical element of the health care system, provides a structural incentive for all parties to perform as effectively and efficiently as possible. It also makes the identification of problems that otherwise may be unnoticed or misunderstood more likely. Ultimately, a health care system that incorporates a high degree of accountability is likely to have better outcomes, better satisfied clients and providers of care, and more realistic expectations among all interested parties.

The State of West Virginia, as a major payer for health services, needs to move expeditiously to implement methods to accurately measure what it is buying with its scarce health care dollars. The availability of reliable outcome measures could have a significant impact on the health care system by directing resources to those providers and programs best able to demonstrate their effectiveness. In addition, absent the development of effectiveness of care measures tied to the key objectives of the State Health Plan, West Virginia's progress toward achieving those objectives will not be known and cannot be demonstrated to the legislature or the residents of the state. However, public accountability for health care system performance in West Virginia, as elsewhere, is fragmented and somewhat haphazard. Near-term, the best approach to improving accountability appears to be the development, incrementally, of an integrated health information system that supports performance measurement and improvement statewide. It should be expanded gradually into a comprehensive system that includes, at the least, all licensed services and programs.

The traditional framework for measurement has three dimensions:

- 1 Structure the characteristic of the care setting;
- 2. Process what is done for patients, and
- 3. Outcomes how patients respond to care.

Essential features of such a framework include establishing best practices benchmarks across all service settings, monitoring feedback to providers of care and to those served, and developing specific measures/indicators for high at-risk populations chosen for special focus.

Rather than attempt to develop and use unique measures, West Virginia can benefit from the experiences of other states and organizations in selecting accountability measures. Health system officials should monitor and participate, as appropriate, in ongoing performance measurement development initiatives nationwide. Any system adopted should ensure that benchmark accountability measures address identified at-risk populations, access, and vulnerable populations. Consideration should be given to Agency for Health Care Policy & Research Healthcare Cost and Utilization Project (AHCPR HCUP) Quality Indicators, Health Employer Data & Information Set (HEDIS), Consumer Assessment of Health Plans Survey (CAHPS), and Foundation for Accountability (FAACT) guidelines, as well as other national initiatives and clinically accepted guidelines that have shown promise. Within West Virginia, the West Virginia Medical Institute has many sets of indicators that are used in different programs such as Medicare, Medicaid, and the Veterans Health Administration. It is imperative, however, that all data used in measuring performance must be credible and the confidentiality of patient and provide-specific data must be protected.

Ultimately, improvements in accountability and performance measurement are tied to having better, more complete, comparable, and timely information. West Virginia already has several longitudinal health databases that can be used to enhance accountability. The development of CHRIS, now under way at WVHCA, should be viewed as the initial step in developing the integrated system needed. All interested parties should be invited to participate in developing a core set of accountability measures.

Accountability

- -- Establish a set of population-based baseline indicators/performance measures and develop a standard definition for accountability. (A1)
- -- Extend certificate-of-need data collection to include ongoing tracking of actual performance for the listed health services (to allow for a reconciliation between projections and outcomes) and to measure quality indicators and access to care by the medically indigent population. Augment current operational reporting to more fully inform the public and legislature about the quality of care and financial performance of the state's key health care providers and insurers. (A1)
- Encourage the development of a comprehensive disease management program. Track and evaluate the Bureau for Public Health and the Bureau for Medical Services' disease state management program for diabetes. (B2)
- -- Develop a core set of measures to improve performance in a cost-effective manner. (B2)

V. Quality of Care

Issue Summary

The inauguration of a new millennium will include a focus on "quality renewal" as the result of multiple changes occurring within American industry and throughout the health care system. Quality is an abstract construct that can be viewed from different perspectives. In fact, each person will potentially have a different description of quality based on his or her own professional and educational experience. Recent reports from the Institute of Medicine and a presidential advisory commission have both concluded that health care quality is an endemic problem that must be addressed in the context of a systems approach if improvement is to occur. Quality as used here is thus defined as "the improvement of clinical, financial, functional, and organizational outcomes." It refers to the management of processes rather than the management of practitioners.

