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Center *for* Rural Health

University of North Dakota
School of Medicine & Health Sciences

POLICY BRIEF

North Dakota Health Care Workforce: Planning Together to Meet Future Health Care Needs

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Part 2 of 2

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INTRODUCTION

Ensuring an adequate health care workforce for North Dakota citizens requires creating a shared statewide agenda. To begin this effort, the Center for Rural Health, in partnership with other organizations, held a North Dakota Health Care Workforce Summit in Bismarck in December 2006. The purpose of the Summit was to explore current and emerging challenges associated with the supply and demand of health care workforce in the state, and to begin to develop an action plan to address these challenges. Approximately 200 people attended the Summit, including over 50 state legislators and representatives from state government, statewide organizations, economic development commissions, health care employers and educators, among others. Clearly, the challenge of ensuring that all North Dakota citizens have access to health care providers has the attention and will require the action of a wide range of organizations and individuals.

Summit Objectives:

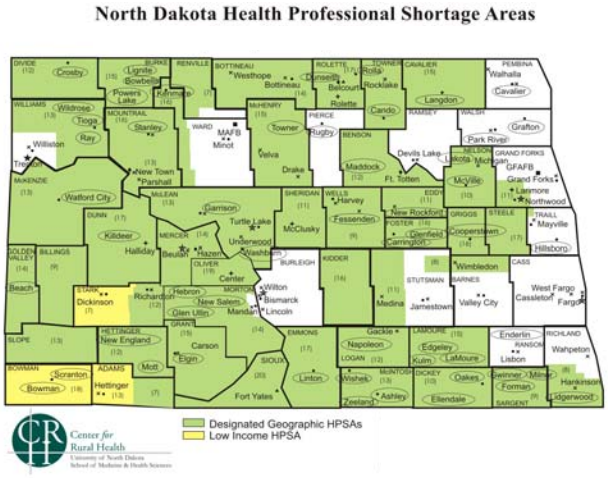
1. Share action-oriented plans from other rural states.
2. Consider current and projected characteristics of the health care workforce in North Dakota and the United States.
3. Describe selected efforts underway in North Dakota to expand, recruit, and retain the workforce.
4. Develop immediate and long-term strategies to address the health care workforce needs of North Dakota.
5. Inform the development of a statewide plan through collaboration.

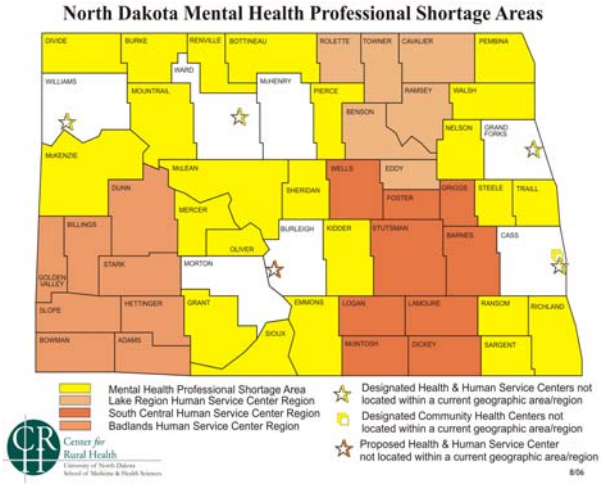
SCOPE OF THE PROBLEM

Between now and 2012, seven of the top ten fastest growing occupations across the nation are projected to be in health care.[1] Just 13 years from now, demand is expected to outstrip supply for a number of health care occupations including a projected shortage of 100,000 physicians and 800,000 nurses.[2] Shortages of health care providers are problematic because they can negatively impact health care quality and access to health care services. Shortages can also increase stress on available providers and contribute to higher health care costs by increasing the use of overtime pay and expensive temporary personnel.

While workforce shortages are a challenge for the entire health care system, they are likely to be most severe in rural areas of the United States. Underscoring this point, the Institute of Medicine recently noted that, “efforts should be made to boost the supply of health professionals in rural areas”.[3] However, demand for health care providers is not just about meeting rural versus urban health care needs in America. Rather, increasingly the market for the health care workforce is global, with rising international competition. As a result, the workforce that North Dakota competes for is a workforce that can be recruited from or recruited to not just other locations in the United States, but other countries.

Against this backdrop of increasing demand, North Dakota starts at a distinct disadvantage. Already 81 percent of the state’s 53 counties are designated as federal primary care health professional shortage areas.





One-third of North Dakota counties are designated as oral health shortage areas and 94 percent of the state's counties are designated as mental health professional shortage areas. Exacerbating this problem are survey data suggesting that approximately 26 percent of the state's physicians and 24 percent of the state's nurses are planning to retire by 2015-less than 10 years from now. These data are consistent with concerns expressed in 16 community forums held across the state over the past three years. In meetings held by the Center for Rural Health, difficulty in maintaining an adequate workforce, ranging from clinical laboratory and radiology technicians to emergency medical service providers, was a consistent concern. Urban-based health care providers are also expressing workforce concerns. Some urban concerns overlap with those of rural providers and communities, while other urban workforce issues are somewhat different (e.g., attracting physician specialists and high turnover rates for nurses).

North Dakota faces current and emerging challenges related to features of both supply and demand. For example, North Dakota's current supply of physicians, dentists, dental assistants, podiatrists, pharmacy technicians, emergency medical service providers and radiology technicians is below the per capita average.[4] In terms of demand, Job Service of North Dakota expects significant growth (over 10 percent) in demand for pharmacists, occupational therapists, physical therapists, medical and clinical laboratory technologists and technicians, physician assistants, registered nurses and others by 2014.[5]

Demand for health care providers is driven by many factors ranging from the increase in our state's aging population to the significant geographic distance that many clinicians cover in order to reach populations in need of health care. While addressing workforce supply requires a multifaceted approach, state government is a key player in many states. In fact, across the United States, at least 14 other states have recognized the emergent need to ensure an adequate workforce and have held statewide meetings within the past few years. At least 13 states have recently enacted workforce related policies and programs to help ensure that their citizens have access to health care providers, (see attached matrix for examples of specific activities).

Given the demographic trajectory of North Dakota as well as anecdotal and quantifiable information about our health care workforce, the state clearly faces emerging challenges to ensure access to an adequate workforce**.** State policy makers and other stakeholders should carefully plan and act in order to ensure that: 1) the day to day health needs of our states' communities are met-from helping people stay healthy and avoid illness to effectively managing acute and chronic diseases; 2) the state is well positioned to meet major health care challenges ranging from avian flu to bioterrorism, and 3) the

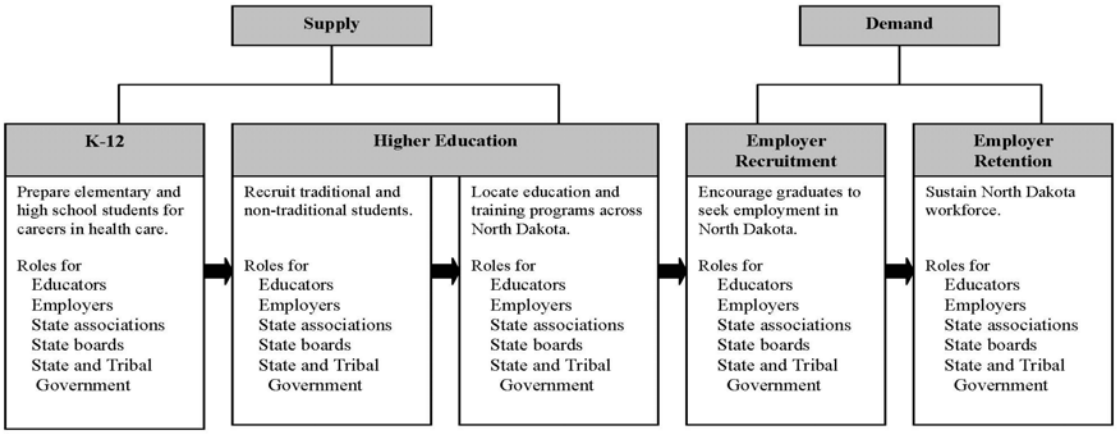
economic health of communities is not compromised by lack of availability of health services for both small and large businesses.

