CHAPTER 6: RECOMMENDATIONS FOR A WYOMING-SPECIFIC RURAL HEALTHCARE SERVICE DELIVERY SYSTEM

The Georgia Rural Health Plan states that all "…rural communities are the same only in not being urban. Rural healthcare delivery systems are as unique as the communities in which they have evolved."[234] States have developed a variety of solutions targeted to their own particular rural health needs.

There are several existing models for the organization of the delivery of healthcare services, but, as noted in Chapter 5, there is currently no single model that adequately addresses the issues of cost and access. It is necessary to choose aspects of existing models and integrate them into a model that will work for Wyoming. Considering that there is no "perfect" model, health systems planners are forced to make tradeoffs depending on need and priority; it is essential for planners to determine priorities for resource development.

In our research, we found that a number of states have specifically addressed the issues of rural healthcare and improving access to services in rural areas. We summarized those initiatives in Chapters 4 and 5 of this report. This research shows that many of these states have adopted more traditional approaches to improving service delivery, such as recruitment of medical professionals to rural areas.

Wyoming, like other states, has employed traditional methods of preserving healthcare delivery and access such as professional recruitment and retention. However, State agencies and private organizations are competing for professionals and working independently without a central vision and coordination. If the State continues to employ this disjointed traditional approach, improving access to care in rural and frontier areas will be increasingly challenging. Since most of the modest population growth projected for Wyoming is to occur in Casper, Cheyenne and larger towns and not rural and frontier areas, relying on physicians to establish practices in shrinking communities is not a viable solution. Patients need to be "brought" to a loci of providers, via telemedicine or physical transport. Such approaches will require investments in telemedicine, transportation and a professional recruitment infrastructure optimally made and coordinated at the State level with regional/local planning input. Although the regions should assist in determining needs and setting priorities, the State should provide the overall vision for the healthcare system and direction in evaluating tradeoffs between healthcare resources and the State's other economic development goals.

Although we could not complete the study of existing healthcare resources because of data limitations, based on our work and discussions with the Wyoming Healthcare Commission,

[234] Health Strategies Council and Georgia Department of Community Health, Division of Health Planning, "Georgia State Health Plan," p. 6.

we can at this time make some recommendations regarding a framework for organizing and prioritizing healthcare services in Wyoming.

Overview of Chapter

In this chapter we:

- Recommend a framework for how Wyoming can organize and prioritize rural and frontier healthcare services
- Identify needs and recommend priorities based on the analysis completed in the first section of this report
- Recommend strategies for how the State, regions and local communities can develop and implement initiatives to address their healthcare needs

Recommendation of a Framework for Organizing and Prioritizing Rural Healthcare Services

We recommend the following component structure for organizing and prioritizing rural and frontier healthcare services across the State:

- Creation of a State Board to direct healthcare planning
- Facilitation of community input through regional boards
- Determination of healthcare needs at the regional level by the State Board
- Prioritization of healthcare needs at a regional level by the State Board
- Use of regional input in selecting initiatives to address healthcare needs

Although we have outlined five components in this structure, these components may need to be implemented simultaneously or in a different order. For example, a network may not be able to form until the needs of the region have been identified.

<u>Creation of a State Board to Direct Healthcare Planning</u>

As we noted above, State agencies, communities and private organizations are competing for professionals and working independently to resolve rural and frontier health issues without a central vision and coordination. Some of these activities have been successful, others less so; without a central vision, financial and human resources may be expended in vain. Therefore, we recommend that the State consider appointing a State Board to centralize and direct healthcare planning throughout the State.

This Board will play a role in many areas. Most importantly, it can determine how and where financial resources will be directed by prioritizing needs and evaluating tradeoffs, for example, what new resources should be developed at the community level vs. what new resources should be developed at the regional level. The State Board will set priorities for recruitment, coordination of services, emergency transportation and other initiatives described in this report. The State Board can also determine where State resources should be used to identify and apply for federal and private foundation grants and to provide technical assistance. Any investments by the State should be consistent with the goals and priorities established by the State Board.

The State Board can also facilitate voluntary network development and dialogue among hospitals and other providers in regions by creating forums for discussion. Individual parties who make up a network must share a common vision and goals and see a clear reason for participating, and again, it is the responsibility of the State Board to establish this vision and articulate it effectively to all parties to secure their buy-in. By providing funding for network development, the State creates incentive for communities to develop rural and frontier healthcare networks and collaborate within regions. Regional alliances are built by a state requirement that only one grant application be submitted for each region. There are federal funding opportunities for development of rural and frontier health integrated networks.

The State Board will oversee the development and maintenance of a statewide health resources database, which will record information on health resources, their locations and professions and full-time equivalences for planning purposes.

Facilitation of Community Input Through Regional Boards

The State Board will facilitate the appointment of Regional Boards of community stakeholders to create a partnership between the State and local governments. These Regional Boards can provide input to the State Board in overall resource investment and allocation through determining needs, evaluating priorities and making recommendations for financing.

