APPENDIX 6: VETERANS HEALTH ADMINISTRATION INFORMATION

There are two Veterans Health Administration (VHA) hospitals in Wyoming – one in Sheridan and one in Cheyenne – and outreach clinics in Casper, Gillette and Riverton. Although the VHA system provides valuable healthcare services for many veterans in Wyoming, not all veterans use the VHA system. Many veterans seek services outside of the VHA system. Rural healthcare planning in Wyoming must consider that veterans use the private healthcare system as well as or instead of the VHA system. It is also important to consider that veterans, who live in other states, may be using the services of the Wyoming VHA system.

Veterans' use of the VHA healthcare system varies county by county and depends on the availability of VHA services and the number of veterans that reside in the area. Table 1 shows projections of the veteran population as a percent of the total population projection, by county, for 2005, 2010, 2015 and 2020. Currently, Laramie County has the largest percentage of veterans in the State. This larger concentration of veterans can be explained by the location of F.E. Warren Air Force Base in Laramie County.

Table 1: Veteran Population as a Percent of County's Total Population[1]

County	2005	2010	2015	2020
Albany	9.2%	9.3%	9.0%	8.6%
Big Horn	10.3%	9.0%	8.2%	7.5%
Campbell	8.5%	8.0%	7.2%	6.6%
Carbon	12.9%	11.9%	11.1%	10.4%
Converse	11.1%	10.1%	9.1%	8.5%
Crook	11.1%	10.0%	8.9%	8.0%
Fremont	10.8%	10.1%	9.5%	9.0%
Goshen	10.7%	9.7%	8.8%	8.0%
Hot Springs	13.9%	12.6%	11.7%	10.3%
Johnson	12.1%	10.5%	9.1%	7.9%

[1] Data Source: Office of the Actuary, Office of Policy and Planning, Department of Veterans Affairs, "VetPop2001 Adjusted to Census 2000." Available online: http://www.va.gov/vetdata/demographics/Vetpop2001adj/BASIC/Counties/County Data-Living/WY.xls.

Table 1: Veteran Population as a Percent of County's Total Population[2] (Cont'd)

County	2005	2010	2015	2020
Laramie	14.6%	13.6%	12.5%	11.8%
Lincoln	8.6%	7.5%	6.7%	6.0%
Natrona	10.3%	9.7%	9.1%	8.5%
Niobrara	11.8%	10.9%	10.4%	9.6%
Park	10.8%	10.0%	9.4%	8.7%
Platte	13.7%	12.3%	11.3%	10.2%
Sheridan	13.1%	12.2%	11.5%	10.7%
Sublette	9.6%	8.4%	7.5%	6.6%
Sweetwater	10.4%	10.2%	10.0%	9.8%
Teton	8.0%	7.5%	7.0%	6.6%
Uinta	7.8%	7.5%	7.0%	6.7%
Washakie	11.0%	9.9%	9.0%	7.9%
Weston	11.9%	10.7%	9.8%	8.9%
Total	**11.1%**	**10.3%**	**9.6%**	**8.9%**

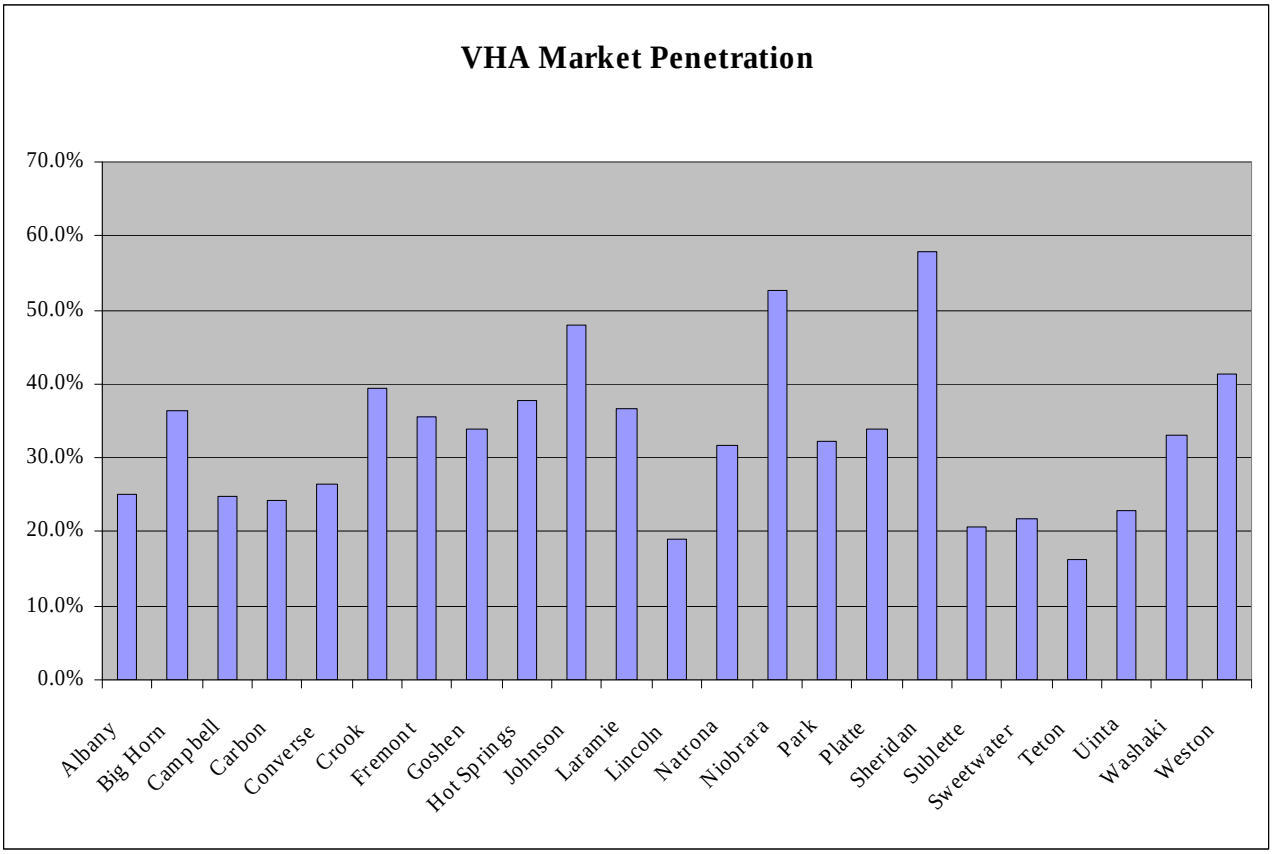
Nationwide, most veterans do not use the VHA system when they need healthcare. According to the 2001 National Survey of Veterans, nearly 77 percent of veterans used only non-VHA healthcare services during the previous year. Only 7 percent of veterans used the VHA system exclusively for healthcare, while 16 percent used both VHA and non-VHA services.[3]

In Wyoming, there is wide variation by county in the percent of veterans who use the VHA system. Figure 1, on the next page, shows VHA market penetration – the percentage of veterans who use the VHA healthcare system - for each county.

[2] Data Source: Office of the Actuary, Office of Policy and Planning, Department of Veterans Affairs, "VetPop2001 Adjusted to Census 2000." Available online: http://www.va.gov/vetdata/demographics/Vetpop2001adj/BASIC/Counties/County Data-Living/WY.xls.

[3] Department of Veterans Affairs, "2001 National Survey of Veterans." Available online: http://www.va.gov/vetdata/SurveyResults/.

Figure 1: Percentage of Wyoming Veterans That Use Veterans Health Administration System by County[4]



[4] Data Source: Department of Veterans Affairs, "% FY04 Market Penetration." (Received by fax from Craig Calvert on January 12, 2005).