THE WORKFORCE PIPELINE

The model used to characterize production, recruitment, and retention of health care providers is often referred to as the workforce pipeline. Each step of the pipeline offers opportunities to target either supply or demand, including specific areas such as workforce training, recruitment, and retention.

The pipeline begins with preparing elementary and high school students for careers in health care and attracting high school and non-traditional students into health professions programs. It incorporates accessibility to training programs across North Dakota (on-site as well as distance learning,) and recruitment and retention of health care professionals by employers and communities across the state. Many states have developed programs and policies that address different parts of the pipeline and are referenced at the end of this document.

The North Dakota Health Care Workforce Pipeline



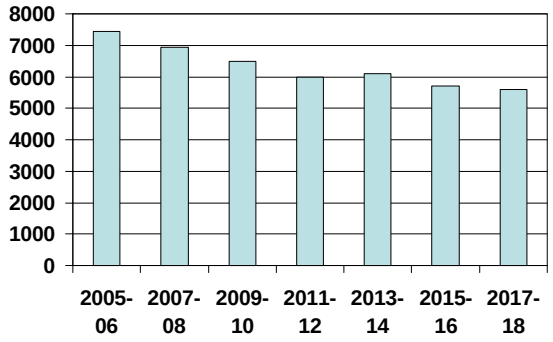
(Wakefield, Amundson, and Moulton, 2006)

With timely information policymakers, employers, educators, and others can efficiently target actions to each part of the pipeline. However, details about the health care workforce pipeline in North Dakota are fragmented at best. Nonetheless, using available information, the following provides a snapshot of aspects of North Dakota's workforce pipeline.

Step 1: Kindergarten through 12th grade - Prepare elementary and high school students for careers in health care

In 2005, over 70,800 children were enrolled in kindergarten through eighth grade and over 34,500 were enrolled in 9th through 12th grade. The number of high school graduates is expected to decline between now and 2018.

Projected North Dakota Public School Graduates
2005-06 through 2017-18



Source: http://www.wiche.edu/policy/knocking/1988%2D2018/profiles.asp

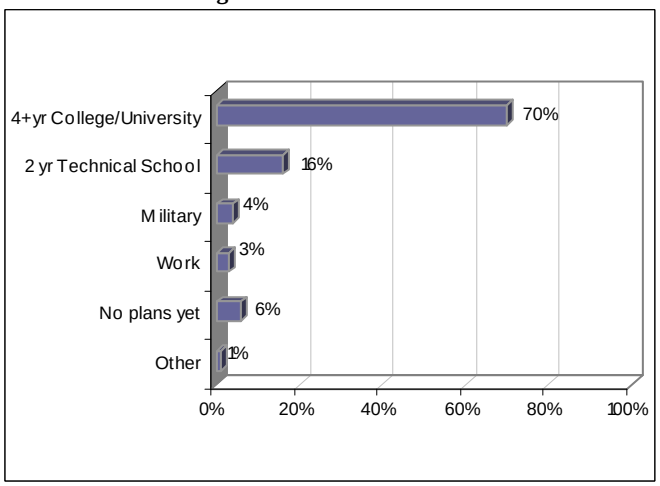
In a survey of high school students, the vast majority indicate plans to attend college. More students indicate an interest in a health care career (38 percent) than any other occupational area. Most of these students said they would like to go into medicine, nursing, or physical therapy. Nearly half of these students show interest in more than one choice, such as health care and business indicating the lack of clarity in career preference. High school students also note that they would be more likely to choose a health care career and work for a particular facility if the facility paid their tuition. [6]

Step 2: Higher Education Students - Recruit traditional and non-traditional students

Most high school students in North Dakota plan to attend a 4-year college or university and 73 percent plan to attend school in-state.[6] While no statewide information is available about other health professions, nursing students frequently indicate that the location of the educational program, the availability of a career ladder for additional training, no waiting list to enroll, and the reputation of the academic program are factors that influence their choice of educational program.[7]

Program -

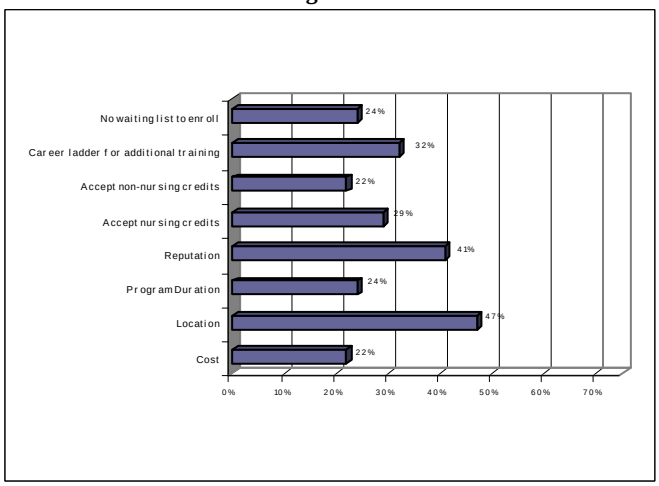
Post-High School Graduation Plans



Source: Hanson, B., Moulton, P., Rudel, R. and Plumm, K. (2006). High School Student Survey Results. Report of the North Dakota Nursing Needs Study. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.

Most Important Factors in Choosing Education

Nursing Students



Source: Moulton, P. and Speaker, K. (2004) Student Survey Results Report part of the North Dakota Needs Study. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.

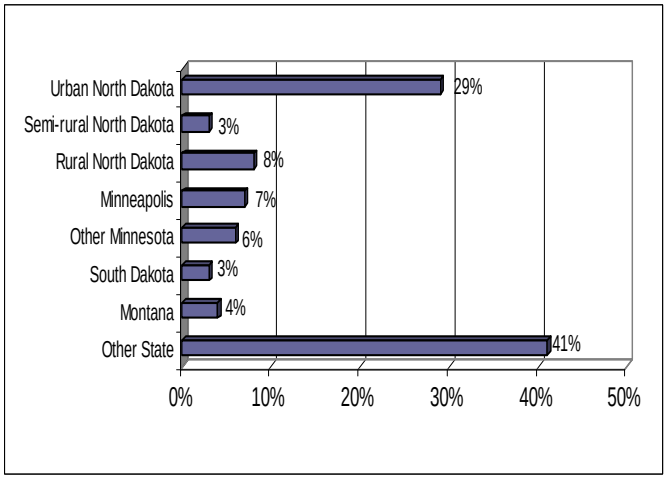
Step 3: Higher Education Programs - Locate education and training programs across North Dakota
North Dakota has a strong educational platform from which to offer and extend health professions education, including 11university system institutions, six tribal colleges, and two private institutions of higher education. Currently, among the health professions education programs, nursing is the only profession with statewide information about faculty and information technology infrastructure-two essential components of maintaining and growing health professions education programs.