Based on our review, we believe that the Wyoming Trauma Care Program's[235] five regions provide a geographic framework within which to build a regional approach to healthcare planning. Trauma Care Program regions are based on the locations of hospitals, the natural loci of healthcare services. The purpose of expanding these regions beyond trauma care would be to facilitate health services planning and priority setting and foster integration

[235] The Wyoming Trauma Programs divides the State into five regions or TRACs. TRAC 1 includes the northeastern part of the State, TRAC 2 includes the central part of the State, TRAC 3 includes the southeastern part of the State, TRAC 4 includes the southwestern and western part of the State and TRAC 5 includes the northwestern part of the State.

among providers. The Trauma Care Program model also provides a blueprint for patient referral and transfer relationships.

Determination of Healthcare Needs at The Regional Level by the State Board

While the State Board will establish priorities for resources, we recommend that the State Board evaluate these healthcare resources and needs at the regional level. Once formed, Regional Boards will assist the State Board in determining healthcare needs by assisting in the analysis of the current environment within their respective regions. This includes understanding the demographics and existing health services within the region, and assisting in gathering information for the statewide health resources database. Wyoming's aging population creates new pressures and issues for the State. Projected changes in the population's age composition will mean increasing demand for some types of health care in Wyoming, particularly primary care, nursing facility services and home- and community-based services.

Prioritization of Healthcare Needs at a Regional Level by the State Board

Regional Boards will uncover multiple unmet needs and report these to the State Board. The State Board, with assistance from the Regional Boards and their communities, will determine how to prioritize needs and organize health care services to respond more effectively to these regional needs. The State Board will also involve Regional Boards and their communities in a meaningful way in planning for services and notifying residents regarding options available to them.

Use of Regional Input in Selecting Initiatives to Address Healthcare Needs

Our report describes initiatives other states have used to improve rural and frontier healthcare delivery systems. These are best practices Wyoming can implement, including:

- Providing non-emergency transportation for rural and frontier residents to healthcare services in distant locations
- Organizing mobile healthcare services to provide primary and preventive health services rural and frontier residents
- Encouraging education, training and recruitment of health professionals with financial incentives including scholarships and loan forgiveness
- Ensuring retention of health professionals with financial and non-financial incentives
- Providing resources for telemedicine and telehealth

- Updating professional licensure laws to widen scope of practice and encourage cross-training

- Creating centralized provider and health databases

- Encouraging the provision of rural and frontier healthcare in schools, churches and other community settings

What initiatives regions' stakeholders decide will be most effective for them depends on a number of factors, including the region's needs, what it will take to implement an initiative and the potential for sharing initiatives among different regions.

Identification of Needs and Recommended Priorities Based on Analysis

Although our analysis regarding geographic and capacity access could not be completed based on available data, our research on Wyoming and other states suggests priority areas in healthcare planning initiatives. We discuss these areas below.

Primary Care and Selected Specialty Physician Services

As the State continues to study access to healthcare services, we recommend that the State should give priority to the availability of primary care services. Primary care is the foundation of any healthcare system. A sufficient supply of primary care providers is critical to meeting the needs of rural residents, because the preventive services and early intervention services they provide are essential to continuity of care as well as to controlling healthcare costs.

We recommend that the State encourage the development and retention of primary care resources at the community level and specialty services at a regional level.

Advantages/Disadvantages and Other Considerations

- In regional centers, large critical masses have the resources to support the investment required to provide some core services and specialized care. Development of resources at a regional medical center also helps attract physicians to areas with greater population and greater resources.

- Since it may not be economically feasible to provide every service in every region, many specialized secondary and all tertiary hospital services should be rationalized at a State-wide level. It is not possible to have every service in every town, but it is possible to develop a comprehensive range of emergency and specialist care on a regional basis. Some specialist services can be provided on an outreach basis; specialists would be based in larger rural centers, but visit smaller towns. Anecdotally, we have learned that specialists already do provide outreach to rural communities on a weekly, monthly or informal basis.

Emergency Transportation Services

Advanced emergency transportation services is important to rural areas.

One of the challenges that trained paramedics in rural areas face is that, due to the low frequency of emergencies, they do not use their skills enough to remain fully prepared for an emergency. Considering these constraints and challenges, we recommend some options for addressing emergency transportation services.

Consider Short-Term Options to Enhance Emergency Transportation Services.

- Identify opportunities to cross-train paramedics to provide some primary care services.

- Consider developing a pilot program whereby paramedics from one or two rural areas spend two weeks per year with an ambulance service in high-volume areas to refresh their skills.

- Identify and implement options to increase revenues to ambulance providers and use increased funds to build services. For example, explore forming a centralized billing service for ambulance services on a regional or statewide basis to reduce administrative costs and capture revenue from third party payers for services that many ambulances are not now billing. From our work on the Commission's Unreimbursed Catastrophic and Trauma Care Study, we understand that many of the ambulance services supported by county funding do not bill for their services because their low volume makes billing economically unviable.

- Evaluate the feasibility of having Critical Access Hospitals that are not already operating ambulance services do so as a way of securing Medicare cost-based reimbursement for the ambulance services. This is only an option if the ambulance service is the sole provider within a 35-mile drive of the Critical Access Hospital.

Advantages/Disadvantages and Other Considerations

- There are few paramedics throughout the state; cross-training may not be an option because there may be no paramedics in areas of greatest need.