APPENDIX 7: MATRIX OF OTHER STATES' RURAL HEALTHCARE INITIATIVES

Program or Activity: Non-Emergency Transportation

New Mexico	Vermont	North Dakota	Other States
	• **Coordination of Regional Transportation –** Several regional transport agencies in Vermont coordinate transportation for medically necessary travel for those who are Medicaid eligible.[1]	• **Public School Transportation and Health Care Access –** BlueCross BlueShield of North Dakota awarded a grant to study the feasibility of using public school transportation for health care access in southwestern North Dakota.[2]	• **School Buses and Senior Transportation –** Washington State has had success using school buses for senior transportation.[3] • **Hub and Spoke Transportation Model –** The Brazos Valley Health Partnership in central Texas uses vans to transport residents in seven surrounding rural "spoke" counties to non-emergency health services. Two vans transport patients to services within their areas, while a third van supplies service from rural areas to the "hub" in Brazos County.[4]

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Program or Activity: Mobile Services

New Mexico	Vermont	North Dakota	Other States
• **Mobile Dental Van –** Covenant Health System in Lubbock, TX has a mobile services program, which includes a mobile dental van in New Mexico for children and a primary care mobile clinic.[5]	• **VanGo –** Vermont used a HRSA Rural Health Outreach Grant to provide health and health education services to rural residents using a mobile unit called "VanGo." Vermonters who are in need of health services, but are unable to access services because of transportation, finances, or lack of knowledge of availability of services can use the "VanGo" unit. The target population includes families with infants and young children, senior citizens and those who are underinsured or uninsured.[6]		• **Mobile Dental Clinic –** The University of Southern California has a Mobile Dental Clinic that visits elementary and high schools to provide dental services such as X-rays, cleanings, fluoride treatments and extractions.[7] • **Mobile Mental Health –** A mobile clinic in an underserved county of rural Virginia provides Mental Health services to women two days a week.[8] • **Mobile Mammography –** The Navajo reservation used federal breast and cervical cancer screening program funds to subsidize a mobile mammography unit.[9]

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Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
• **The Business of Recruitment and Retention –** New Mexico Health Resources, Inc. (NMHR), a private, non-profit agency, is organized to support efforts to recruit and retain healthcare personnel in New Mexico.[10] *The Wyoming Health Resources Network serves a similar function for Wyoming.*[11] • **Family Practice Residency; One-Plus-Two Program –** The One-Plus-Two Program at the University of New Mexico trains family practice physicians while helping to meet the needs of the underserved rural population. This program involves the first year at a large urban teaching center and the last two years at a rural community hospital.[12] *The University of Wyoming sponsors a similar Family Practice Residency Program in Cheyenne and Casper.*[13] • **Area Health Education Centers (AHECs) –** New Mexico's AHEC program provides clinical experience in rural areas for residents, medical, nursing, pharmacy and allied health students. AHEC assists in developing rural placement sites and provides travel reimbursement and housing support.[14] *Wyoming's AHEC program is housed at the University of Wyoming.*	• **Scholarships for Rural Health Service –** The University of Vermont College of Medicine will provide $1.6 million in scholarships annually for the next four years to in-state students and a select group of out-of-state students who demonstrate a willingness to commit to practicing medicine in Vermont. Funding of $400,000 per year will be allocated to support a program aimed at educating students about rural health care.[15] • **Rural Clerkships and Rotations –** The University of Vermont College of Medicine's rural health promotion strategies include a mentoring program in which students are paired with a community physician and clerkship rotations in rural communities across the State.[16] *Students in the WWAMI program may also attend clerkships and fourth year electives in several sites throughout Wyoming. The WWAMI Rural Integrated Training Experience (WRITE) clerkship in Powell allows the students to complete their family medicine clerkship, and large portions of psychiatry, medicine and pediatrics at this site.*[17]	• **Rural Training –** The University of North Dakota Department of Family Medicine conducts the Rural Opportunities for Medical Education (ROME) program for third-year medical students. This program enables students to live and train in non-metropolitan communities to encourage them to practice in rural areas throughout the State of North Dakota.[18] *WWAMI's Rural/Underserved Opportunities Program is similar in that it places medical students in a four-week fellowship in rural communities.*[19] • **Rural Health Research Centers –** The University of North Dakota has a Rural Health Research Center funded by HRSA.[20] *WWAMI also receives HRSA funding for its Rural Health Research Center.*[21] • **Provider Access to Information –** The University of North Dakota's medical school library received a grant from the National Library of Medicine to improve the level of access to information available to rural providers to improve their information seeking skills.[22]	• **Rural Clerkships –** The Idaho Track program allows WWAMI students to complete all third-year clerkships with the State of Idaho.[23] • **One-Plus-Two-Program –** The University of California campuses in Davis, Merced and Redding have One-Plus-Two programs similar to New Mexico's program. • **Area Health Education Centers (AHECs) –** Arizona, Colorado, Nevada and North Carolina also have Area Health Education Center programs. • **Federal and Community Loan Repayment –** Colorado's Health Professions Loan Repayment Program repays qualified educational loans up to $70,000. This program is funded by the Health Professional Shortage Area (HPSA) community in which the provider will be working and with matching funds from the National Health Service Corps.[24] • **Practice Start-Up Grants –** The State of Colorado provided practice start-up grants to dental facilities and practitioners who agreed to serve children who qualified for the State Children's Health Insurance Program or Medicaid.[25]

Wyoming Rural Healthcare Study, Appendices: Appendix 7

Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
• **Ryan White AIDS Funding and Rural Health –** New Mexico uses Ryan White funds for AIDS Education and Training Centers that provide training including AIDS prevention and treatment for rural health care providers.[26] • **Training in Recruitment and Retention –** New Mexico Health Resources (NMHR) provides training to agencies that are interested in improving recruitment and retention of healthcare professionals. The objectives of this program include developing connections between rural communities and centralized library resources.[12] *Wyoming's Center for Rural Health Research and Education (CRHRE), at the University of Wyoming, serves a similar function.*[27] • **Locum Tenens –** The program allows primary care physicians relief for continuing education, vacation, illness or assistance while recruiting. The program exposes upper level primary care residents and recent graduates to practices recruiting for primary care physicians.[28] *Locum tenens is being used in Wyoming as well. Private organizations often post locum tenens positions.*	• **Federal Efforts at Recruitment –** Vermont uses federally funded programs including loan repayment and loan forgiveness programs, underserved designations, J-1 visa waivers, National Health Service Corps staff and the Rural Hospital Flexibility Program.[29] *Wyoming also uses all of these methods to recruit health professionals into the state.*[30] • **Recruitment from Rural Areas –** Vermont has programs that identify students in the "pipeline" and recruit them into healthcare training and professions.[31] *The University of Wyoming Colleges of Health Sciences WWYAMI Medical Education Program and the Office of Multicultural Affairs offer a seven-week program for students who have completed their junior and senior year in high school to foster and encourage their interest in the medical profession. The program, known as U-DOC, offers students a preview of college life; they take an overview of pre-med curriculum, explore medicine as a career, learn about the various physician specialties and get exposure to clinical medicine through a physician mentor.*[32]	• **On-Site Training –** The University of North Dakota School of Medicine and Health Sciences teaches on-site in mental health centers, alcoholic treatment units and public health clinics, and has partnerships with teaching hospitals including the Veterans Administration Medical Center in Fargo and the United States Air Force hospitals in Minot and Grand Forks.[33] • **Recruitment from Rural Areas –** North Dakota has programs that identify students in the "pipeline" and recruit them into healthcare training and professions.[34] • **State and Community Loan Repayment –** North Dakota has a 50/50 state and community match loan repayment program. This program is available to individuals in their last year of training or to physicians already practicing in a medical shortage area.	• **Other Loan Repayment –** Montana and West Virginia's health loan repayment programs are funded using student fees. Florida's nursing loan repayment program is funded with health licensure fees.[35] • **Non-Educational Financial Incentives –** Financial incentives, including bonuses and income supplements, are offered by states, local communities and the private sector to attract providers to specific geographic areas, types of facilities or services.[36] • **Tax Credits –** Oregon offers a $5,000 income tax credit for certain health professionals serving rural communities.[37] Five other states, including Alabama, Georgia, Louisiana, Montana and Virginia use tax credits as a financial incentive to attract providers.[38] • **Medicaid Reimbursement and High Risk Services –** Alabama increased Medicaid reimbursement for "high risk" services to offset the medical malpractice premium costs. • **Malpractice Subsidies –** Illinois awards grants to physicians practicing obstetrics in rural shortage area to cover the cost of malpractice insurance. Maine also provides subsidies to similar providers.

Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
• **Rural Rotations –** New Mexico has a community-oriented learning educational curriculum extended to the rural setting, which includes clinical rotations with rural tutors and preceptors.[39] *Students in the WWAMI program may also attend clerkships and fourth year electives in several sites throughout Wyoming.*[40] • **Practice Relief and Specialty Outreach –** Specialty Extension Services provide practice relief and regular outreach clinics with emphasis on the specialty needs of New Mexico's rural communities.[41] • **Recruitment from Rural Areas –** New Mexico has programs that explicitly seek to identify and recruit students from rural areas who presumably understand the realities of rural life and are more likely to return to a rural area when they complete training.[42] • **Veterans Affairs Partnership –** The New Mexico VA Health Care System is a leader in providing rural health care services. It opened its first VA-staffed community based outpatient clinic (CBOC) in Farmington, NM in 1987 and its most recent CBOC was opened in the Santa Fe area in January 2002.[43]	• **Dental Subsidies and Medicaid –** Vermont established a program that subsidized a dental practice in return for the dentist's commitment to treat a specified volume of Medicaid patients. Local community partners used state and private foundation grants to purchase dental equipment and cover start-up costs. The program provides access to dental care for the community, including Medicaid recipients.[44] • **Training Nurses in Rural Health –** Vermont's Department of Employment and Training established a rural health program to train critical care, operating room and psychiatric nurses.[45] *Campbell County Memorial Hospital's Northeast Wyoming Rural Nursing Internship Program, which is funded by HRSA, is a similar program that trains and increases retention rates of nurses in rural areas.*[46]		• **Malpractice Immunity –** Some states make providers immune from liability when providing charity care.[47] • **State Provided Malpractice Insurance –** West Virginia's Board of Risk and Insurance Management offer preferred and high-risk premiums to providers who cannot find affordable coverage in the private market. • **Emergency Room (ER) Coverage –** Hospitals in rural Nevada recognized that ER coverage is a factor discouraging physicians from locating in rural areas. To attract physicians to their area, hospitals paid local physicians to take ER duty or contracted privately for ER coverage. • **Computerized Rural Match –** Several states, including Minnesota, New Hampshire, North Carolina and Oregon maintain a centralized computerized database on communities and provider practices and health professionals seeking in-state positions to facilitate the matching process.[48] • **Recruitment from Rural Areas –** West Virginia and Mississippi[49] have programs that identify students in the "pipeline" and recruit them into healthcare training and professions.[50]

Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
	• **Rural HIV/AIDS Training –** The University of Vermont implemented and developed three HIV/AIDS clinics in rural areas across the State. Before the development of these rural clinics, there was only one HIV/AIDS clinic in the State. Primary care physicians in rural areas report wanting to participate in "mini-residencies" within these clinics to stay up-to-date with current HIV/AIDS information.[51]		• **Health Education Industry Partnership (HEIP) Led by Minnesota State Colleges and Universities (MnSCU) –** HEIP seeks to bring health employers, educators and government partners together to develop relevant, forward-thinking health care education programs. Two current innovative programs include a multi-sector partnership to develop training for community health workers focusing on minority communities and a program emphasizing increasing the number of nursing faculty in order to increase the capacity of the educational system.[52] • **Reimbursement for Volunteer Dental Service –** Minnesota created a program to reimburse retired dentists for the cost of license renewal and malpractice insurance if they perform 100 hours of volunteer dentistry in a year. Georgia, Oregon, Maine and South Carolina have enacted similar initiatives.[53] • **Dental Public-Private Partnership –** Michigan developed a public-private partnership between its state Medicaid program and a commercial dental plan to deliver care to low-income children under the age of 21. Dental reimbursements for services are identical to those in the commercial plan, providing access to all dentists who accept the private insurance for Medicaid recipients.[54]

Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
			• **Dentists, Federally Qualified Health Centers and Rural Health Centers –** Connecticut developed a contracting program between private sector dentists and health centers (e.g. Federally Qualified Health Centers and Rural Health Centers). This program allows individual dentists to negotiate the terms of their involvement in providing services to health center patients. Consequently, health center patients have access to dental care when they otherwise might not.[55] • **Specialist Training for Nurses –** The Washington Health Foundation has funded a one-year specialist training project at rural Lake Chelan Community Hospital. This project is intended for new graduates and experienced RNs who are entering rural nursing for the first time. This project hopes to create a broad-based rural nursing curriculum, covering six-subspecialty areas of nursing commonly encountered in acute care family practice medicine. The challenge for rural nurses is to accomplish all these broad-based proficiencies across all six areas of nursing and incorporate them into their scope of practice.[56]

Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
			• **Ensuring Adequate Nurse Supply –** Canada's Prince Edward Island initiated a comprehensive approach to ensure an adequate supply of nurses. The government created a C$10 million Health Care Stabilization Fund to create 85 new full and part-time nursing positions in the province. Some of these new nurses will be cross-trained to work in several areas of care. The government also believes that the increase in staffing will increase flexibility in scheduling on weekends and holidays, allowing for more work/life balance.[57] • **Nurse Refresher Program Cost Assistance –** Prince Edward Island created a Nurse Refresher Cost Assistance Program, which reimburses a $1,400 fee charged to nurses who must pass a nurse refresher program if they want to enter back into nursing. [58] • **Nursing Shortage Solutions –** Haxtun, Colorado increased wages, signing bonuses and recruited nurses from the Philippines to address its nursing shortage. They believe this shortage exists because starting nurses in Haxtun earn on average $38,000, while starting nurses in nearby Denver earn $55,000. They have also encouraged:

Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
			➢ Offering classes online to facilitate studying at home and eliminate commuting ➢ Offering more benefits (i.e., more vacation time, shorter shifts) ➢ Targeting males and minorities, since more than 90% of nurses are female and white[59] • **Internal Recruitment Bonus –** Community Memorial Healthcenter in South Hill, Virginia paid employees $2,000 for recruiting an employee to the hospital.[60] • **Nursing Grants and Scholarships –** Richmond Virginia Hospitals announced $600,000 in grants and scholarships for students who enroll in licensed practical nursing programs in the Richmond and Northern Virginia areas. In exchange for funds, students are required to work in the area for a period of three to four years.[61] • **Training Nurses Locally –** Rural hospitals in Virginia contributed $25,000 to create a local nurse-training program that resembled a program in Richmond, so nurses could avoid the daily commute to Richmond to receive their training.[62]

Program or Activity: Education and Training and Recruitment and Retention of Health Professionals

New Mexico	Vermont	North Dakota	Other States
			• North Carolina Center for Nursing sponsors a biennial Institute for Nursing Excellence, which: ➢ Recognizes excellence in direct patient care ➢ Develops leadership skills ➢ Offers a weeklong professional retreat experience that recognizes exemplary RNs who have demonstrated excellence in their practice and professional roles[63] • **Promoting Nursing Among Youth and Minorities –** North Carolina Center for Nursing also launched a statewide campaign designed to promote interest in nursing among youth and minorities.[64] • **Girl/Boy Scouts Nursing Patch –** The Girl Scouts, Boy Scouts and Career Explorer programs in North Carolina developed nurse exploration patch programs.[65]

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Program or Activity: Telemedicine and Related Technology

New Mexico	Vermont	North Dakota	Other States
• **Telemedicine –** The University of New Mexico's Telemedicine Program began in July 1995. The program goals are:[66] ➢ To improve the quality of and access to health care services in rural New Mexico ➢ To reduce the number of unnecessary patient transfers from rural areas ➢ To increase the capacity of rural health care systems to retain patients locally ➢ To reduce the professional isolation that contributes to recruitment and retention problems for rural health care providers and communities ➢ To provide educational opportunities for health care providers and patients in rural settings ➢ To conduct telemedicine research and evaluation activities • **Challenges –** The University of New Mexico telemedicine program has faced several challenges: ➢ New Mexico Medicaid does not reimburse for telehealth services. ➢ Health care facilities must develop a telehealth investment plan.	• **Telemedicine –** As of 1997, Vermont had 18 sites around Vermont and northern New York linked to Fletcher Allen's telemedicine system.[67] Services in this system include rural trauma care, surgical support and follow-up, dermatology clinics, telepsychiatry and renal services.[68] • **Teleconferencing –** The University of Vermont College of Medicine and Fletcher Allen Health Care in Burlington have built a telemedicine network that enables synchronous videoconferencing between rural health care facilities in the region and the Burlington hub. This system increases access to both clinical care and medical education and training.[69]	• **Dakota Telemedicine System –** The Dakota Telemedicine System (DTS) connects a central hospital to the Veterans Administration Hospital in Fargo and 10 remote sites. The project is partially funded by grants from the Rural Utility Service, as well as a Telecommunications and Information Infrastructure Assistance Program (TIIAP) grant from the U.S. Department of Commerce.[70] • **Telemedicine and Physician Licensure –** North Dakota permits a limited telemedicine medical license for physicians who hold an unrestricted license in their home state.[71]	• **Emergency Medical Services (EMS) Virtual Training –** In Montana, rural EMS units have been equipped with computers to participate in training, discuss issues with colleagues, trade tips and fill out trip reports.[72] • **Hub and Spoke Telemedicine Network –** Partners in Health Telemedicine Network in Montana uses two-way interactive video communication to deliver telehealth services to rural communities. The primary hub is located in Billings, with secondary hubs and spokes located in hospitals and clinics in rural areas.[73] In northern Florida, the University of Florida Department of Pediatrics uses telemedicine to link RNs at rural clinics with the comprehensive resources at the hub site, enabling the RN to perform assessments.[74] • **Medicaid and Teleconferencing –** In Texas, Medicaid pays physicians, advanced nurse practitioners, certified nurse midwives, Rural Health Clinics and Federally Qualified Health Clinics who participate in interactive video teleconferencing.[75] In California, Medicaid pays physicians who participate in interactive video teleconferencing.[76] • **Telepharmacy –** Montana, Texas, and Utah enacted legislation to establish telepharmacy services.[77,78,79]