Availability of qualified faculty, due in part to an aging faculty, is a significant concern in the expansion of health professions education programs. For example, nursing faculty data indicate that the average age of faculty is 51 and 40 percent of North Dakota's nursing faculty are projected to retire by 2013. [8]

Information technology to outreach educational programs is being used to some extent in North Dakota. For example, most North Dakota nursing programs have used video conferencing to outreach their classes. Some have also started to apply newer technology such as web-based video streaming which can be viewed on computers. Nursing programs indicate that lack of funding and lack of time to train faculty are the major barriers to increasing the use of technology. Other barriers include lack of high speed internet and cable television in some parts of the state as well as student readiness. (The latter has implications for K-12 education). [9]

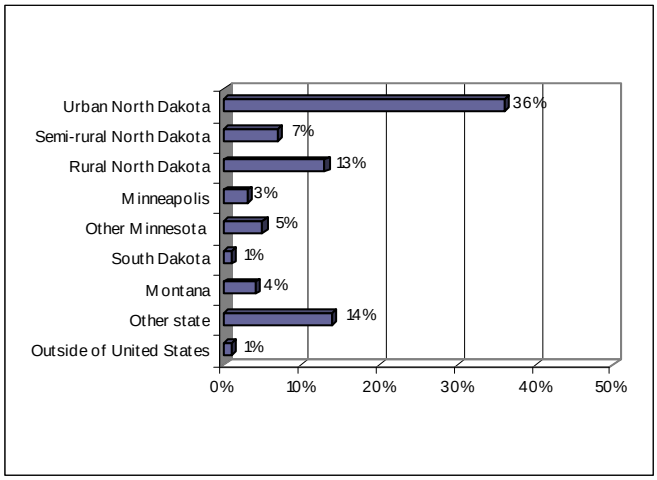
Step 4: Health Provider Recruitment - Encourage graduates to seek employment in North Dakota
It will take an additional 33 primary care physicians just to remove the health professions shortage designations in the state.[10] Also, based on requests for assistance, some urban centers in the state find recruiting for other specialty physicians challenging as well. Available information on nursing students indicates that 46 percent plan to work in North Dakota along with 40 percent of medical students/residents. [7, 11]

Medical Students and Residents Anticipated Work



Source: Moulton, P. and Amundson, M. (2004). Medical Student and Resident Preliminary Survey Results Center for Rural Health, School of Medicine and Health Sciences Health Professions Tracking Program.

Nursing Student Anticipated Work Location



Source: Moulton, P. and Speaker, K. (2004) Student Survey Results Report part of the North Dakota Needs Study. Center for Rural Health, University of North Dakota School of Medicine and Health Sciences.

Other than medicine and nursing, there is no information about the plans of health professions students to seek employment in the state or strategies they identify as most effective to keep them in North Dakota.

Step 5: Health Provider Retention - Sustain North Dakota's workforce

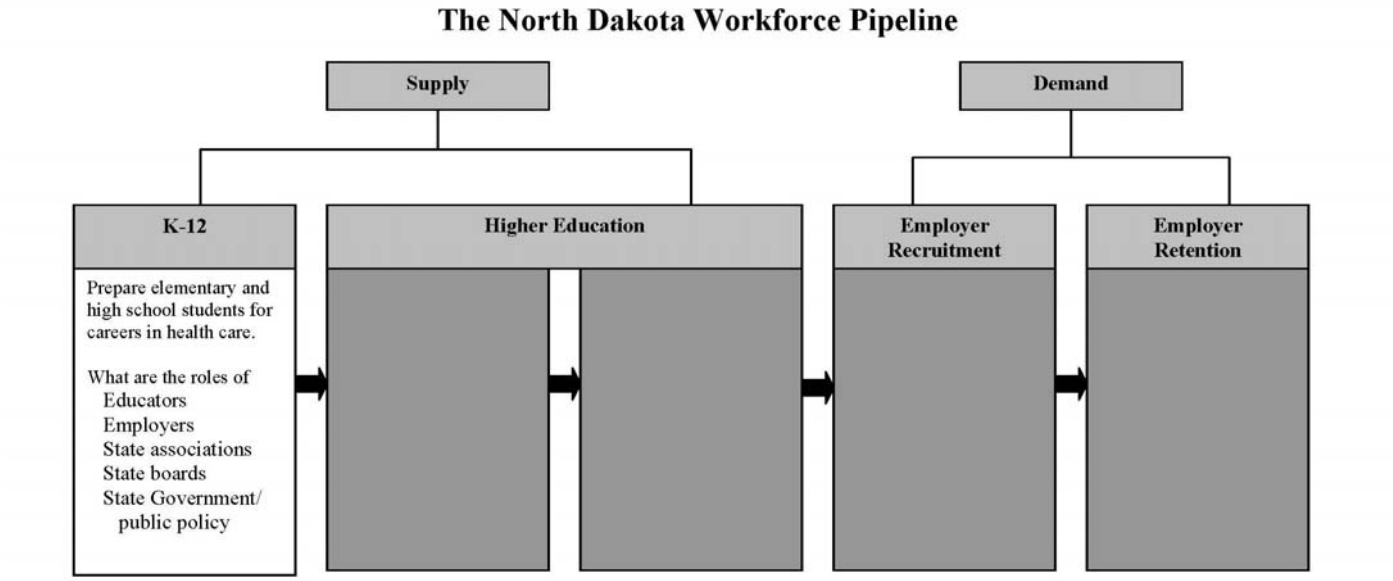
Turnover rates are a measure of retention and are an indication of fluctuation in staffing within a facility. Statewide information on turnover rates for health care providers, other than nursing, is unavailable. Turnover rates for registered nurses is currently at 19 percent (about one out of every five registered nurses has changed positions within the past year).[12]

POLICY STRATEGIES FOR EACH PIPELINE STEP

Having examined the information available on North Dakota's workforce pipeline, the next step was to determine priority goals and key issues within the five steps. Barriers to achieving goals, elements needing change, and action steps were considered by Summit participants. Additionally, current efforts of stakeholders were examined and further efforts were discussed. The Health Care Workforce Summit participants investigated each pipeline step from both the supply side including K-12, higher education students and programs, and the demand side of employer recruitment and retention. This work was designed to address the following Health Care Workforce Summit objectives:

- *Describe selected efforts underway in North Dakota to expand, recruit, and retain the workforce.*
- *Develop immediate and long-term strategies to address the health care workforce needs of North Dakota.*
- *Inform the development of a statewide plan through collaboration.*

Time limitations prevented full discussion of all stakeholder roles. The following action steps can be considered in addition to strategies used in other states and identified in the attached matrix.



(Wakefield, Amundson, and Moulton, 2006)

Goal 1: K-12: Increase students' exposure to health care professions through education and business partnerships, scholarship consortia, associations, industry, and education.