- Many of Wyoming's ambulance services are staffed exclusively by volunteers – over 43 percent in 2002 (A centralized billing service may make billing for their services economically viable.)

- The option of evaluating the feasibility of having Critical Access Hospitals operate ambulance services may alienate long-established organizations that currently provide ambulance services in local communities, such as fire departments and local businesses.

- The options identified here are designed to take advantage of the skills of the existing paramedic workforce and to improve their retention. These options would require some State effort to coordinate the various activities.

Identify Long-term Goals and Objectives for an Emergency Transportation System.

The development of a highly effective and improved emergency transportation services system in Wyoming would be a longer-term objective because of the costs associated with developing a more sophisticated infrastructure, including communication systems, vehicles and equipment and technology. Given that there is an existing statewide EMS task force and the Commission's Subcommittee on Trauma and Catastrophic Care exploration of the topic, we believe the best option now is for these other efforts to identify specific goals and objectives and make certain that other rural health initiatives address those goals and objectives.

Advantage/Disadvantages and Other Considerations

Developing an effective emergency transportation system statewide would require significant state subsidies, as it would be very costly to operate these systems given the relatively small volume of patients in many areas.

Behavioral Health

Improving access to mental health and substance abuse services may require efforts beyond recruitment of professionals. Mental health professionals in Wyoming acknowledge that there is a cultural bias in the state against seeking help for mental health problems. In implementing the options identified above, the State may want to consider additional efforts to improve access to mental health services that address this cultural bias. For example, according to the National Conference of State Legislatures (NCSL), as of October 2003, every state, except Idaho, Iowa and Wyoming, has a statute on insurance benefits for the treatment

of mental illness and/or substance abuse.[236] The Wyoming Legislature considered a mental health coverage parity bill in 2001, but it failed to pass.

Although the State can affect mental and behavioral health service availability to the general population through a mental health parity law and support of the Division of Mental Health, these actions may do little for the Wyoming veterans who receive their mental health treatment through the Veterans Health Administration (VHA) facilities. Recent articles in the New York Times[237] and the Casper Star-Tribune[238] quote an Army study that showed that one in six soldiers in Iraq report symptoms of major depression, serious anxiety and or post-traumatic stress disorder. However, the New York Times quotes a September Government Accountability Office (GAO) report that found six out of the seven VHA medical facilities surveyed said they "may not be able to meet" increased demand for treatment of post-traumatic stress disorder. Depending on the number of soldiers returning to Wyoming, the prevalence of mental health disorders in this population, and the preparedness of the Wyoming VHA facilities to cope with rising demand for mental health services, the return of veterans to Wyoming may increase the demand and need for mental health services in the State.

Consider Specifically How Behavioral Health Issues Can Be Integrated In the Development and Implementation of Other Rural Health Initiative Options.

- Consider again a mental health parity act.

- Consider specifically how support can be given to the Division of Mental Health in the Wyoming Department of Health, as they indicate that there are many federal grants for which the state could apply.[239]

Advantages/Disadvantages and Other Considerations

- Passage of a mental health parity bill is likely to be difficult. Those who support such passage cite studies that demonstrate cost-effectiveness of behavioral health services and those who are opposed cite studies that show that overall expenditures will increase.

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[236] National Conference of State Legislatures, "Health Policy Tracking Service Issue Briefs Summary: Mental Health," (October 2003). Available online: http://www.ncsl.org/programs/health/hptsmental.htm.

[237] Scott Shane, "A Flood of Troubled Soldiers is in the Offing, Experts Predict," *The New York Times*, (December 16, 2004). Available online: http://www.nytimes.com/2004/12/16/national/16stress.html.

[238] Esther Schrader, "Soldiers' post-war trauma grows", *Casper Star- Tribune*, (November 18, 2004). Available online: http://www.casperstartibune.net/articles/2004/11/18/news/national/d29b2757adfe15fa87256f4c007abbf7.txt.

[239] Information from conversation between Jan Kruse and a representative of the Wyoming Department of Health, Division of Mental Health, (November 9, 2004).

- Medicaid expenditures could increase if additional behavioral health benefits are provided.

- Additional public education would be helpful to encourage specific recommendations regarding behavioral health services.

- Additional support for grant writing could provide additional needed funds to support initiatives which would address provider shortage areas.

Home- and Community-Based Services

While we were unable to obtain data on the number of patients served by home- and community-based organizations in Wyoming, we believe the projections of nursing facility bed need take into account the availability and use of these services.

Given the aging of the population, however, Wyoming should further study the demands that will be made for elderly services, home- and community-based services,

Develop and Maintain Statewide Projections Of Bed Need and For Home- And Community-Based Services.

Many states conduct bed need assessments to support the certificate of need process. In the absence of certificate of need programs, bed need projections can still be meaningful, given that Medicaid funds more than 49 percent of nursing home expenditures nationally,[240] any significant growth in the number of nursing home beds will have a significant impact on State expenditures, and some projections will assist in Medicaid budgeting efforts. Projections will also help the State determine the need for home- and community-based services and other elder services.

Advantages/Disadvantages

Additional State staff would be needed to support the development of the database and projections. The information derived from the study, however, would be invaluable to policymakers.