Program or Activity: Telemedicine and Related Technology

New Mexico	Vermont	North Dakota	Other States
➢ New Mexico has a shortage of physicians.[80] • **Teleradiology –** There are 15 teleradiology sites throughout New Mexico and Arizona. • **Televideo –** There are three televideo sites on University of New Mexico Medical School campus; there is one site at Santa Rosa, one site in Las Vegas and two sites in Roswell. • **Telepathology –** There is one telepathology site in Roswell. • **Telemedicine and Physician Licensure –** New Mexico permits a limited telemedicine medical license for physicians who hold an unrestricted license in their home state.[81]	• **Fletcher Allen Specialized Telemedicine for Supporting Transfer and Rescue (FAST STAR) –** FAST STAR is a mobile technology that allows for one-way, full-motion video and two-way audio communication between a command center, located at Fletcher Allen and an emergency medical services crew inside an ambulance.[82] The purpose of this technology is to increase the survival rate of critical patients who are transported via ambulance in rural areas. The University of Vermont received a $250,000 grant to fund the testing and installation of mobile telemedicine technology in an ambulance that services the academic medical center. A U.S. Department of Transportation appropriation funded the pilot program.[83] • **Teletrauma –** The teletrauma project uses two-way interactive video telemedicine system to reduce disparities in clinical care and medical education by: ➢ Providing 24-hour access to trauma center specialty surgeons, neurosurgeons, vascular surgeons and pediatric surgeons ➢ Educating rural ambulance personnel and doctors, who have low volume and limited access to educational opportunities		• **Telemedicine Infrastructure –** In many rural areas, the infrastructure required for telemedicine does not exist. States are attempting to address this through coordinated rural economic development initiatives.[84] • **Access to Technology –** The Georgia legislature has established a Universal Service Fund, under the 1996 Telecommunications Act, as a mechanism to provide equity in Internet access, telemedicine and other telecommunications services for rural providers. The fund ensures that rural providers will receive discounts for telecommunication services.[85] • **Medicaid Reimbursement of Telemedicine –** As of October 2001, more than 18 states allow Medicaid reimbursement for telemedicine services, including: Arkansas, California, Georgia, Illinois, Iowa, Kansas, Louisiana, Minnesota, Montana, Nebraska, North Carolina, North Dakota, Oklahoma, South Dakota, Texas, Utah, Virginia and West Virginia. States have wide latitude in defining reimbursable telemedicine services. Some states, like Nebraska, have restrictions (e.g., a comparable service cannot exist within a 30-mile radius of the client's home). *Wyoming Medicaid also reimburses for telemedicine services.*[86]

Program or Activity: Telemedicine and Related Technology

New Mexico	Vermont	North Dakota	Other States
	➢ The goals of the project, beyond expanding the technology within Vermont, include more extensive evaluation of the impact of telemedicine after rural trauma interventions upon outcomes, complications of trauma, transfer rates, and the costs of care, including telemedicine system costs.[87]		• **Telemedicine and Third-Party Payers –** California, Kentucky, Louisiana, Oklahoma and Texas enacted legislation requiring third-party payers to reimburse for telemedicine services.[88,89] • **Telemedicine and Physician Licensure –** Alabama, Montana, Nevada, Oregon, Tennessee and Texas permit a limited telemedicine medical license for physicians who hold an unrestricted license in their home state.[90] • **Canada's Telemedicine –** A research study on Canada's telemedicine programs found that the programs needed community support and could be costly.[91]

Program or Activity: Licensure, Scope of Practice and Cross-Training

New Mexico	Vermont	North Dakota	Other States
Physician Assistants (PAs)			
• **Requirements –** New Mexico requires physician assistants to: ➢ Include a written utilization plan ➢ Have 20% of their work reviewed every two weeks when practicing in remote areas • **Physician Supervision –** Physicians may not supervise more than two PAs and a PA may only use the Board-approved drug formulary.[92] • **Prescriptive Authority –** New Mexico's PAs may prescribe, administer and distribute drugs, other than those drugs listed on Schedule I of the Controlled Substances Act, as long as they are under the supervision of a physician.[93] *Wyoming's laws allow similar physician supervision and prescribing authority.*	• **Requirements –** Vermont requires that the PA submit to Board for approval a written scope of practice. • **Prescriptive Authority –** PAs may prescribe, dispense and administer drugs and devices. However, the prescription must indicate the name of the physician who has delegated privilege.[94]	• **Physician Supervision –** North Dakota requires: ➢ The contract between the physician and the PA be filed for approval ➢ The supervising physician to direct and review the work, records and practice of the physician assistant[95] ➢ There be no more than two PAs assigned to a supervising physician • **Prescriptive Authority –** PAs are allowed to dispense pre-packaged schedules IV and V medicines. However, prescriptive authority is delegated to the supervising physician.[96]	

Program or Activity: Licensure, Scope of Practice and Cross-Training

New Mexico	Vermont	North Dakota	Other States
Nurse Practitioners (NPs)			
• **Scope of Practice and Physician Supervision –** NPs are allowed to practice independently and serve as a primary acute, chronic long-term and end-of-life health care provider for an individual, family or community. When necessary, they may collaborate with licensed medical doctors, osteopathic physicians or podiatrists.[97] • **Prescriptive Authority –** NPs may prescribe and distribute dangerous drugs and controlled substances included in Schedules II through V of the Controlled Substances Act.[98] However, they must maintain a self-determined formulary relevant to their specialty with the Board of Nursing.[99] *Wyoming's laws require similar physician supervision and prescribing authority for NPs.*	• **Dispensing Authority –** NPs have dispensing authority for prescription drugs.[100]	• **Prescriptive Authority –** NPs must have a collaborative agreement with a physician to have prescriptive authority.[101]	

Program or Activity: Licensure, Scope of Practice and Cross-Training

New Mexico	Vermont	North Dakota	Other States
Certified Nurse Midwives (CNMs)			
• **Scope of Practice and Physician Supervision –** CNMs are allowed independent management of women's health care; physician supervision is not required. • **Prescriptive Authority –** CNMs may administer drugs, but only limited prescribing is allowed.[102] • **Medicaid Reimbursement –** Medicaid covers services provided by CNMs and Licensed Midwives.[103]	• **Prescriptive Authority –** CNMs may write and sign prescriptions.[104]	• **Scope of Practice and Physician Supervision –** The CNM retains the responsibility and accountability for scope of practice.[105] Midwifery practice is not legally defined but not prohibited.[106] • **Prescriptive Authority –** Prescriptive authority for CNMs requires physician collaboration. CNMs may dispense samples.	

Program or Activity: Licensure, Scope of Practice and Cross-Training

New Mexico	Vermont	North Dakota	Other States
Clinical Psychologists			
• **Prescribing Authority –** Psychologists are allowed prescribing authority if they: ➢ Maintain an ongoing collaborative relationship with a health care practitioner who oversees the patient's general medical care ➢ Complete pharmacological training from an institution of higher education ➢ Pass a national certification examination that tests the knowledge of pharmacology in the diagnosis, care and treatment of mental disorders[107]			• **Prescribing Authority –** Psychologist prescribing authority was passed in the Louisiana legislature in the spring of 2004, making Louisiana the second state in the nation to expand prescribing authority beyond psychiatrists.[108] • **Prescribing Authority Rejected –** Psychologist prescribing authority has been considered and rejected in Nebraska, Connecticut, Georgia, Hawaii, Illinois, Missouri, Tennessee, Texas and Wyoming.[109] *In February of 2003, the Wyoming legislature rejected a bill that would have allowed such authority.*[110]

Program or Activity: Licensure, Scope of Practice and Cross-Training

New Mexico	Vermont	North Dakota	Other States
Other Health Professionals			
• **Paramedics and Primary Care –** Red River, New Mexico trained paramedics to be "community health specialists". These specialists use a triage system in which they transport patients in need of emergency physician care, but treat others with less urgent medical needs.[111]			• **Volunteer Licensure –** Several states, including Nevada, Mississippi and North Carolina, allow for volunteer licensure of medical professionals. Volunteer licenses often restrict the scope of practice to the provision of free care. *Wyoming allows volunteer licensure for newly retired physicians, physician assistants, nurses, dentists and dental hygienists. However, providers must show license in good standing, immediately prior to retirement, of 10 years.*[112,113] • **Cross-Training –** The Indian Health Service (IHS) has been at the forefront of cross-training between health professionals. Cross-training allows one health professional discipline to provide basic services of another discipline. For example, a laboratory technician can be trained to perform basic x-rays or nurses being trained to provide allied health services. IHS has been able to do this because they are exempt from state-licensing boards.[114]