The three general areas of concern within a systemic treatment of quality of care are underuse of services by those in need, overuse of services by many, and avoidable medical errors, all of which are present in West Virginia. With the exception of avoidable errors, which are not publicly documented or reported, there is considerable evidence in the state of the other two areas, i.e., higher-than-expected use of some services and underuse that may result from limited access, as well as considerable variation in use among similar populations that does not appear to be related to underlying differences in health status.

Analyses of morbidity and mortality within the state reveal substantial disparities among selected populations, indicating that health care quality in West Virginia varies considerably within and across communities, delivery systems, geographic areas, and health problems. These differences may be associated with a number of demographic, economic, environmental, personal behavior, health provider, and health system variables. Strategies for improving quality must therefore include a mix of techniques involving provider interventions, patient-oriented interventions, and health-system-oriented interventions. It is also necessary to recognize that many of the determinants of community and personal health are not individual-specific, but rather reflect characteristics and factors found in the larger environment, e.g., crime, poverty, and employment levels, air and water purity levels, vocational and community safety, and accident-prevention programs.

A fuller picture of the health care quality in West Virginia awaits the development of a more complete integrated health information system. In the meantime, much can be learned from: (1) a fuller use of existing hospital discharge data by linking hospital data with birth and death records, workers' compensation data, and highway accident/crash data; (2) analyzing variations in treatments and physician practice patterns; and (3) examining more closely preventable hospital admissions, for example, asthma and diabetes-related conditions that could have been prevented through changes in the primary care delivery system.

The problem facing health care officials in West Virginia, as elsewhere, is how to maintain and improve quality in a cost-effective manner, without sacrificing access or unduly burdening any element of the delivery system. Quality of care issues refer to both health care providers and consumers. Underaccess may be related to geography, finances, gender, or ethnicity. In addition, health care providers may overuse certain medical interventions. Assessing and improving health care quality is a continuous process. Over time, the state needs to expand the analyses to include examination of care provided in settings for which little or no data now exist. Planning and regulatory changes may be required to ensure that providers and other data sources collect and report data elements needed to support quality improvement activities.

Quality of Care

- -- Establish a clearinghouse for quality data collection. (A1)
- -- Establish an advisory group on quality as a private/public partnership of health care stakeholders to develop and implement a quality plan, establish statewide standards, identify and select national benchmarks, monitor selected quality outcomes, and create a forum for measuring and reporting quality. (A1)
- Determine the definition for quality, to be accomplished by the advisory group on quality. The parameters of this definition will include measurement of health care services against established standards, consumer expectations, and improvement in health status. The term standards includes established targets, appropriateness criteria, or guidelines. (B2)
- Establish conservative objectives and timetables for the advisory group on quality to develop strategies ensuring linkages among financing, care management, and community-based care that will (1) assess the resources available to provider organizations to improve quality performance; (2) assess the experiences of other states to provide insight into the practical and technical problems occurring in their health care systems; (3) perform small area variation studies using existing hospital data to identify variations among facilities, communities, and high-risk populations; (4) identify and select high-risk populations to study by using valid, reliable, tested measures such as AHCPR HCUP Quality Indicators and HEDIS, and (5) use a systems approach to measure quality using the structure, process, and outcome process. (B2)

VI. At-Risk Populations

Issue Summary

West Virginia's demography is extraordinary, so atypical that understanding recent and expected population dynamics is critical to identifying health risks. There was an actual decrease in population in 1997. This remarkable development resulted from the combination of low fertility and birth rates and a high and rising death rate. West Virginia's population is aging rapidly, relative to those of most other states and the nation as a whole.

These demographic data hold major implications for the demand for and the provision of health services in the state. The age distribution of the West Virginia population is the single most important determinant of community health status and of the types and amount of health care that are likely to be required. Aging West Virginians — the more than one-third of the population now 50 years of age or older — regardless of gender, location, or race, will be the state's largest at-risk population for the next 25 years.

Progress made earlier this decade in improving health indices may have reached a plateau, or may actually be eroding. The number of excess deaths has increased considerably in recent years; there were about 3,500 more deaths in the state in 1997 than would be expected given the age profile of the state's population. Given the high variance from experience elsewhere, and the greater potential of having near-term positive effects from intervention, it appears that half of the ten leading causes of death are worthy of special attention and effort: diabetes, heart disease, chronic obstructive pulmonary disease, suicide, and unintentional injuries.