Key issues in exposing students to health care professions include developing job shadow programs in school systems that are incorporated into the curriculum, involving college students in elementary school career days, and developing programs to assist students acquire employable characteristics (i.e., interview skills and appropriate attire). Modeled after the Grand Forks school system (4th to 12th grade),

a career development curriculum could be implemented along with providing remedial education to help students prepare for health professions education programs. Health care providers could play a greater role by informing young people about industry needs.

Barriers that prevent developing programs to provide early exposure to health careers for K-12 students focused on curriculum challenges and lack of career path awareness. For example, students have incomplete knowledge of opportunities and thus are unable to make informed choices about potential careers. Students often begin college without information about the array of health care careers. Smaller schools do not have as many opportunities in science, which may make students less competitive for fields in health care. Other issues that have an effect on whether students choose health care careers is the perceived negative attitude of the professionals themselves due to pressures of the job, regulatory requirements (e.g., training and background checks) and remoteness of some communities.

Having identified issues and barriers, six action steps were proposed in the K-12 pipeline discussions to increase student awareness of health career options. Contributions of stakeholders are also described.

Action Step 1: Develop curriculum plan and design a workshop to engage parents.

Educators (K-12, Higher Education) and Health Care Providers can:

- design curriculum content that includes exposure to clinical experiences, (e.g., job shadowing) content about health occupations and science relevant to health careers and
- plan workshops that inform parent about health careers.

Action Step 2: Develop programs that use existing community resources (e.g., health care employers who can provide information about what careers are needed in the area.)

Employers can:

- market opportunities,
- increase capacity to provide student experiences in health care facilities,
- use information technology to outreach educations programs in grades K-12,
- adapt programs for small health care facilities,
- disseminate programs for use by other types of health care facilities, and
- develop a resource that lists all available health career orientation programs for use by career counselors/teachers.

State associations can:

- partner with health professional education programs and be listed as a resource in a developed speaker's bureau and
- help sponsor, coordinate, develop, and market health programs career awareness.

Action Step 3: Health care providers and/or academic departments could adopt a K-12 class as a community service project and provide tours, presentations, and related activities to introduce students to health care professions.

Employers can:

- provide information about health careers to community members through strategies such as speakers and tours.

Action Step 4: Schools, employers, and health care provides partner to develop a toolkit for elementary school students to reinforce reading, writing, math, and basic skills.

Employers can:

- standardize information for each grade level and
- target parents for health care recruitment.

Educators can:

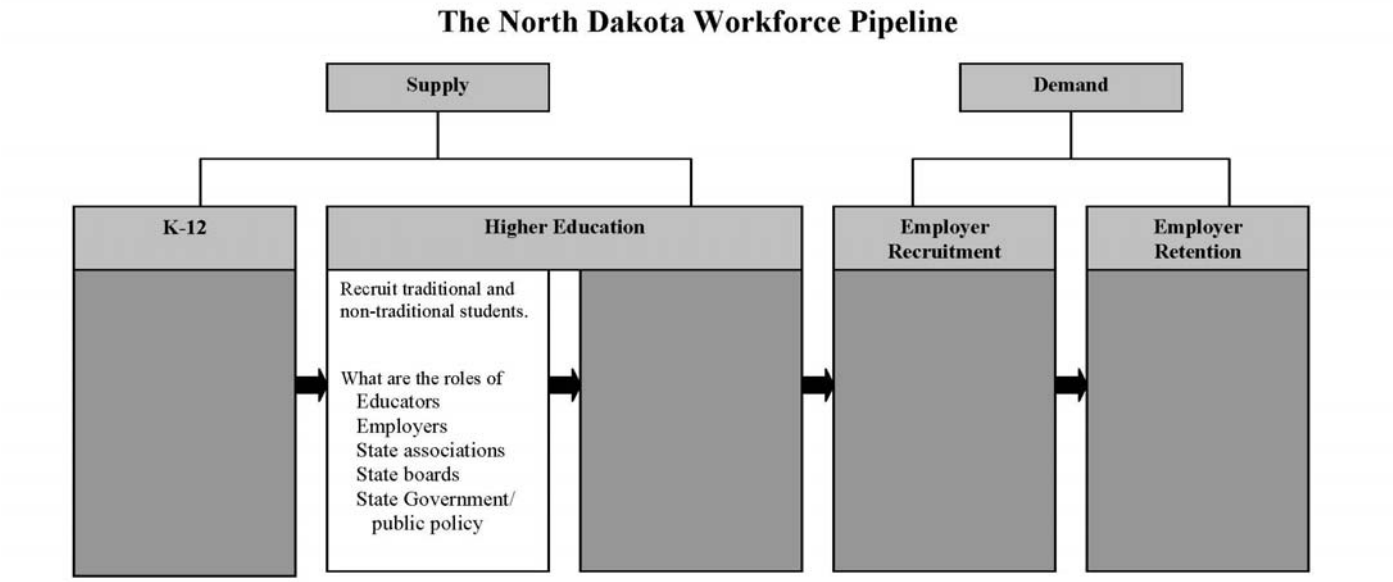
- increase math and science education with health care examples provided by health care employers.

Action Step 5: Given concern with the Health Insurance Portability and Accountability Act (HIPAA) and its impact on job shadowing, work with state boards and others to address regulatory requirements. Develop appropriate standards for different levels of students (e.g., fourth grade vs. high school student).

State and Tribal government can:

- design a career development process for K-16 in North Dakota,
- provide assistance in promoting health careers, and
- structure and share information for job shadowing and related opportunities consistent with HIPAA regulations.

Action Step 6: Examine the Grand Forks health career development model to determine applicability to rural areas. With assistance from the North Dakota Career Counselors Association, develop a pilot program.



(Wakefield, Amundson, and Moulton, 2006)

Goal 2: Higher education/students: Engage community/education programs to educate prospective students about health care programs.

Key issues discussed in higher education/student sessions included the development and dissemination of a variety of programs to expose students to health careers such as pre-med co-op programs and the medical explorers program. To recruit students into health careers, it was suggested that the number of health career fairs as well as the health occupations featured at the fairs, be expanded. Increasing the number of health career classes to target high school students and explore innovative methods of delivering programs was also recommended. Create scholarship and/or loan repayment programs in exchange for service obligation to attract students into health care careers. Explore the potential for developing statewide recruitment options to recruit students.

Barriers included the cost of health professions education and distance between home and higher education programs. Students leaving the state to pursue higher education likely increases career out-migration. Other barriers discussed were lack of knowledge about job opportunities, cost incurred by facilities when providing programs and work overload for health care providers participating in such programs.

Action Step 1: Establish a clearinghouse of information for potential students consisting of existing educational programs and employment opportunities for all health care careers. An assessment of what students/parents already know about health care opportunities in North Dakota would help target information gaps. A meeting of high school counselors with health associations and employers would provide information about effective strategies to disseminate information to students.

Employers can:

- contribute student and employment opportunities to the clearinghouse,
- develop grow-your own programs (e.g., health care facilities identify local individuals that wish to pursue health career education but lack funding to do so), and
- provide room and board opportunities for students during clinical rotations.