Program or Activity: Licensure, Scope of Practice and Cross-Training

New Mexico	Vermont	North Dakota	Other States
Other Health Professionals (Cont'd)			
			• **Fluoride Varnish Training –** Wisconsin Medicaid trains nurses and dental hygienists employed at certified HealthCheck nursing agencies, physicians, physician assistants and nurse practitioners to apply fluoride varnish to the teeth of Medicaid eligible children under the age of 5. The goal is to provide a safe and effective way to contribute to the prevention of tooth decay as part of a comprehensive oral health program.[115]

Program or Activity: Economic Access

New Mexico	Vermont	North Dakota	Other States
• **State Insurance Pool –** New Mexico's Health and Human Services Department proposed a health care agenda for New Mexico, which proposes several options for rural and low-income assistance. These options include a state insurance pool for basic and catastrophic healthcare with limited benefits for those who cannot afford more comprehensive policies and requiring employers who do not provide health insurance to pay into the state insurance pool.[116] • **Statewide Health Initiative –** New Mexico's latest statewide health initiative plans to target working people without insurance, obesity, suicide among young people and to expand funding and add locations for New Mexico's school-based health centers. The school-based health centers provide healthcare and behavioral health services to Medicaid children and other adolescents.[117] *Wyoming currently has six school-based pilot sites that offer Medicaid health screenings and case management services.* • **Health Professional Shortage Areas (HPSAs) –** Many counties and divisions of New Mexico are designated HPSAs for the Primary Care, Dental and Mental Health disciplines.[118]	• **Community Health Clinics and the Working Poor –** Vermont has used a Rural Health Outreach Grant to help eight community health clinics expand their services to the working poor in Vermont.[119] *Wyoming also uses this grant for a similar purpose.* • **Health Professional Shortage Areas (HPSAs) –** Many counties and divisions of Vermont are designated HPSAs for the Primary Care, Dental and Mental Health disciplines.[120] *Wyoming also has many areas that are designated HPSAs.* • **Physician Shortage Areas (PSAs) –** One county is a designated Primary Care PSA, and 1 county is a designated Specialty Physician PSA in Vermont. *Wyoming also has many areas that are designated PSAs.* • **Rural Physician Network –** Pediatricians and family physicians in Vermont created a network to discuss the problems that they face: isolation, access to care, inadequate reimbursement rates and the effects of poverty.[121]	• **Health Professional Shortage Areas (HPSAs) –** Many counties and divisions of North Dakota are designated HPSAs for the primary care, dental and mental health disciplines.[122]	• **School-Based Dental Program –** Rochester, NY has a school-based dental program that: ➢ Uses school district resources (e.g., clinic space, utility and custodial services) for 6-12 weeks each year at no cost ➢ Is self-supporting through per diem-based Medicaid reimbursements, Child Health Plus (New York State Children's Health Insurance) and other third-party reimbursements • **School-Based Dental Program Results –** The Rochester, NY program provided dental care to over 10,000 "difficult to reach" underserved Medicaid school children, over 90 percent of whom the Rochester program projected would not have received care.[123] • **School-Based Dental Sealant Program –** Iowa's School-Based Dental Sealant Program provided exams to 3,479 students in the 2002-2003 school year, with 79 percent of these children receiving sealants. Twenty percent of the children examined were enrolled in Medicaid, 24 percent had private dental insurance and 25 percent had no dental insurance.[124]

Program or Activity: Economic Access

New Mexico	Vermont	North Dakota	Other States
• **Physician Shortage Areas (PSAs) –** Sixteen counties are designated Primary Care PSAs, and 19 counties are designated Specialty Physician PSAs in New Mexico. • **Proposed Tax Incentives –** New Mexico allows tax credits or rebates for: ➢ Persons eligible for Medicaid who purchase their own insurance ➢ Caregivers who provide care to someone who would otherwise be using Medicaid benefits ➢ Health care professionals with student loans if they practice in New Mexico with increased deductions for those who practice in rural areas [125] • **Property Taxes –** New Mexico allows local property taxing authority to help support public hospitals. *Wyoming also uses property taxes to support local hospitals and public health facilities.*[126]			• **Insurance Coverage –** To increase coverage, many states are expanding their Medicaid and SCHIP programs and increasing outreach in rural areas to encourage people who qualify for these programs to sign up.[127] • **Sales Taxes –** Several states allow counties to impose sales taxes to support health care services and indigent care.[128]

Program or Activity: Funding

New Mexico	Vermont	North Dakota	Other States
• **Rural Health Network Development Grant –** New Mexico received $589,202 in Fiscal Years (FY) 2003 and 2004.[129] • **Rural Access to Emergency Devices (RAED) Grant Program –** New Mexico received $252,760 in FY 2003.[130] *Wyoming received $259,734 in FY 2003.* • **Small Rural Hospital Improvement Grant Program –** New Mexico received $116,736 in FY 2003.[131] *Wyoming received $164,052 in FY 2003.* • **State Office of Rural Health –** New Mexico received $150,000 in FY 2003.[132] *Wyoming received $62,028 in FY 2003.* • **Rural Hospital Flexibility Grant –** New Mexico received$290,000 in FY 2004.[133] *Wyoming received $379,300 in FY 2003.* • **Traumatic Brain Injury (TBI) Implementation Grant –** New Mexico received $200,000 in 2001.[134] • **Agency for Healthcare Research and Quality (AHRQ) Grant –** AHRQ awarded grants for an electronic system for data collection and feedback and a pilot project centered around primary prevention and risk factor reduction (especially for diabetes) in vulnerable populations.[135]	• **Rural Health Outreach Grants –** Vermont received $382,866 in Fiscal Year (FY) 2004.[136] • **Rural Access to Emergency Devices (RAED) Grant Program –** Vermont received $250,000 in FY 2003.[137] • **Small Rural Hospital Improvement Grant Program –** Vermont received $87,552 in FY 2003.[138] • **State Office of Rural Health –** Vermont received $150,000 in FY 2003.[139] • **Rural Hospital Flexibility Grant –** Vermont received $280,000 in FY 2004.[140] • **Traumatic Brain Injury (TBI) Planning Grant –** Vermont received $75,000.[141] • **Area Health Education Center Funding –** Vermont received funding support for the Champlain Valley AHEC from HRSA, Fletcher Allen Health Care, Vermont's Community Hospitals, the University of Vermont and the State of Vermont.[142]	• **Rural Health Outreach Grants –** North Dakota received $399,750 in Fiscal Year (FY) 2004.[143] • **Policy-Oriented Rural Health Services Research Grant –** North Dakota received $150,000 in FY 2003.[144] • **Rural Access to Emergency Devices (RAED) Grant Program –** North Dakota received $231,239 in FY 2003.[145] • **Small Rural Hospital Improvement Grant Program –** North Dakota received $311,296 in FY 2003.[146] • **State Office of Rural Health –** North Dakota received $150,000 in FY 2003.[147] • **Rural Hospital Flexibility Grant –** North Dakota received $655,000 in FY 2004.[148] • **Various Rural Health Funding –** North Dakota has obtained funding for rural health projects from the U.S. Administration on Aging,[149] combinations of mill levy funding and city or county general funds, state aid and federal funding.[150]	

Program or Activity: Funding

New Mexico	Vermont	North Dakota	Other States
• **Community Health Center Funding –** Family Support Centers in two counties are a "one-stop shop" for connecting families to various health-related services and providing services, such as conducting educational workshops on prenatal care or tobacco cessation, helping families apply for Medicaid and food stamps and facilitating referrals to the appropriate agencies for services. All services are provided by lay health workers, and funding comes from a variety of sources, including community health centers' general funds and other private foundations.[151] • **Title V Maternal and Child Funding –** Children's Medical Services provides health services for pregnant women, and children using Title V funding.[152]			

Sources

[1] Vermont Department of Health, "Children with Special Health Needs." Available online: http://www.healthyvermonters.info/hi/cshn/cshn.shtml#clinic.

[2] BlueCross BlueShield of North Dakota, "BCBSND awards 10 grants to improve rural health care delivery," (May 18, 2004). Available online: http://www.noridian.com/newsroom/rh_grant04.html.

[3] United States Department of Agriculture, National Rural Development Partnership, "Rural Transportation Policy Dialogue," (March 15, 2004). Available online: http://www.rurdev.usda.gov/nrdp/resources/ conferences/nrdp_conferences/march04/transportation.doc.

[4] Transportation barriers: Developing a system for low-income rural residents. Available online: http://apha.confex.com/apha/132am/techprogram/paper_88914.htm

[5] Covenant Health System, "Covenant Community Outreach Provides More Than $1 Million in Services for Fiscal Year." Available online: http://www.covenanthealth.org/aboutus/ccoservices.htm .