With limited health care resources, the goal must be to devise strategies to address as many of the major health problems as is practicable, using available health resources as efficiently as possible. These resources must be woven into a better-coordinated, more efficient service network if the need for both acute and chronic care services is to be met in a reasonable, cost-effective manner. Those managing the planning process should generate a list of potential at-risk groups, with an explanation of the rationale for initial selection, as a starting point from which all interested parties would work. There are various sources available from which to make these determinations, among them the **Dartmouth Health Atlas of Health Care** and the goals and objectives for **Healthy People 2010**, which will be released in April 2000.

At-Risk Populations

- Generate an initial list of potential at-risk groups based upon existing data, with an explanation of the rationale for their selection, as a first step in the planning process and a starting point from which all interested parties would work. Invite all interested parties, based upon the data findings providers of care, policymakers, voluntary services groups, civic organizations, and the citizenry in general to participate in the determination of which population subgroups will be judged "at-risk," as this implies special attention and resources for these groups. The interested parties can contribute their knowledge, experience, and a practical sense of what is feasible and workable; their role should be both substantive and advisory. Their involvement is likely to be most productive if they are involved early, as soon as necessary preliminary planning efforts are under way. (A1)
- -- Performance measurement systems and indicators of quality and accountability should address priority at-risk populations; at-risk populations should be monitored over time. Assess long-term care needs. (B1)
- -- Redefine end-of-life care as part of the continuum of care. (B2)
- -- Use cost-effective methods and processes such as benchmarking and computer modeling in order to allocate health care resources as effectively as possible. (C3)

VII. Public Health

Issue Summary

Public health services are in transition nationwide. Eroding state and local economic support, Medicare payment reforms, and market shifts due to the rise of managed care (particularly among Medicaid enrollees) are combining to threaten public health delivery systems as they exist today. This is especially true in West Virginia, where less than one percent of health expenditures goes for public health services, and a comparatively large percentage of the population is rural, poor, uninsured, and aged, and therefore at high risk of health problems addressed by public health services. It remains to be seen what these changes will mean both for the local public health systems and for those who are dependent on them.

The recent change in policy involves a shift from a more balanced mix of public and personal services and activities to a more narrow focus on basic public health services. National public health organizations, the Centers for Disease Control and Prevention, and the Health Resources and Services Administration have already begun a process to define performance-based standards for the refocused public health system. It is expected that these standards and competency measures will become requirements for public health systems nationwide. These requirements will likely become essential for federally funded public health programs.

Most public health services in West Virginia are delivered by the state's 54 local health departments. Collectively, they have assured that the basic public health services of communicable disease prevention and control, community health promotion, and environmental health protection were met. Providing a wide array of population and personal health care services, they recorded more than one million client encounters in 1998. Given that local health departments serve many of those persons most in need, any reform or integrated system formation should take fully into account their value and role in the health system and assure that those receiving personal health care services are not forgotten.

Growth in managed care presents opportunities, as well as challenges, for the public health sector. Public health methods and techniques in documenting the need for, and then providing, primary care and preventive services are becoming more valuable to managed care and the health system generally. Public health departments that have, or can develop, skills and experience in these areas may be able to market their expertise to managed care organizations and health care networks. Many of West Virginia's local health departments are already part of regional, multifacility networks. They need to further explore the possibility of contracting with managed care organizations to provide a wide range of preventive services.

Much is at stake in the "transition" of West Virginia's public health system. It is evident that alternative ways must be found to provide many of the "safety net" personal health services that the public system has historically provided. Health care officials need to encourage managed care plans, health care networks, and other private entities to contract with public health departments to provide basic preventive and primary care services. In addition, they should ensure that private health care entities participate in and help support (defray the costs of) certain of the core public health functions, including assessing and reporting community needs and undertaking cooperative public/private community health promotion activities. Simultaneously, support of public health's unique provision of population-based health services needs to be strengthened. Preparing the state's public health workforce and building the infrastructure essential for delivery of basic public health services to West Virginia residents is the focus of the West Virginia Public Health Transitions Project. In West Virginia, as well as across the country, the financial resources to support the preventive health system have not grown as rapidly as, nor in the amounts needed to capably care for, the state's aging population.