Develop Elder Care And Community-Based Services Alternatives.

- As we discussed earlier, our estimates of bed need take into account, to some extent, the availability of home- and community-based services, at least to the extent that they are currently available. Growing bed need, however, signals a

[240] Centers for Medicare and Medicaid Services. "Table 7: Nursing Home Care Expenditures." Available online: http://www.cms.hhs.gov/statistics/nhe/historical/t7.asp.

need for greater numbers of home- and community-based services. The State's various agencies that work to promote services for the elderly should work with communities to determine the need for services, where that need will be and if there is a workforce that can support that need. Where there is projected unmet need, these parties should work to recruit and retain a workforce that can provide these services.

- The projection of unmet needs and the potential need for providers should be communicated to parties involved in medical professional recruitment and retention to coordinate these efforts.

- A potential nursing shortage has especially serious implication for long-term care. Wyoming should develop education, recruitment and retention programs designed specifically to address the myriad of nursing workforce issues – from wage rates, to workplace conditions and culture, to the special concerns about nursing and long-term care, especially in view of the projected growth in the State's elderly population.[241]

Advantages/Disadvantages and Other Considerations

- Developing a database of providers will be a challenging task. Often, caregivers are family members who would not be "providers" for others. The development of a model to determine the exact number and type of caregivers needed in a particular location could be difficult, if not impossible.

- Determining estimates of the number of individuals who will be seeking home- and community-based care, however, will aid communities and relevant state agencies in developing alternatives to identify and finance services.

Strategies for Developing and Implementing Initiatives to Address Healthcare Needs

In Chapter 5 we discussed many initiatives that other states have used to address their rural healthcare needs. In this section, we offer some strategies for how Wyoming can develop and implement similar initiatives. We have identified the following rural healthcare initiatives because they address Wyoming's need to increase access to healthcare services; they are not discussed in order of priority for Wyoming.

It is essential that local communities participate in developing and implementing initiatives to address their needs and share in the funding of them, where appropriate. Joint State and local funding is critical to community ownership of the initiative and will increase the likelihood their success. In addition, there is funding available from HRSA, other Federal

[241] Wyoming Healthcare Commission, "Meeting Minutes," (October 25, 2004).

agencies and philanthropic organizations to help finance the initiatives. Appendix 10 of this report details Federal funding opportunities that Wyoming does not receive.

The strategies for developing and implementing the various initiatives that we identify below require networks of providers working together. They address ways that will allow networks to either bring people to services or services to people.

The matrix at the end of this section (Exhibit 6.1) provides implementation information on the primary state and community responsibilities, potential state and community funding sources, potential infrastructure requirements, the timeframe, and key indicators to evaluate success.

Non-Emergency Transportation Systems

In areas where the State determines that there is a lack of geographic access to core services, we recommend that options for improving access to services for these people focus primarily on providing for visiting healthcare professionals on a periodic basis or organizing transportation services to periodically transport people to where healthcare professionals are located. We recommend development of non-emergency transportation systems to provide reliable and scheduled transportation to communities where services are available.

Consider Developing Non-Emergency Transportation Options.

- Consider use of school buses or other public transportation (e.g., mini-vans, transportation for the elderly, etc.).
- Consider broadening the population for transportation services in communities that currently have such services available. Public Health Nurses report that where transportation services are available, they are either primarily for or only for the elderly.
- Consider involving churches in providing non-emergency transportation.

Advantages/Disadvantages and Other Considerations

- Some towns may not have public transportation resources, and the very low potential user volume may make the cost prohibitive.
- This option could also be implemented on a pilot project basis in two different places to test its value and applicability in other areas.

- This option also requires local community involvement in organizing and funding the service, especially if a subsidy were required due to the potentially low volume of patients.

- May not be practical for families who need to travel regularly to obtain hospital services or visit relatives in hospitals for longer periods (e.g., rehabilitation care).

Mobile Services

Mobile services provide another means by which Wyoming can expand access to those communities that lack geographic access.

Expand Mobile Services.

- State-level efforts should be implemented to purchase and staff mobile vans or contract with mobile van providers, in conjunction with County Health Departments and community hospitals. These mobile vans could provide:

  - Primary care and diagnostic services, as well as telemedicine services, where feasible

  - Screening and preventive dental services

- Our research indicates that there are a number of companies that sell or lease mobile service vans and some that work with local providers to staff vans.

- Consider use of retired medical professionals to assist with training or providing services (currently, retired professional in Wyoming who are interested in volunteering their services pro bono are granted volunteer licenses.)

Advantages/Disadvantages and Other Considerations

- Funding could be an issue, particularly in areas where there are very small numbers of patients. States subsidies might be needed to promote viability of services.

- Communities must educate their residents about the availability of services to make sure that there are a sufficient number of patients for mobile services.

- This option also requires local community involvement in organizing and funding the service, especially if a subsidy were required due to the potentially low volume of patients.

- The State would need to consider whether there should be any regulations regarding mobile vans. In North Carolina, for example, state officials reported that mobile vans would screen Medicaid children and take x-rays. The provider charged the Medicaid program and was paid, but there was no follow-up, i.e., the mobile van moved on to other communities, along with the records (and x-rays) and did not return to the communities to provide follow-up care.