[6] United States Department of Health and Human Services, Health Services and Resources Administration, Rural Health Policy, "Office of Rural Health Policy Grants – Vermont, Rural Health Outreach Grants." Available online: http://ruralhealth.hrsa.gov/Map/Vermont.htm.

[7] Laura A. Maldanado, "Dental students 'fill' need: Mobile clinic from USC stops in Farmersville," *Visalia Times-Delta*, (March 26, 2003). Available online: http://www.visaliatimesdelta.com/news/stories/20030326/localnews/1256266.html.

[8] Karma S. Castleberry and Melanie Parks, "A Collaborative, Holistic Approach to Women with Mental Health Needs," National Rural Women's Health Conference: Extended Learning Community, (2002). Available online: http://ruralwomenshealth.psu.edu/s04_kcastleberry-mparks.html

[9] United States Department of Health and Human Services, Indian Health Service, "Indian Health Service Increases Access to Mammograms for American Indian Women in Northern Arizona," (June 8, 2001). Available online: http://www.ihs.gov/PublicInfo/PublicAffairs/PressReleases/Press_Release_2001/Release_8_MBCC_2001.asp.

[10] New Mexico Health Resources, Inc, "What is NMHR?" Available online: http://www.nmhr.org.

[11] Wyoming Health Resources Network, Inc., "Welcome to WHRN." Available online: http://www.whrn.org.

[12] University of New Mexico Health Sciences Center, "Roswell." Available online: http://hsc.unm.edu/fcm/family/Residency/FP_opt_r.shtml.

[13] Accreditation Council for Graduate Medical Education (ACGME), "List of ACGME Accredited Programs and Sponsoring Institutions." Available online: http://www.acgme.org/adspublic/.

[14] University of New Mexico Health Sciences Center, "Area Health Education Center." Available online: http://hsc.unm.edu/som/outreach/Dept/ahec.html.

[15] R.C. Bowman, M.D., Director of Rural Health Education and Research for the Department of Family Medicine at the University of Nebraska Medical Center, "AAMC and Rural." Available online: http://www.unmc.edu/Community/ruralmeded/model/medsch/aamc_and_rural.htm.

[16] Ibid.

[17] University of Washington School of Medicine, *Wyoming WWAMI*, (September 2004).

[18] University of North Dakota, Department of Family Medicine, "Rural Opportunities for Medical Education (ROME)." Available online: http://family.med.und.nodak.edu/course/year3.

[19] University of Washington School of Medicine, Department of Family Medicine, "Rural/Undeserved Opportunities Program." Available online: http://www.fammed.washington.edu/predoctoral/ruop/.

Sources

[20] National Rural Health Association, "Where to go … for information on rural health care - how to obtain grants to assist elderly," *Aging*, (Summer 1993). Available online: http://www.findarticles.com/p/articles/mi_m1000/is_n365/ai_13253375.
[21] University of Washington, School of Medicine, "WWAMI Rural Health Research Center." Available online: http://www.fammed.washington.edu/wwamirhrc/.
[22] University of North Dakota, Harley E. French Library of the Health Sciences, "Information Access: Enhancing Rural Healthcare in North Dakota." Available online: http://harley.med.und.nodak.edu/index.php?site=default&content=libraryinformation$ruralhealth.
[23] State of Nevada, Department of Human Services, "Strategic Plan for Rural Health Care in Nevada," (October 2002). Available online: http://www.hr.state.nv.us/shcp/documents/RuralHealth_Documents/NVReportAppendix/NV-Report-FINAL.pdf.
[24] Colorado Area Health Education Center, "Colorado Health Professionals Loan Repayment Program." Available online: http://www.uchsc.edu/ahec/lrp/lrp.htm
[25] The Center for Health and Healthcare in Schools, "Colorado Dental Start-up Grants – Request for Application." Available online: http://www.healthinschools.org/sr/states/CO/rfa.asp#3.
[26] National Alliance of State and Territorial AIDS Directors, "New Mexico CARE Act Program Profile." Available online: http://www.nastad.org/documents/public/ryan_white_profiles/RWP_NewMexico.pdf.
[27] University of Wyoming, "About the Center for Rural Health Research and Education (CRHRE)." Available online: http://www.health.uwyo.edu/about.asp.
[28] University of New Mexico Health Sciences Center, "Locum Tenens Program." Available online: http://hsc.unm.edu/som/outreach/locum.
[29] Vermont Department of Health, Office of Rural Health and Primary Care, "2000 Health Care Professionals Survey." Available online: http://www.healthyvermonters.info/hi/ruralhealth/ruralhome.shtml.
[30] http://www.hrsa.gov
[31] United States Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, The National Advisory Committee on Rural Health and Human Services, "Meeting Summary," (September 7-9, 2003) Charleston, West Virginia. Available online: http://ruralcommittee.hrsa.gov/Sept2003/ Sept2003Minutes.htm.
[32] University of Washington School of Medicine, *Wyoming WWAMI*, (September 2004).
[33] University of North Dakota, School of Medicine and Health Sciences, Office of the Associate Dean for Research and Program Development, School of Medicine, "Mission, Organization and Facilities." Available online: http://www.med.und.nodak.edu/users/mebadi/somhs_mission.html.
[34] United States Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, The National Advisory Committee on Rural Health and Human Services, "Meeting Summary," (September 7-9, 2003) Charleston, West Virginia. Available online: http://ruralcommittee.hrsa.gov/Sept2003/ Sept2003Minutes.htm.
[35] State of Nevada, Department of Human Services, "Strategic Plan for Rural Health Care in Nevada," (October 2002). Available online: http://www.hr.state.nv.us/shcp/documents/RuralHealth_Documents/NVReportAppendix/NV-Report-FINAL.pdf.
[36] Ibid.
[37] Oregon Health and Science University, "Office of Rural Health, Provider Tax Credit." Available online: http://www.ohsu.edu/oregonruralhealth/provtaxpg.html.
[38] State of Nevada, Department of Human Services, "Strategic Plan for Rural Health Care in Nevada," (October 2002). Available online: http://www.hr.state.nv.us/shcp/documents/RuralHealth_Documents/NVReportAppendix/NV-Report-FINAL.pdf.
[39] University of New Mexico. "Rural Health Interdisciplinary Program." Available online: http://hsc.unm.edu/som/programs/ruralhealth/ .

Sources

[40] University of Washington School of Medicine, *Wyoming WWAMI*, (September 2004).
[41] University of New Mexico, "Specialty Extension Services." Available online: http://hsc.unm.edu/som/outreach/SES.
[42] Zina D. Geller, et al., "Interdisciplinary health professional education in rural New Mexico: a 10 year experience," *Learning in Health and Social Care Volume 1 Issue 1, (*March 2002) p. 33. Available online: http://www.blackwell-synergy.com/links/doi/10.1046/j.1473-6861.2002.00003.x/full/
[43] Department of Veterans Affairs, CARES Commission, "CARES Commission Site Visit Report," (July 22, 2003). Available online: http://www.carescommission.va.gov/Documents/SiteVisitVISN18Albuquerque.pdf.
[44] American Dental Association, "State and Community Models for Improving Access to Dental Care for the Underserved—A White Paper," (October 2004).
[45] Vermont Department of Employment and Training, "Commissioner's Message: Innovative High Skills Training in Vermont" [Source: *'The Vermont Labor Market" Newsletter*, (November 2001).]. Available online: http://www.workforceatm.org/articles/template.cfm?results_art_filename=vtskills.htm.
[46] United States Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, "FY 2003 Grantee Abstracts-Internship and Residency Grant Program." Available online: http://bhpr.hrsa.gov/nursing/03abstracts/intern.htm.
[47] Ibid.
[48] Ibid.
[49] Mississippi State University, Coordinated Access to the Research and Extension System, "Rural Health." Available online: http://msucares.com/health/health/ruralhealth.html.
[50] United States Department of Health and Human Services, Health Resources and Services Administration, Office of Rural Health Policy, The National Advisory Committee on Rural Health and Human Services, "Meeting Summary," (September 7-9, 2003) Charleston, West Virginia. Available online: http://ruralcommittee.hrsa.gov/Sept2003/ Sept2003Minutes.htm.
[51] The Measurement Group.com, Evaluation and Dissemination Center, "The University of Vermont HIV/AIDS Project," *SPNS/Fax: An Electronic Report from HRSA/HAB's SPNS Cooperative Agreements: Volume 1, Issue 9*, (August 10, 1996). Available online: http://www.themeasurementgroup.com/Documents/SPNSfax/vol1_issue9.htm.
[52] Health Education Industry Partnership, "Welcome: Who We Are." Available online: http://www.heip.org/.
[53] National Conference of State Legislatures, "Improving Oral Health Services in Rural Areas: The Role for States, Synopsis of a Meeting Sponsored by HRSA's Federal Office of Rural Health Policy," (July 2003). Available online: http://www.ncsl.org/programs/health/oralheaserv.htm.
[54] American Dental Association, *State and Community Models for Improving Access to Dental Care for the Underserved—A White Paper*, (October 2004).
[55] American Dental Association, *State and Community Models for Improving Access to Dental Care for the Underserved—A White Paper*, (October 2004).
[56] Lake Chelan Community Hospital, "Rural Nurse Retention Grant Project." Available online: http://www.lakechelancommunityhospital.com/rural-nurse-retention.html.
[57] Prince Edward Island, Canada, Health and Social Services, "Nursing Recruitment and Retention Strategy." Available online: http://www.gov.pe.ca/hss/recruitment/nursing.php3.
[58] Ibid.
[59] Colleen Long, "Rural Communities Feel Sting of Nursing Shortage," www.*The Daily Camera.com*, (October 9, 2000). Available online: http://community.bouldernews.com/news/statewest/09lnurs.html.