Public Health

- -- West Virginia should target initiatives in cardiovascular disease. These initiatives could include continuing employee wellness programs, reporting the findings, and seeking opportunities to expand wellness programs for all employees. (A1)
- The WVBPH and the West Virginia Department of Education should collaborate in encouraging school policy development and partnerships between the local boards of health and the county boards of education to determine school-specific environmental interventions and measurement indicators that promote healthy eating, a tobacco-free lifestyle, and physical activity among students, faculty, and staff (including the disabled). (A1)
- -- Target initiatives in cancer control. These initiatives could include (1) the establishment of a cancer coalition, bringing together medicine and other health professions, environmental scientists, existing coalitions and organizations addressing cancers, and other essential partners to develop a comprehensive plan for cancer control in West Virginia and (2) the continued support by the West Virginia State Legislature for cancer screening and treatment through the West Virginia Breast and Cervical Cancer Diagnostic and Treatment Fund. (A1)
- -- Continue and support financially the strategic process that has laid the groundwork for a strengthened public health system emphasizing the basic public health services of prevention and control of communicable diseases, community health promotion, and environmental health protection. (A1)
- -- Create and pass legislation to curb tobacco use among the state's children, making tobacco products harder to obtain by causing a significant increase in the retail cost of tobacco products. (A1)
- -- Develop policies to ensure that private health care entities participate in and help defray the costs of conducting and reporting public health community needs assessments and establish cooperative public/private health promotion activities, by sharing resources wherever possible. (B1)
- Develop organizational structure and capacity at the state level to institutionalize continued public health workforce development. Identify profession-specific competencies needed to enable the workforce to deliver the basic public health services and measure progress toward meeting those competencies. Establish a process to review and revise the job descriptions and qualifications of public health workers to more adequately reflect the developing profession-specific competencies and qualifications and revise pay scales reflective of these newly emerging requirements. Provide funding to support the leadership development of the current public health workforce to provide for more rapid capacity development. (B2)
- -- Develop policies that encourage managed care plans, health care networks, and other private entities to contract with public health departments to provide basic preventive and primary care services, such as immunizations, home health care, and screening services. (D3)

VIII. Rural Health

Issue Summary

The National Rural Health Association notes that rural areas are experiencing "the most profound changes in the health care system in modern times." Nearly two-thirds (64%) of West Virginians live in rural areas, with more than three-fourths of the state's 1.8 million residents living in communities of fewer than 2,500 people. All except four of the state's 55 counties are designated fully or in part as Health Professional Shortage Areas and/or Medically Underserved Areas.

Residents of rural areas in West Virginia differ significantly from the national norms in terms of demography, socioeconomic characteristics, health status and health care needs, and access to care. Demographic and socioeconomic characteristics of the state's rural population are generally more negative than those found among their counterparts nationally. Actual and perceived health status, personal health risk behaviors, and access to resources are more problematic than in most other rural areas. The lack of roads and the condition of existing roads pose additional problems. Only half of the roads are paved and more than 60 percent of the paved highways are rated fair, poor, or very poor, and poor road conditions are associated with longer times to reach medical care. Even with good roads, health care resources are often limited in the state's rural areas.

Given these and related conditions and circumstances, the basic question facing health care officials is how to preserve the stability of the existing rural health care infrastructure, while simultaneously working to transform and integrate the private and public health systems. West Virginia has made significant progress in establishing responsive health care systems to serve its rural population. It has developed a network of primary care centers and clinics statewide and has taken steps to stabilize and preserve essential rural hospitals, as well as the viability of local health departments.

Policy makers in West Virginia should make efforts to continue to assist at the local level, gearing programs to the local level and helping develop local health plans. A key component of this effort should be the continuation of support and encouragement in the development of rural health networks. Telemedicine, which provides consultation to six rural areas from hubs in Morgantown and Charleston, is another avenue that holds great promise for the future. Further, the EMS community is evolving to more effectively accommodate rural areas but continues to face financial, organizational, and personnel problems.