Education, Training and Recruitment

Education and training of health professionals is an essential tool for states to increase the supply of health professionals in rural areas, and should be centrally coordinated at the State level with regional involvement. Wyoming has already implemented a number of programs.

Wyoming has also undertaken a number of efforts aimed at recruiting physicians and other medical professionals. As we discussed in our Deliverable 3 report, the Wyoming Health Resources Network participated in the placement of 77 permanent healthcare providers, including 44 physicians, 21 physician assistants and 12 nurse practitioners, in 20 of the 23 Wyoming counties.[242]

Wyoming's lack of a medical school precludes it from implementing some of the approaches used by other states; Wyoming does participate, however, in the WWAMI regional medical education program by funding medical school tuition loans for Wyoming students and offering a service "payback" in exchange for loan repayment, by offering medical clerkship sites in several Wyoming towns in primary care and obstetrics and gynecology and by sponsoring two Family Practice residency programs. The Wyoming Legislature recently increased the WWAMI program class size from 10 to 12 students for 2005 and to 16 students for 2007. There are opportunities to build on these efforts.

As the funding and loan repayment program approved by the Wyoming Legislature is implemented, the program should be targeted to help address professional shortages and, especially, primary care physicians, OB/GYNs and mental health professionals, and in the communities we have identified as most in need of these professionals.

The funding and loan repayment program allocates loan repayment for 10 physicians and dentists with a maximum of $30,000 per person per year for three years and for 10 allied health professionals for a maximum of $10,000 per person per year for three years. The legislation also specifies that the health professionals who are recipients of the loan repayment program must agree to practice for three years in Wyoming and serve public patients. The Office of Rural Health of the Department of Health has responsibility for

[242] Wyoming Health Resources Network. Available online: http://www.whrn.org

defining which professions will be eligible for the allied health professional loan repayment program and for specifying the criterion regarding the provision of services to public patients.

Consider Other Financial Options.

- Expand the State-funded loan repayment program by developing a 50/50 community and state matching program, e.g., a community could fund 50 percent of the loan repayment and the State could match those funds. The State could consider using a portion of the revenue it collects from professional licensing fees to fund this program.

- Consider tax incentives/credits (such as property tax credits) for health professionals who are willing to establish practices in communities with professional shortages.

- Target State funds to programs that give strong financial incentives to students who remain in or return to Wyoming. For example, through the Western Interstate Compact for Higher Education, students' tuition at out-of-state institutions is subsidized, but there is no requirement that they practice their professions in Wyoming.

- Monitor all state-funded programs to ensure they are working in harmony and are designed to meet similar objectives.

- Determine how best to solicit information from program participants, e.g., to determine what works and what does not work. Wyoming should monitor the impact of the new legislation and other publicly funded programs to determine which efforts have been most successful. Periodic changes in recruiting direction may be necessary to respond to changes in the Wyoming environment.

- Determine the feasibility of recruiting and training more mid-level professionals.

- Increase emphasis on training of local residents to fill health professional positions.

Wyoming may also want to consider other efforts, including the following:

- Develop a coordinated effort to have community welcoming groups that conduct tours for professionals considering locating in the area and provide assistance to their spouses in finding local employment.

- Explore with hospitals and other institutional providers the need for and feasibility of nursing salary and wage structure changes that reward higher levels of educations, and identify funding options that will reimburse these costs (e.g., Medicare pays Critical Access Hospitals 101 percent of their costs).

- Continue the program to recruit high school and younger students for various professions in which there are shortages.

- Work with medical and dental societies to identify funding and other opportunities to sponsor students with potential interest in the medical and dental professions.

Advantages/Disadvantages and Other Considerations

- Given that the Wyoming Legislature approved expenditures for the funding and loan repayment program, as well as enhanced payments for Medicaid OB/GYN services, options that seek additional state funds may not be considered favorably. However, these options do present some opportunities for community involvement in improving access in their communities.

- Convincing institutional and other providers to develop salary and wage structures that pay nurses higher salaries and wages based on their levels of education will be difficult, given competing demands by other employers.

- Many options rely on community involvement – with both time and financial commitments. Community involvement is beneficial in that it is community members who can best identify resource needs; however, some communities may lack the financial support needed to implement some of these options.

Retention of Medical Professionals

Lifestyle issues and maintaining professional connections and skills are important factors for physicians and other professionals who practice in rural communities. Some options for addressing these factors that Wyoming may want to consider are listed below.

Encourage Retention of Medical Professionals.

- Contract with private firms that provide locum tenens coverage to enable rural physicians, dentists and mental health professionals to pursue continuing

medical education opportunities or to take vacations.[243] Consider shortage areas identified in this Study as a priority.

- Use distance learning technologies to bring continuing medical education and training to rural physicians.

Advantages/Disadvantages

These efforts require local community support and funding, and may be difficult to implement because of start-up coordination requirements.

Telemedicine

Telemedicine can overcome geographic and economic access barriers to improve healthcare access. It is essential to the concept of developing, connecting and supporting a regional health services delivery network. Telemedicine can be used to deliver primary and specialty care, to link primary care providers with specialists, or to provide training.