State and Tribal government can:

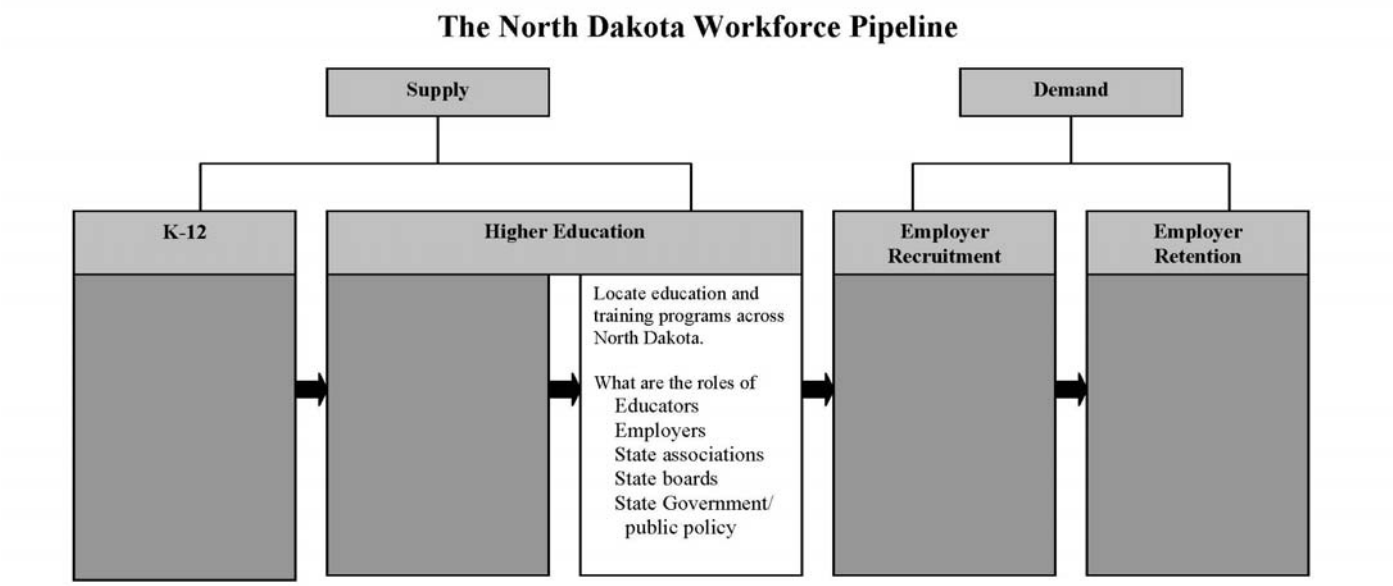
- support programs to promote health careers,
- support career ladder programs, and
- provide bonuses/incentives for educators that develop innovative service/community based education programs.

Tribal government can:

- identify mentors in communities to encourage students exploration of health careers.

Educators can:

- increase enrollment of nontraditional students (i.e., second career) and
- develop a better understanding of financial needs for nontraditional students (e.g., making students aware of financial resources such as scholarships).



(Wakefield, Amundson, and Moulton, 2006)

Goal 3: Higher education programs: Design rural interdisciplinary education programs for all health care disciplines.

Several *key issues* were identified associated with designing rural interdisciplinary educational programs. Capitol infrastructure, available technology/simulations, and developing innovative/non traditional programs were cited as issues to address when designing programs. Additionally, providing students early exposure, providing supervision, combining rural and urban clinical opportunities to ensure exposure to both settings, establishing hub training sites, and improving faculty salaries were discussed. The group cited expanding and strengthening rural sites to enable facilities to offer adequate educational experiences for students.

A number of *barriers* to establishing rural interdisciplinary educational program development were identified including a lack of shared vision and a changing workforce with different generational attitudes towards work. Limited communication between health care facilities and higher education regarding mutual needs and expectations is problematic. Across some health professions, academic faculty are paid less than their counterparts in practice. In addition, there is an insufficient number of clinicians that can serve as educators in clinical facilities. This contributes to constraints on program expansion. Access to student housing at clinical sites is problematic. Accreditation standards, rules and regulations also need to be addressed. Streamlined structures and processes should be established to facilitate individuals with advanced education in rural areas to provide clinical education for students. This group also cited the need for a statewide assessment of clinical opportunities and a statewide plan for educational program experiences.

Two action steps were identified to address rural interdisciplinary educational training programs.

Action Step 1: Create opportunities for representatives of educational programs and employers to meet at a state-wide conference such as the Dakota Conference on Rural and Public Health.

Employers can create a health education workgroup to:

- meet with educators to discuss options for student supervision, clinical sites, and joint appointments and
- encourage vocational and higher education programs to place students in rural communities, support joint appointments, combine urban and rural experiences and help find room and board for students in clinical placements.

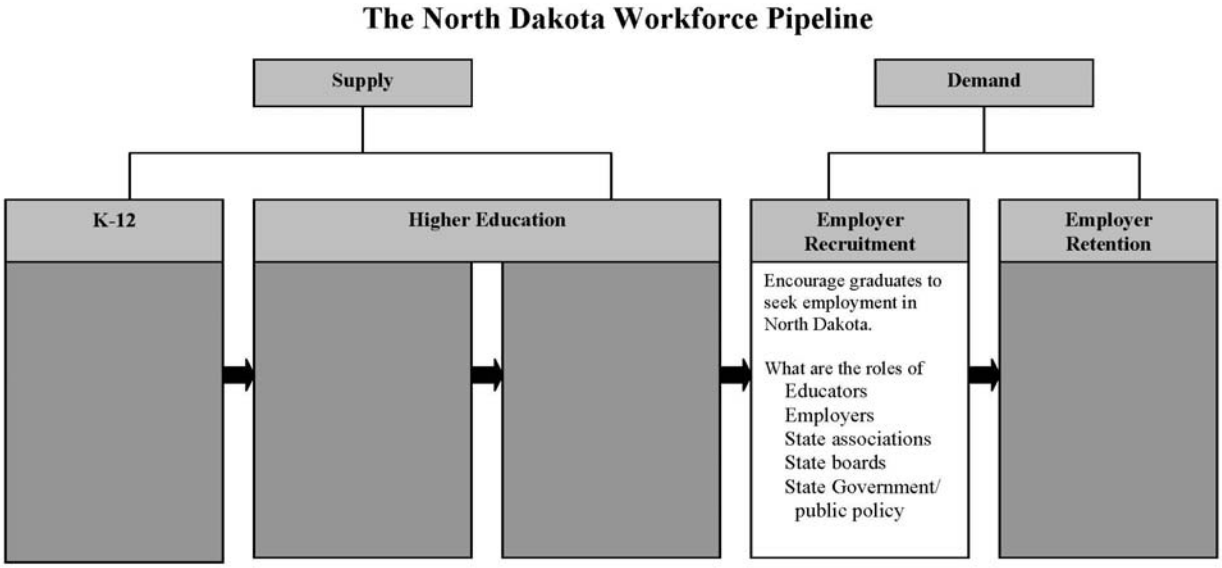
Educators can:

- explore additional distance education programs,
- look for clinical opportunities in rural areas, and
- address accreditation issues and other challenges that limit rural sites from participating in training.

Action Step 2: Increase the number of rural training programs statewide. An assessment of current programs and the potential for establishing other programs and collaborations was suggested along with the development of a rural curriculum (including interdisciplinary programs). Once a plan is developed a concept paper should be detailed and a pilot program implemented.

State associations can:

- advocate for state funding and support efforts centered on rural interdisciplinary training education.



(Wakefield, Amundson, and Moulton, 2006)

Goal 4: Employer Recruitment: Educate legislators about the "perfect storm" of the aging workforce and needs of an aging population.