A number of additional steps could be taken to gain a better understanding of how health status and the need for and use of health care services, differ between the West Virginia rural population and the rest of the state. Studies are needed to determine:

- < age- and gender-specific population-based use rates for rural and other populations;
- < the practical effects of the policy of encouraging the conversion of rural hospitals;
- the relationship between facility and program size and volume and treatment outcomes in the state's small hospitals and service programs, and
- < the number of potential unnecessary hospitalizations for ambulatory-sensitive conditions.

Rural Health

- -- Identify circumstances that are needed to support rural health care and identify the barriers that need to be eliminated. (A1)
- -- Evaluate payment levels in West Virginia and their impact on rural health providers and make needed changes to the system assuring continued viability of existing providers. (A1)
- -- Promote the development of new technologies that promote the continuum of care services in rural health. (B2)
- -- Recognize the importance of medical transportation as a component in a coordinated system of care in rural communities. With more training and medical supervision, EMS personnel can have a larger role in providing care in rural areas. The EMS system should be more integrated into a health care system that is cooperative, shares limited resources, promotes public/private collaboration and cost containment, provides a broad education to EMS providers, and recognizes innovative methods of health care delivery. (B2)

IX. Coordinated Health-Related Information Networks

Issue Summary

Reliable information is the key to understanding community and personal health and the workings of the health care system. The size and complexity of the health care system are such that essential information is now found in many large, disparate databases. The value of individual data sets is increased greatly when they are combined; more sophisticated analyses of the health care system and of community health are possible when data are linked to form an integrated information system.

Fortunately, innovation in information technology and electronic data processing is lowering the cost of data gathering and processing, analysis, and dissemination. Integrated information systems are now feasible, are becoming more practical, and should become less costly, both to develop and to operate. Moreover, it is likely that the cost of not having efficient integrated information systems will soon greatly outweigh the cost of developing and operating them, if that is not actually the case already.

The utility, and hence the value, of the numerous databases in West Virginia are reduced by gaps in the data, limited comparability, lack of comprehensiveness, mismatched timeliness, and inconsistent quality. Under recent legislation, WVHCA will develop a consolidated health-related information system (CHRIS), which will include public and private sector databases. Locating disparate databases in a single location (or a virtual location) moves West Virginia closer to having an integrated statewide health information system.

Regional integrated health information systems are already being developed by two rural provider networks. The Eastern Panhandle Integrated Delivery System (EPIDS), which serves nine counties in eastern West Virginia, and the Southern Virginia Rural Health Network (SVRHN), which serves three counties in southern West Virginia, received federal grants to develop integrated medical information systems. Both networks are vertically integrated, including hospitals, local health departments, primary care centers, social service agencies, physicians, and the services of other entities.

Health officials should monitor data standardization activities in these networks and elsewhere (other states, the federal government, and voluntary standardization organizations), both to take advantage of what is learned and to try to be consistent with developments elsewhere. Experience developing public data clearinghouses and data warehouses is growing, and these sources should be consulted.

Planning policy and decisions should ensure that any health information system developed is designed to ensure that, to the maximum extent practical, population-based data element definition, collection, analysis, publication, and evaluation are built into the system. The value of data from a managed care plan, for example, is greatly depreciated if it cannot be related (linked) to the underlying enrolled population and to the general public.

Coordinated Health-Related Information Networks

- Facilitate the adoption of a core set of measures, indicators, and data when establishing the Coordinated Health Related Information System (CHRIS) that will be used for planning, policy setting, performance monitoring, and other systemwide measures utilizing encounter-level detail data. (A1)
- -- Integrate existing health databases and health information networks to lead to better understanding of the health status and socioeconomic conditions of West Virginia's population and how the health care system is responding to its needs. The plan should also address how existing data are used and provide a rationale for additional data collection. (A1)
- -- Use data standardization methods from other states, the federal government, and voluntary standardization organizations. West Virginia should take advantage of, and try to be consistent with, other efforts. (B1)
- -- Implement gradually electronic patient records across health provider settings. This effort will be necessarily long term but is an essential element if there is to be efficient and effective coordination. (A2)
- -- Require all affected entities to participate in an integrated electronic patient records system in order to obtain data from CHRIS. (B2)
- -- Seek collaboration between state agencies, universities, and private groups to develop Geographic Information Systems (GIS) infrastructure to benefit all entities, including the consumer. (B2)
- -- Use medical technology to assess patients in their homes. (C3)