It is our understanding that Wyoming has recently received Federal funding to develop telemedicine projects throughout the State and that Wyoming plans to form an advisory committee that will oversee the funding and development of telemedicine projects.

Expand Telemedicine Services.

- Coordinate a state-level effort to build the infrastructure and to avoid duplication.

- Continue to build on existing telemedicine capacity to enhance capabilities and serve areas with greatest access issues. Give consideration to communities with specific shortages that cannot support medical or other professional practices due to their size.

- Continue to develop supervision guidelines for telemedicine services and develop and implement quality assurance activities.

- Coordinate with the Veterans Administration services in Wyoming to explore possible synergies with the Veterans Administrations' telemedicine services.

[243] We did find evidence that some locum tenens companies were seeking physicians for positions in Wyoming, but could not determine if these searches were being conducted on behalf of hospitals or other organizations in Wyoming.

- Provide communications and educational assistance to healthcare professionals about telemedicine so they will be comfortable with the technology.

- Provide hospitals and other healthcare facilities assistance with grant applications to fund telemedicine projects. For example, the United States Department of Agriculture (USDA) issues grants on a limited basis, for projects costing between $20,000 and $50,000.

- Work with private payers to remove barriers to their payment for telemedicine services.

- Assess the feasibility of using telemedicine in ambulances as some states are doing.

Advantages/Disadvantages and Other Considerations

- Telemedicine requires development of an infrastructure and potentially more resources at the state level to coordinate activities. In other states, one of the biggest problems regarding the use of telemedicine is physician opposition to it. Physician telemedicine "champions" can inform their peers about the uses and benefits of telemedicine services.

- The lack of reimbursement for telemedicine can be a major barrier to its use. Medicaid covers telemedicine services, as does Medicare if the service is provided in a HPSA or outside a metropolitan statistical area. However, Blue Cross and Blue Shield of Wyoming does not cover telemedicine services. Wyoming could make telemedicine a mandated insurance benefit to encourage use of telemedicine services.

- A supportive infrastructure is critical to the success of telemedicine. A centralized effort is needed to avoid duplication and make sure that appropriate services are provided in areas of greatest need. There could be challenges as the State determines when and how to make resources available. It may be difficult to coordinate the development of an infrastructure if hospitals and clinics are acting independently to acquire and use technology.

- The lack of paramedics in ambulances may limit the feasibility of using telemedicine in ambulances.

Licensure, Expanded Scope of Practice and Cross-Training

Wyoming has permitted a fairly broad scope of practice for practitioners such as physician assistants, advanced practice nurses and licensed midwives. A recent effort to allow

psychologists to administer medications was not passed by the Wyoming legislature. Based on other states' experiences, it appears Wyoming may be doing what it can in the scope of practice area.

We note, however, that Wyoming Medicaid does not allow clinical social workers to bill separately for services they provide to Medicaid patients; instead, a psychiatrist must bill these providers' services. If Medicaid were to allow these providers to bill separately, access to some services may be improved.

In addition, utilization of physician assistants, nurse practitioners and clinical social workers should be monitored to determine if more care could be directed to these practitioners to free up access to physicians in any shortage areas that the State identifies.

Consider Options Related to Cross-Training.

- Educate and train primary care providers (including nurses, physicians, physician assistants and nurse practitioners) to perform basic dental screening and to apply fluoride varnish to children's teeth, as well as to perform mental health screening and treatment.

- Consider expanding the role of the public health nurses in coordinating and providing more services, as well as providing services described above.

Advantages/Disadvantages and Other Considerations

- Cross-training of medical professionals to provide dental services has been controversial in some states. Wyoming can overcome these concerns with communication and careful coordination. The acceptance and assistance of medical, dental and other professional associations is crucial. The State should conduct a communication program to ensure that providers support this option.

- Expansion of the role of the public health nurses builds on an existing resources structure. Public health nurses currently provide a variety of healthcare services and are very knowledgeable about the services that are available throughout the county. Improvement in their pay scales could provide incentives for them to participate in cross-training efforts to broaden their service scope. However, wage increases for public health nurses are regulated by State policy and additional funding would be necessary for improved pay scales and to hire more nurses to expand service offerings. In addition, we understand that there may be vacancies in public health nurse positions that are unfilled now.

- If more physician assistants, nurse practitioners and clinical social workers can provide services throughout the State on their own, this might suggest

opportunities for recruiting efforts targeted at these professionals. This, together with cross-training, may provide flexibility in communities that cannot support a full-time primary care physician.

- Continuity of care can be a concern if clinics, programs are not scheduled with a regular frequency.

- Development of pilot projects, with evaluation at the end of the project, will be helpful in determining if this option works to improve access.

Centralized Databases

Develop a Statewide Database that Contains Practitioner Information that can be Linked to Current and Projected Population Data.

The State should develop a central repository of data regarding health professionals and their availability, and continue to monitor areas. The State should consider the availability of services in out-of-state areas in planning for service delivery.

It is not surprising that we had difficulties in determining the numbers and locations of medical professionals. Other states have experienced similar difficulties. Other states, too, have pointed to the need for statewide databases that allow them to measure access at given points in time and monitor the efforts they implement to improve access.