The *key issues* related to educating legislators about the aging workforce and aging population include seeking state support for basic recruitment strategies necessary to successfully attract health care professionals. New national marketing campaigns for health professionals are increasing competition from outside the state. Recruitment needs to focus on the strengths of North Dakota. Health care systems should play a greater role in familiarizing students with health professions opportunities in North Dakota and share their experiences with other North Dakota facilities. There is a need to expand collaborative outreach to prospective clinicians. Financial incentives from county tax resources, loan

repayment and scholarships could impact recruitment of providers and educators and be used to encourage rural placements.

B*arriers* include lack of opportunities for K-12 students to explore health care careers early in their education especially the lack of health career fairs that target, in particular, high school students. Recruitment of health care providers, lack of resources in state loan repayment programs, and the need for innovation in reimbursement are challenges. Financial issues from faculty compensation to health care provider salaries were raised as barriers to the recruitment of an adequate academic and provider workforce. Out-migration of graduating students and a lack of knowledge about job opportunities in North Dakota are challenges to achieving an adequate workforce. A lack of training space and technology in health care facilities along with adequate clinical faculty are also barriers to recruitment.

Action Step 1: Information about community health centers, the nursing needs study, workforce environments, provider issues, and demographics, should be accessible to legislators. Develop a shared vision and common voice for the next legislative session.

State and Tribal government can:

- expand loan repayment programs,
- decrease interest rates on loans, and
- provide innovative community incentives and tuition breaks for North Dakota students and faculty families.

Educators can:

- provide loan forgiveness programs, competitive faculty salaries, waive tuition, promote tax incentives and get banks involved.

State associations can:

- educate legislators about the need for more funding to compete for health care providers and
- continue to help legislators focus on health care workforce through joint meetings such as the Health Care Workforce Summit.

Action Step 2: Develop a grass roots effort to inform key members of the appropriations committees regarding the need to adequately fund loan repayment programs and other financial issues related to workforce issues.

Employers can:

- advocate for funding loan repayment and other financial support programs.

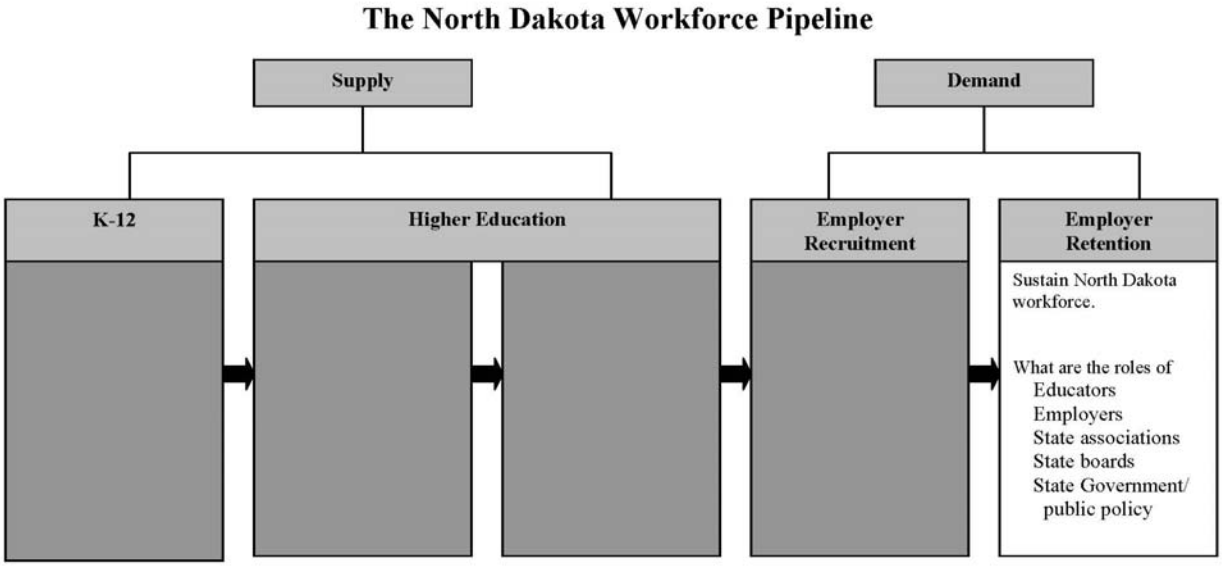
Action Step 3: Build partnerships among employers, the Center for Rural Health, economic development, and professional organizations/programs to address key issues. Identify gaps in what is currently being done and develop a central information clearinghouse and workforce center.

State Associations can:

- collaborate in building partnerships and encourage member involvement in a statewide workforce action plan including developing a central information clearinghouse.

Employers can:

- assist in providing data and promoting helpful public policies.



(Wakefield, Amundson, and Moulton, 2006)

Goal 5: Employer Retention: Foster a caring and innovative workplace environment.

Key issues include creating an innovative work environment relevant to recruiting and retaining health care providers. Marketing, good benefit packages, flexible workload and hours for employees along with addressing employment issues for spouses are important considerations in creating a good work environment. Career ladder opportunities for all disciplines were viewed as important as well as having current technology infrastructure. The availability of mentoring was also identified as important.

Barriers include generational differences that prompt redesigning the workplace (i.e., flexible workload and hours). Other concerns include adequate Medicare reimbursement for rural facilities, streamlined rules and regulations, depopulation and retention of health care providers in small towns, opportunities for spouse and family in rural communities and the need for a safe work environment. Lack of opportunity to use advanced degrees and/or lack of opportunity to advance education are also important barriers to address in retaining health care providers.

Action Step 1: Improve provider retention by creating a culture of caring that includes sharing best practices, developing coalitions to improve benefit packages, and increasing teamwork and job enrichment.

Employers can:

- conduct statewide employee surveys to track trends related to provider retention and
- help providers get involved with the community and stay connected.

Educators can:

- help with incentives (e.g., clinical faculty positions) to recruit providers.

State Associations can:

- actively recruit new members in order to provide them with a connection to their peers.

Action Step 2: Develop a common message to share with legislators regarding the challenges associated with provider retention.

Tribal government can:

- engage their community members to provide better and timelier information about the unique needs associated with retaining health care providers on reservations to legislators.

Action Step 3: Health care facilities could build/expand relationships with schools and offer ongoing programs as a way to stimulate interest in health careers and retain employees.

State associations can:

- assist in the development of information that would improve the experience of students in health career classes,
- increase communication with health career teachers and provide them with up-to-date information on health careers, and
- be involved in establishing career days, develop tools to facilitate presentations, and develop a resource about health care careers.

NEXT STEPS

In response to widespread interest to further efforts in strengthening the state's health care workforce, the Center for Rural Health is forming a Health Care Workforce Committee to work on the action steps identified at the Summit. This committee will include approximately 43 individuals representing state boards, state associations, medical facilities (urban, rural and Veterans Administration), long-term care, health and human services, academic and economic development. These individuals expressed interest in continuing to participate in workforce activities. The State Office of Rural Health, a program within the Center, has committed funds to support initial efforts of the committee. The Health Care Workforce Committee will identify the top three or four issues and develop an action plan. The action plan developed during the Health Care Workforce Summit and presented here is a core component of a statewide agenda. It will require further refinement and prioritization of issues and action steps by the health workforce committee.