Sources

[60] Holly M. Rodriguez, "Nursing Shortages Approach Critical Condition," *Virginia Business*, (January 2003), p. 1-4. Available online: http://www.virginiabusiness.com/magazine/yr2003/jan03/nurse.shtml.
[61] Ibid.
[62] Ibid.
[63] North Carolina Center for Nursing, "Nursing Shortage Areas in North Carolina Hospitals", (February 2001), p. 16. Available online: http://www.nursenc.org/research/hospital1.PDF.
[64] North Carolina Center for Nursing, "Nursing Shortage Areas in North Carolina Hospitals", (February 2001), p. 17. Available online: http://www.nursenc.org/research/hospital1.PDF.
[65] Ibid.
[66] University of New Mexico Health Sciences Center, "Program Highlights." Available online: http://hsc.unm.edu/telemedicine/Program/History.cfm.
[67] Fletcher Allen Health Care System, "$2 Million Telemedicine Grant Announced, "(January 1998). Available online: http://www.fahc.org/telemedicine/n16.htm.
[68] Fletcher Allen Health Care System, "Clinical Telemedicine." Available online: http://www.fahc.org/ Telemedicine/clinical_tele.html.
[69] Doheny-Farina, Stephen, Hayslett, Patrick, Callas, Peter W., Flynn, Brian S., Caputo, Michael P., Amour, Judith L., Ricci, Michael A., "Technical Communication and Medical Education: Improving Rural Health Care Through Synchronous Distance Education of Advanced Medical Students". Abstract. Available online: http://www.fahc.org/Telemedicine/Research/vrti.html.
[70] United States Department of Commerce, National Telecommunications & Information Administration, "Evaluation of the Telecommunications and Information Infrastructure Assistance Program, Case Study Report: Dakota Telemedicine System." Available online: http://www.ntia.doc.gov/top/research/EvaluationReport/case_studies/384096092e.PDF.
[71] Craig A. Walker, HealthCare Computer Corporation, "Telemedicine Reimbursement," National Consortium for Ocular Telehealth, (June 2, 2002) Los Angeles Convention Center. Available online: http://www.healthcare-vision.com/abouthcv/resources_p/pres_Reimbursement_ICOT02_Walker.pdf.
[72] Tom Rowley, "Solving the Paramedic Paradox," *Rural Health News, Volume 8 (3),* (Fall 2001) United States Department of Agriculture. Available online: http://www.nal.usda.gov/ric/richs/RHNfall01.htm.
[73] John Zauher, "Telehealth in Montana." Available online: http://www.mansfieldfdn.org/programs/program_pdfs/zauher2.pdf
[74] University of Florida Department of Pediatrics Children's Medical Services. Available online: http://www.cms-kids.com/CPTGainesvilleOcala.htm
[75] Craig A. Walker, HealthCare Computer Corporation, "Telemedicine Reimbursement," National Consortium for Ocular Telehealth, (June 2, 2002) Los Angeles Convention Center. Available online: http://www.healthcare-vision.com/abouthcv/resources_p/pres_Reimbursement_ICOT02_Walker.pdf .
[76] Ibid.
[77] State of Montana, 2001 Montana Legislature, "House Bill 279," (2001). Available online: http://data.opi.state.mt.us/bills/2001/billhtml/HB0279.htm.
[78] Texas Tech University Health Sciences Center, Rural and Community Health, "Telepharmacy." Available online: http://www.ttuhsc.edu/ruralhealth/Research%20&%20Policy/Research_TelePharmacy.htm
[79] State of Utah, "Rural Health Changes," *2001 General Session*, (2001). Available online: http://www.le.state.ut.us/~2001/bills/hbillenr/HB0089.htm.
[80] Alistair Preston, "Rural Economy Needs a Healthy Populace," *The Albuquerque Journal*, (December 5, 2002). Available online: http://hsc.unm.edu/telemedicine/NewsArticle120502.htm.

Sources

[81] Craig A. Walker, HealthCare Computer Corporation, "Telemedicine Reimbursement," National Consortium for Ocular Telehealth, (June 2, 2002) Los Angeles Convention Center. Available online: http://www.healthcare-vision.com/abouthcv/resources_p/pres_Reimbursement_ICOT02_Walker.pdf .
[82] Andrew W. Davis, "Telemedicine in Vermont," Wainhouse Research. Available online: http://www.wainhouse.com/articles/article_1.html.
[83] Fletcher Allen Health Care, "FAST STAR." Available online: http://www.fahc.org/Telemedicine/Research/ fast_star.html.
[84] State of Nevada, Department of Human Services, "Strategic Plan for Rural Health Care in Nevada," (October 2002). Available online: http://www.hr.state.nv.us/shcp/documents/RuralHealth_Documents/NVReportAppendix/NV-Report-FINAL.pdf.
[85] Health Strategies Council and Georgia Department of Community Health, Division of Health Planning, "Georgia State Health Plan", p. 25.
[86] Telephone conversation with Teri Green, Medical Policy Coordinator, Wyoming Office of Medicaid (October 27, 2004).
[87] Fletcher Allen Health Care, "The Vermont Tele-Trauma Project: Advanced Interventions and Outcome Assessment". Available online: http://www.fahc.org/Telemedicine/Research/vt_teletrauma.html.
[88] Craig A. Walker, HealthCare Computer Corporation, "Telemedicine Reimbursement," National Consortium for Ocular Telehealth, (June 2, 2002) Los Angeles Convention Center. Available online: http://www.healthcare-vision.com/abouthcv/resources_p/pres_Reimbursement_ICOT02_Walker.pdf.
[89] American Telemedicine Association and AMD Telemedicine, Private Payer Reimbursement Information Directory, "State Legislation". Available online: http://www.amdtelemedicine.com/private_payer/state_legislation.cfm
[90] Craig A. Walker, HealthCare Computer Corporation, "Telemedicine Reimbursement," National Consortium for Ocular Telehealth, (June 2, 2002) Los Angeles Convention Center. Available online: http://www.healthcare-vision.com/abouthcv/resources_p/pres_Reimbursement_ICOT02_Walker.pdf.
[91] Raymond W. Pong, "Sharing the Learning: The Health Transition Fund, Synthesis Series - Rural Health/Telehealth," (2001). Available online: http://www.hc-sc.gc.ca/htf-fass/english/rural_en.pdf.
[92] United States Department of Health and Human Services, Health Services and Resource Administration, National Center for Health Workforce Analysis, "A Comparison of Changes in the Professional Practice of Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: 1992 and 2000." Available online: http://bhpr.hrsa.gov/healthworkforce/reports/scope/scope1-2.htm.
[93] New Mexico State Statutes, Chapter 61 Article 6 Sections 61-6-7 through 61-6-10, http://www.conwaygreene.com/nmsu/lpext.dll?f=templates&fn=main-hit-h.htm&2.0.
[94] United States Department of Health and Human Services, Health Services and Resource Administration, National Center for Health Workforce Analysis, "A Comparison of Changes in the Professional Practice of Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: 1992 and 2000." Available online: http://bhpr.hrsa.gov/healthworkforce/reports/scope/scope1-2.htm.
[95] North Dakota State Board of Medical Examiners, "Physician Assistant Supervision Contract." Available online: http://www.ndbomex.com/PA_Contract.pdf.
[96] United States Department of Health and Human Services, Health Services and Resource Administration, National Center for Health Workforce Analysis, "A Comparison of Changes in the Professional Practice of Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: 1992 and 2000." Available online: http://bhpr.hrsa.gov/healthworkforce/reports/scope/scope1-2.htm.
[97] New Mexico State Statutes, Chapter 61 Article 6 Sections 61-6-7 through 61-6-10, http://www.conwaygreene.com/nmsu/lpext.dll?f=templates&fn=main-hit-h.htm&2.0.
[98] Ibid.