The database should be complete, current and readily available. As we demonstrated in this Study, there are various sources of data that provide information on the number and location of providers. We supplemented these data with other information we obtained through the comment process. Wyoming should continue to update these databases periodically to monitor the impacts.

Advantages/Disadvantages and Other Considerations

- State staff would be needed to maintain this database. There would need to be coordination across various agencies that currently collect information.

- As we demonstrated through completion of our Study, identifying every Wyoming healthcare provider and his or her location is a daunting task. We believe that the information that we have gathered thus far, however, provides baseline data that can be updated periodically for monitoring purposes.

Develop a Statewide Professional Workforce Planning Database, Encompassing All Healthcare Professions, To Coordinate Recruitment Efforts To Make Certain They Are Targeting The Communities Most In Need.

In addition to the database that contains practitioner and population information, Wyoming should develop and maintain a database that contains information on medical professionals' recruitment. This database would allow the State to define recruitment goals and objectives based on current information regarding shortage areas. This database should also be developed to allow users to monitor the various programs that are being used across the State for their effectiveness.

Advantages/Disadvantages and Other Considerations

State staff would be needed to maintain this database. Coordination across all parties responsible for developing recruitment programs would be needed. There may be some concerns about data sharing if parties believe that priorities will be established that are not consistent with goals and objectives.

Schools, Churches and Other Community Settings

The State may want to consider provision of services in schools, churches and community settings as a way to increase access to primary care and preventive services to those rural communities that lack primary care access.

Provide Services in Schools, Churches and Other Community Settings.

- Recruit visiting physicians, dentists and other medical professionals to provide primary and preventive services in churches and schools, and combine efforts with telemedicine opportunities.
    - This effort should be coordinated at the State level to attract physicians and other professionals to participate in visiting programs, but with County Health Department participation.
    - If locum tenens could be used, County Health Departments could organize these efforts with joint State and County funding.
- Evaluate the current school-based services pilot and expand to additional Medicaid and non-Medicaid populations as well as adult populations, as feasible.

Advantages/Disadvantages and Other Considerations

- Funding could be an issue, particularly in areas where there are very small numbers of patients. State subsidies might be needed to promote viability of services.

- Communities must educate their residents about the availability of services to make sure that there are a sufficient number of patients for services provided in community settings.

- Continuity of care can be a concern if clinics, programs are not scheduled with a regular frequency.

- Development of pilot projects, with evaluation at the end of the project, will be helpful in determining if this option works to improve access.

Exhibit 6.1 on the following page provides implementation information on the primary state and community responsibilities, potential state and community funding sources, potential infrastructure requirements, the timeframe and key indicators to evaluate success.

Exhibit 6.1: Strategies for Developing and Implementing Initiatives to Address Healthcare Needs

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Non-emergency transportation	• None	• Coordination of local efforts to identify sources of transportation and to provide transportation services • Community leaders should identify potential transportation sources	• Potential community subsidies to support transportation services	• Build on current availability	• Short-term, depending on funding needs	• Numbers of individuals transported to priority health services • Demonstrated improved access in shortage areas
Mobile services	• Procure mobile van services and develop community education program about these services. • State oversight of any state-contracted mobile van services	• Identify opportunities for expansion of services. • Identify providers to staff mobile vans.	• Some State funding to initially contract for mobile van services; community funding to support mobile van services • Potential State subsidies of mobile services in very low-volume areas • Additional State funding of Medicaid services if school-based pilot programs expanded	• State staff	• Mobile van – short-term and then ongoing	• Numbers of priority health services provided • Demonstrated improved access in shortage areas

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xii]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Education, training and recruitment of health professionals	• Coordinate training efforts, such as training for EMS personnel and other emergency services providers. • Develop approaches to measure results of new initiatives.	• Implement programs to familiarize recruits and spouses with communities. • Determine approaches to assisting with recruitment, such as job placement for spouses, etc. • Enlist support of hospitals in providing recruitment financial incentives. • Explore with hospitals and nursing homes the need for and feasibility of nursing salary changes.	• Continued State support of loan forgiveness program. • Communities should match State dollars for loan repayment programs and other grants. • Hospitals should fund physician incentive programs.	• State staff (Department of Health) to oversee development of priorities, strategies; implement and monitor loan forgiveness program and other efforts. • Legislation to require local matching funds for loan repayment programs.	• Set initial priorities – short-term • Obtain funding – ongoing • Communication – ongoing • Training efforts for EMS and other emergency services personnel – short-term and then ongoing	• Increase in number of medical professionals • Improved utilization[xiii] of services of certain providers in specific priority communities • Satisfaction surveys, questionnaires to physicians, other medical professionals, spouses, etc. to determine which programs work and which do not • State/local/other initiatives have common goals and objectives (i.e., focus on priority areas)

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Education, training and recruitment of health professionals (cont'd.)		• Work with high schools to recruit local students for health professions. • Enlist support of hospitals to host and conduct training. • Recruit provider volunteers to help recruit local students. • Develop programs to train local residents to fill health professional positions. • Develop community welcoming groups for new medical professional				