WORKFORCE STRATEGIES USED BY OTHER STATES

Many states are actively pursuing plans to increase, recruit, and retain health care providers. From Vermont to Minnesota to New Mexico, policymakers and others are considering how to produce and deploy their health care workforce more effectively. Sharing similar concerns, national organizations such as the Institute of Medicine are also discussing strategies to address the increasing challenge of ensuring a well prepared workforce. **To help inform policy makers about strategies that could be applied in North Dakota, the following matrix provides brief reference to other state's actions developed to meet the challenge of ensuring an adequate workforce. Along with the Summit action plan, these strategies can also be considered for adoption in North Dakota.**

MATRIX

Focus	Workforce Pipeline --- STATE and TRIBAL GOVERNMENT	Cross reference to other Stakeholders
Prepare K-12 for health care careers	**South Dakota**[1] Department of Education, the Health Occupations for Today and Tomorrow program, and Healthcare Organizations are addressing the following areas: -Use technology and web-based resources to promote health careers and providing career program list for high school students to aid in choosing classes. -Provide mentoring opportunities for students that encourage math and science classes. -Provide job shadowing opportunities and address HIPAA restrictions.	Education Employer State Associations
Recruit traditional/ nontraditional students	**Nebraska**[2] Created a Midwest consortium for dental student education and financing that recruits from rural areas of Nebraska, South Dakota, Kansas, and Wyoming.	
	Alaska[11] 2003-04 Status of Recruitment Resources and Strategies (SORRAS) study commissioned by the Alaska Department of Health and Social Services, Primary Care and Rural Health Unit to describe and document current recruitment strategies, effectiveness, costs, and resources used by primary care clinics and small hospitals. SORRAS study systematically complied data on rural Alaskan health professional recruitment.	
Education training programs	**New Mexico**[6] Establish a separate state fund that can be used as seed money for the rapid development of new health professional education/training programs through State universities/colleges.	
	New Mexico[6] -Legislation to reform the education funding formula to reflect more accurately the cost of operating. -Assure that funds allocated under the formula are appropriately applied to mix of educational programs. - The new formula must cover the full cost of off-campus and distance education programs.	
	Vermont[12] Healthcare Workforce Summit plan includes to foster collaborations among community institutions, health care providers, and public health programs in order to complement treatment with prevention and promotion. - Simplify certification requirements for nursing professors/faculty to increase capacity (Link higher education with health care institutions to pay faculty competitively.)	Education Employer Board/Regulation
	Texas[4] Workforce Board developed a partnership with area hospitals and nursing schools to loan 65 nurse clinicians to teach in 13 academic programs. The initiative immediately allowed for an increase of 163 students plus it has fed conversations about curriculum and helped hospitals to recruit nursing graduates.	Education Employers
Encourage graduates to seek employment	**New Mexico**[6] - Expand existing state scholarships and loan programs to more professions. - Loans for service, loan repayment and stipend programs to be made available for: • Dentists • Dental hygienists • Psychiatrists • Selected medical specialists	Education

Focus	Workforce Pipeline --- STATE and TRIBAL GOVERNMENT	Cross reference to other Stakeholders
Encourage graduates to seek employment (continued)	**Loan Repayment Programs include:** KY NC PA TX MN OH SD UT NY OR TN WA	Education
	Massachusetts[8] Legislation to encourage work in primary care; tuition is reduced from $12-13,000 to $4000 if a student commits to four years of service. **New Mexico**[6] Establish incentives for professional relocation: - Differential Medicaid reimbursement for providers in specific areas. - Tax incentives for establishing, maintaining practice in specific areas. - Low/no cost capital financing for new practice.	Education Community
Sustain workforce	**New Mexico**[6] Enforce the Clean Claims Act. A clean claim for a payment for health care service has no defect or impropriety. A defect or impropriety includes lack of required sustaining documentation or particular circumstance requiring special treatment which prevents timely payment from being made from a claim. Violation of the Clean Claims Act can result in penalties issued to the insurance company from the Insurance Department.	Employers
	New Mexico[6] Develop and implement targeted strategies addressing health related taxes: - Reduce personal income taxes for providers. - Remove tax barriers to support establishing and maintaining practices in underserved areas. - Tax incentive for employers who offer health care coverage to their employees	
	New Mexico[6] - Create annual New Mexico Health Workforce Forum. - Shift some New Mexico Health Policy Commission resources from health financing issues to health workforce planning and policy development.	
	New Mexico[6] Improve collaboration among state agencies that employ health professionals and engage in workforce planning to avoid duplication, eliminate unnecessary competition and respond more effectively and quickly to emerging needs.	
	New Mexico[6] Secure financial support for recruitment and retention of health professionals in New Mexico. Sources may include: - Tobacco settlement funds - Blue Cross/Blue Shield conversion foundation - Medicaid funds leveraged by NMDOH investments in recruitment/retention	

Focus	Workforce Pipeline --- STATE BOARDS/REGULATIONS	Cross reference to other Stakeholders
Prepare K-12 for health care careers	**Utah**[5] High school students shadow healthcare workers. Enrollment to become licensed EMTs and certified CNAs is offered.	Education
	South Dakota[1] Department of Education, the Health Occupations for Today and Tomorrow Program, and Healthcare Organizations will address the following: -Provide more job shadowing opportunities and addressing HIPAA restrictions.	
Recruit traditional/ nontraditional students		
Education/ training programs	**South Dakota**[1] Department of Health, post-secondary educational institutions and local healthcare organizations to develop a clinical education consortium and clearinghouse to coordinate internship sites and address barriers to rural internships.	Education Employers
	Vermont[12] Healthcare Workforce Summit plan includes to foster collaborations among community institutions, health care providers, and public health programs in order to complement treatment with prevention and promotion. - Simplify certification requirements for nursing professors/faculty to increase capacity (Link higher education with health care institutions to pay faculty competitively.)	Education Employer Government
Encourage graduates to seek employment	**South Dakota**[1] Department of Health and local healthcare organizations to establish a clearinghouse for vacancies and recruitment programs for healthcare workforce and clinical site opportunities.	State Associations
Sustain workforce	**New Mexico**[6] New Mexico encouraged cooperation among legislators, licensing and regulating board to streamline and coordinate efforts with the following focus: -Conduct study of state licensing processes and make recommendations that would simplify and consolidate these processes. Examine possibilities of multi-state licensing. -Make uniform requirements for credentialing by Medicaid and other state programs. -Create a competency-based licensing/certification process. Allow cross license recognition of competencies. For example, core competencies required in one health profession to be used in partial satisfactions of the requirements in another. -Review potential for new/expanded health professional practice based on identified needs.	State Associations

Focus	Workforce Pipeline --- STATE BOARDS/REGULATIONS	Cross reference to other Stakeholders
Sustain workforce	**New Mexico**[6] Streamline/Standardize State credentialing requirements: Promote sharing and recognition of credentialing between agencies, reducing unnecessary duplication (Arizona model)	
	West Virginia[2] Pediatricians and school nurses can be cross-trained in dental care so they can deliver oral health screening and treatment services.	Education
	Kentucky[7] - Electronic application for license renewals should make data more easily accessible for the following disciplines: - Pharmacy, Nursing, Dentistry, Medical, Psychology. -Questions include gender, race/ethnicity, and primary and secondary work sites. -Electronic data collection will provide reliable and accessible workforce data. -Producing a more standardized data set could be useful to attain appropriate distribution of health professionals in rural and low-income areas.	