Sources

[99] United States Department of Health and Human Services, Health Services and Resource Administration, National Center for Health Workforce Analysis, "A Comparison of Changes in the Professional Practice of Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: 1992 and 2000." Available online: http://bhpr.hrsa.gov/healthworkforce/reports/scope/scope1-2.htm.

[100] Ibid.

[101] Ibid.

[102] Ibid.

[103] United States Department of Health and Human Services, Health Resources and Services Administration, "New Mexico Medicaid Covered Services." Available online: http://www.hrsa.gov/tpr/states/New-Mexico-Medicaid-Covered-Services.htm.

[104] United States Department of Health and Human Services, Health Services and Resource Administration, National Center for Health Workforce Analysis, "A Comparison of Changes in the Professional Practice of Nurse Practitioners, Physician Assistants, and Certified Nurse Midwives: 1992 and 2000." Available online: http://bhpr.hrsa.gov/healthworkforce/reports/scope/scope1-2.htm.

[105] Ibid.

[106] Ibid.

[107] New Mexico State Statute, Chapter 61 Article 9 Section 61-9-17. http://www.conwaygreene.com/nmsu/lpext.dll?f=templates&fn=main-hit-h.htm&2.0.

[108] Jennifer Daw Halloway, "Louisiana Grants Psychologists Prescriptive Authority," *Monitor on Psychology, Volume 35, Number 5*, American Psychological Association, (May 2004). Available online: http://www.apa.org/ monitor/may04/louisianarx.html.

[109] American Psychiatric Association, "State of the States: Psychologists' Prescribing Privileges," (March 2003). Available online: http://www.psych.org/advocacy_policy/leg_issues/statecostex.cfm.

[110] Ken Housman, "Small State Notches Big Prescribing Battle Victory," *Psychiatric N*ews, (March 7, 2003). Available: http://pn.psychiatryonline.org/cgi/content/full/38/5/1.

[111] Tom Rowley, "Solving the Paramedic Paradox," *Rural Health News, Volume 8 (3),* (Fall 2001) United States Department of Agriculture. Available online: http://www.nal.usda.gov/ric/richs/RHNfall01.htm.

[112] State of Wyoming, "2004 Wyoming Statutes, Title 33 Professions and Occupations". Available online: http://legisweb.state.wy.us/statutes/sub33.htm.

[113] American Medical Association, "State Licensing and Liability Laws for Volunteer Physicians," (May 10, 2004). Available online: http://www.ama-assn.org/ama/pub/category/12455.html.

[114] State of Nevada, Department of Human Services, "Strategic Plan for Rural Health Care in Nevada," (October 2002). Available online: http://www.hr.state.nv.us/shcp/documents/RuralHealth_Documents/NVReportAppendix/NV-Report-FINAL.pdf.

[115] Wisconsin Department of Health and Human Services, "Wisconsin Medicaid Coverage of Topical Application of Fluoride for Children," *Wisconsin Medicaid & BadgerCare Update, No. 2004-14*, (February 2004). Available online: http://dhfs.wisconsin.gov/medicaid/updates/2004/2004-14.htm.

[116] Dan Shingler, "State amasses options on health care," *Albuquerque Tribune*, (June 23, 2003). Available online: http://www.abqtrib.com/archives/business03/062303_business_health.shtml.

[117] New Mexico Human Services Department, "Governor Bill Richardson Announces Comprehensive Statewide Health Initiatives to 'Build a Healthy New Mexico,'" (October 15, 2004). Available online: http://www.state.nm.us/hsd/pdf/HealthRolloutPR.pdf.

Sources

[118] United States Department of Health and Human Services, Health Resources and Services Administration, "Health Professional Shortage Areas: Ad-Hoc Database Query Selection." Available online: http://belize.hrsa.gov/newhpsa/newhpsa.cfm.
[119] Office of Senator Patrick Leahy, "Leahy Hails $640,000 Federal Grant to 8 Vermont Free Clinics Serving Uninsured 'Working Poor,'" (October 11, 196). Available online: http://leahy.senate.gov/text/press/199610/961011.html.
[120] United States Department of Health and Human Services, Health Resources and Services Administration, "Health Professional Shortage Areas: Ad-Hoc Database Query Selection." Available online: http://belize.hrsa.gov/newhpsa/newhpsa.cfm.
[121] American Academy of Pediatrics, The National Center of Medical Home Initiatives for Children with Special Needs, "Rural Initiatives." Available online: http://www.medicalhomeinfo.org/resources/rural.html.
[122] United States Department of Health and Human Services, Health Resources and Services Administration, "Health Professional Shortage Areas: Ad-Hoc Database Query Selection." Available online: http://belize.hrsa.gov/newhpsa/newhpsa.cfm.
[123] The Center for Health and Health Care in Schools, "School-Based Dental Program – Addressing Oral Health Needs: A How-To Guide", The Center for Health and Health Care in Schools, "School-Based Dental Program – Addressing Oral Health Needs: A How-To Guide." Available online: http://www.healthinschools.org/sr/states/NY/rochester.asp.
[124] Iowa Department of Public Health, Oral Health Bureau, "2002-03 School-based Dental Sealant Program." Available online: http://www.idph.state.ia.us/hpcdp/oral_health_content/common/pdf/summary_sealant03.pdf.
[125] Dan Shingler, "State amasses options on health care," *Albuquerque Tribune*, (June 23, 2003). Available online: http://www.abqtrib.com/archives/business03/062303_business_health.shtml.
[126] Wyoming Taxpayers Association, "Wyoming Property Taxation 2003," (November 2003). Available online: http://www.wyotax.org/Reports/2003ptb.pdf. Also, Wyoming State Statute 35.2.401 and 35.2.414, "Article 4 Hospital Districts." Available online: http://legisweb.state.wy.us/statutes/titles/title35/c02a04.htm.
[127] State of Nevada, Department of Human Services, "Strategic Plan for Rural Health Care in Nevada," (October 2002). Available online: http://www.hr.state.nv.us/shcp/documents/RuralHealth_Documents/NVReportAppendix/NV-Report-FINAL.pdf.
[128] Ibid.
[129] United States Department of Health and Human Services, Health Services and Resources Administration, Rural Health Policy, "Office of Rural Health Policy Grants – New Mexico, Rural Health Network Development Grants." Available online: http://ruralhealth.hrsa.gov/Map/NewMexico.htm.
[130] Ibid.
[131] Ibid.
[132] Ibid.
[133] Ibid.
[134] Traumatic Brain Injury Technical Assistance Center, "TBI State Grant Program Fact Sheet." Available online: http://www.tbitac.org/site/NonGranteeProfile.cfm?State=NM.
[135] Agency for Healthcare Research and Quality, "New Primary Care PBRN Awards," (October 2002). Available online: http://www.ahrq.gov/research/pbrnproj.htm.
[136] United States Department of Health and Human Services, Health Services and Resources Administration, Rural Health Policy, "Office of Rural Health Policy Grants – Vermont, Rural Health Outreach Grants." Available online: http://ruralhealth.hrsa.gov/Map/Vermont.htm.

Sources

[137] Ibid.
[138] Ibid.
[139] Ibid.
[140] Ibid.
[141] Ibid.
[142] Champlain Valley Area Health Education Center, "Web Resources." Available online: http://www.cvahec.org/links.htm.
[143] United States Department of Health and Human Services, Health Services and Resources Administration, Rural Health Policy, "Office of Rural Health Policy Grants – North Dakota, Rural Health Outreach Grants." Available online: http://ruralhealth.hrsa.gov/Map/NorthDakota.htm.
[144] Ibid.
[145] Ibid.
[146] Ibid.
[147] Ibid.
[148] Ibid.
[149] National Indian Council on Aging, Tribal Long-Term Care Technical Assistance, "Needs Assessment," (2004). Available online: http://www.agingopportunities.com/nicoa-need.html.
[150] Terry Dwelle, MD, "A North Dakota Legislator's Guide to the North Dakota Department of Health," North Dakota Department of Health. Available online: http://www.health.state.nd.us/ndhd/pubs/legguide99.
[151] Thomas Rowley, "Rural Disabled Struggle for Independence," *The Rural Monitor, Volume 10, No. 2*, (Fall 2003). Available online: http://www.raconline.org/newsletter/web/Fall03_vol10-2.html?page=9.
[152] Donna Cohen Ross, "Sources of Federal Funding for Children's Health Insurance Outreach," (February 17, 2000). Available online: http://www.cbpp.org/2-17-00health.htm