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Retention of health professionals	• Develop locum tenens programs to provide physicians with opportunities to temporarily leave their practices for continuing education and vacation. • Coordinate contracts with locum tenens firms. • Implement a public information and education program to promote locum tenens programs in communities.[xiv]	• Work with other communities and hospitals to enlist the support of hospitals in identifying opportunities for physicians and other medical professionals to enhance and update their skills, and to provide incentives to physicians and other professionals to remain in the community, such as tuition support for dependents; approaches will be community- and provider-specific.	• Community funding for locum tenens opportunities • State support • Hospitals/ communities to provide financial incentives for retention • State and community funding to support development/ endorsement of infra-structure for distance learning technologies	• State staff to develop statewide contract with locum tenens programs; provide public information and education, coordinate training events • Technology to support education efforts; potentially, build upon technologies available at University of Wyoming, community colleges, hospitals	• Contract with locum tenens firm – short-term • Public education – short-term and then ongoing • Technology – mid-term	• Number of physicians and other medical professionals who take advantage of locum tenens contracts and other incentive programs • Improved retention rates • "Satisfaction Survey" to evaluate programs and determine which programs work and which do not

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Retention of health professionals (Cont'd)	• Develop distance learning technologies to bring community medical education and training to rural physicians.					

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Telemedicine	• Coordinate a State-level effort to build a telemedicine infrastructure. • Provide communications and educational assistance to healthcare professionals about telemedicine. • Assist local communities with grant applications. • Make telemedicine a mandated benefit. • Develop supervision guidelines. • Develop third-party billing guidelines.	• Coordinate with other counties and communities as well as the State regarding implementation of telemedicine programs. • Encourage cooperation of hospitals in building a statewide system. • Assess feasibility of using telemedicine in ambulances.	• Enact legislation to require discounts to critical access hospitals for telecommunication services • State, community and provider funding to acquire telemedicine capacity • Identify grant/assistance opportunities or, consider State subsidies for line charges for shortage areas.	• State staff • Inventory and build on current infrastructure when possible. • Implement statewide communications hardware and software protocols to integrate systems.	• Integrated telemedicine system – mid-term to long-term • Communication and education – short-term and then ongoing • Reduce barriers to third-party payments for telemedicine services – requires legislation; mid-term • Assess feasibility of using telemedicine in ambulances – short-term	• Increased grant funding for telemedicine • Increased utilization of telemedicine services • Improved utilization of services in shortage areas where telemedicine has been implemented • Consumer reports of satisfaction with telemedicine services

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Licensure, scope of practice and cross-training	• Evaluate utilization to determine if more can be done to encourage utilization of mid-level professionals, to improve availability of physicians in shortage areas. • Coordinate cross-training of providers. • Expand role of public health nurses. • Assess feasibility of allowing clinical social workers to bill separately.	• Enlist support of hospitals and other community providers to conduct training.	• State support	• State staff to monitor utilization, conduct public and provider education to encourage using mid-level professionals • State participation to coordinate cross-training efforts, establish policies and monitor quality	• Monitoring use of mid-level professionals – mid-term and then ongoing • Cross-training – short-term and then ongoing	• Higher utilization of physician assistants, nurse practitioners and clinical social workers • Higher overall utilization of services in shortage areas

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Centralized databases	• Develop statewide database that contains practitioner information, population data and other healthcare data. • Develop statewide professional workforce planning database. • Develop process for updating database. • Track results of specific initiatives. • Identify other data needs (e.g., data to track the number of individuals served by new initiatives, etc.).	• Provide input to statewide effort.	• State funding to support staff to build and maintain database	• State Office of Rural Health or other Department of Health agencies	• Short-term – assign staff to build on Navigant Consulting database	• Availability of up-to-date information for state agencies, counties, other parties to track numbers of medical professionals and population in geographic areas • Availability of up-to-date information for state agencies, counties, other parties to track numbers of medical professionals

Initiative	Primary State Responsibility	Primary Regional/ Community Responsibility	Potential State, Regional and Community Funding[xi]	Potential Infrastructure/ Administrative Requirements	Timeframe	Key Indicators to Evaluate Results
Schools and churches	• Evaluate the school-based services pilot and expand, if feasible. • Provide administrative support to school districts with school-based services.	• Enlist support of churches, other community centers to develop service provision sites.	• Additional Medicaid funding for school-based services • Grant funding from the National Assembly on School-based Health Care • Grant funding from the Centers for Disease Control and Prevention Healthy Youths Program	• State staff • Expansion of equipment and staff in school-based health clinics	• Assess feasibility of expanding current school-based services pilot program (current pilot ends in 2006) – mid-term • Administrative support to school districts – ongoing	• Number of priority health services provided • Demonstrated improved access in shortage areas

[xi] Additional funding is provided by HRSA for the development and support for many of these initiatives. See Appendix 9 and 11 for more information on these grant opportunities.
[xii] Additional funding is provided by HRSA for the development and support for many of these initiatives. See Appendix 9 and 11 for more information on these grant opportunities.
[xiii] By improved utilization, we mean utilization of services that are cost-effective, medically necessary and provided in the most appropriate setting.
[xiv] We hear anecdotal evidence that some local hospitals have not responded to requests from local physicians for such support and, as a result, have lost physicians.