Focus	Workforce Pipeline ---- EDUCATION	Cross reference to other Stakeholders
Prepare K-12 for health care career	**South Dakota**[1] Department of Education, the Health Occupations for Today and Tomorrow Program, and Healthcare Organizations are addressing the following areas: -Use technology and web-based resources to promote health careers and providing career recommended class list for high school students to aid in choosing classes. -Provide mentoring opportunities for students that encourage math and science classes. -Provide job shadowing opportunities and address HIPAA restrictions.	Employer State Associations Government
	Tennessee[2] Sends teams of health professions students to teach health education and discuss careers with rural adolescents at 4-H summer camps.	
	West Virginia[2] Enroll minority and lower income high school students in the Health Sciences and Technology Academy; and provide summer health careers education through local science clubs.	
	Utah[5] -Intermountain Health Care, is working with its partners to develop resources to infuse health care career information into K-12 curricula. For example, primary students practice basic math by counting tongue depressors and sutures. - Middle schools add tour and field trips with help of AHEC representatives who supply schools with speaker and sites. -High school students shadow healthcare workers and enrollment to become licensed EMTs and certified CNAs is offered.	Board/Regulation
Recruit traditional/ nontraditional students	**Emory University – Georgia**[3] - Teaching salaries and tuition discounts are offered to nurses while getting their masters and doctorates. - "Fast tracks" master degrees are offered to nurses for faculty careers. -Summer Nursing Teaching Institute Certification Program blends 12 days of classroom followed by 1 ½ months of cyber sessions and 4 months of mentoring/teaching at an approved educational institution of the student's choice.	
Education training programs	**California**[2] State of California has implemented modular instructional units for EMS and paramedic education. The instructional units are flexible to accommodate the schedules of volunteers. Information Technology based learning has demonstrated to be comparable to on-site classroom training to be used for either initial training or continuing education. Many volunteer EMS have used this experience as a stepping stone to work in other health care careers.	
	Iowa University[2] BSN Satellite Program trains rural students in their community of residence rather than requiring relocation to urban areas. Uses distance learning with Nursing and Pharmacy.	
	New Mexico[6] Plan to improve collaboration among health professional education programs to reduce duplication, eliminate unnecessary competition, standardize course offerings and respond more effectively and quickly to emerging needs.	

Focus	Workforce Pipeline ---- EDUCATION	Cross reference to other Stakeholders
Education training programs (continued)	**Texas**[4] Workforce Board developed a partnership with area hospitals and nursing schools to loan 65 nurse clinicians to teach in 13 academic programs. The initiative immediately allowed for an increase of 163 students plus it has fed conversations about curriculum and helped hospitals to recruit nursing graduates.	Employers State Associations Government
	California Partnership – Sutter Corporation with Sacramento Community College[4] Sutter Corporation has made an endowment totaling 13.5 mil to develop a new teaching area for nursing plus supplying clinicians as adjunct lab teachers. College agreed to quadruple the size of program.	Employers
	South Dakota[1] Post-secondary educational institutions need to attract and retain clinical internship opportunities to encourage healthcare providers and healthcare program faculty to advance their education while continuing their current employment.	Employers
	South Dakota[1] Department of Health, post-secondary educational institutions and local healthcare organizations to develop a clinical education consortium and clearinghouse to coordinate internship sites and address barriers to rural internships.	Employers Board/Regulation
	Vermont[12] Healthcare Workforce Summit plan includes to foster collaborations among community institutions, health care providers, and public health programs in order to complement treatment with prevention and promotion. - Simplify certification requirements for nursing professors/faculty to increase capacity (Link higher education with health care institutions to pay faculty competitively.)	Employers Board/Regulations Government
Encourage graduates to seek employment	**Georgia**[10] School of Allied Health Sciences at the Medical College increased allied health student participation in interdisciplinary health care services in rural areas 2001-03, After polled; found that 76% responded positively that they would "accept employment at the educational rotational site if offered."	
	New Mexico[6] - Expand existing state scholarships and loan repayment programs to more professions. - Loans for service, loan repayment and stipend programs to be made available for: • Dentists • Dental hygienists • Psychiatrists • Selected medical specialists	Government
	Loan Repayment Programs include: KY NC PA TX MN OH SD UT NY OR TN WA	Government
Encourage graduates to seek employment (continued)	**Massachusetts**[8] Legislation to encourage work in primary care; tuition is reduced from $12-13,000 to $4000 if a student commits to four years of service.	Government
	Arkansas[9]	Community

Focus	Workforce Pipeline ---- EDUCATION	Cross reference to other Stakeholders
	Rural health loan repayment program: 1) Communities pay back loans in return for a 4 year commitment by the physicians. 2) If a student commits to this loan program, it will increase their chances of admission if they are placed on the alternate list.	
Sustain workforce	**West Virginia**[2] Pediatricians and school nurses can be cross-trained in dental care so they can deliver oral health screening and treatment services.	Board/Regulation

Focus	WORKFORCE PIPELINE --- EMPLOYERS	Cross reference to other Stakeholders
Prepare K-12 for health care careers	**South Dakota**[1] Department of Education, the Health Occupations for Today and Tomorrow Program, and Healthcare Organizations are addressing the following areas: -Use technology and web-based resources to promote health careers and providing career recommended class list for high school students to aid in choosing classes. -Provide mentoring opportunities for students that encourage math and science classes. -Provide job shadowing opportunities and address HIPAA restrictions.	Education State Associations Government
Recruit traditional/ nontraditional students	**Robert Wood Johnson Foundation**[4] Increasing the supply of nurses is not the only answer. A healthy hospital environment should be created addressing the following 3 areas: physical space; work processes and policies; and organizational culture. Transforming Care at the Bedside (TCAB) is a 2 year pilot program involving 13 hospitals and nursing schools charged with focusing improvements in the following areas: -work flow in medical surgical units -lean operations -safety/reliability -patient-centeredness -new graduates readiness for the work environment and the environment's readiness for them	
Education training programs	**Texas**[4] Workforce Board developed a partnership with area hospitals and nursing schools to loan 65 nurse clinicians to teach in 13 academic programs. The initiative immediately allowed for an increase of 163 students plus it has fed conversations about curriculum and helped hospitals to recruit nursing graduates.	Education
	California Partnership – Sutter Corporation with Sacramento Community College[4] Sutter Corporation has made an endowment totaling 13.5 mil to develop a new teaching area for nursing plus supplying clinicians as adjunct lab teachers. College agreed to quadruple the size of program.	Education
	South Dakota[1] Post-secondary educational institutions need to attract and retain clinical internship opportunities to encourage healthcare providers and healthcare program faculty to advance their education while continuing their current employment.	Education

Focus	WORKFORCE PIPELINE --- EMPLOYERS	Cross reference to other Stakeholders
Education training programs (continued)	**Vermont**[12] Healthcare Workforce Summit plan includes to foster collaborations among community institutions, health care providers, and public health programs in order to complement treatment with prevention and promotion. - Simplify certification requirements for nursing professors/faculty to increase capacity (Link higher education with health care institutions to pay faculty competitively.)	Education Board/Regulation Government
	Vermont[12] - Healthcare Workforce plan includes to study recruitment and retention and share "best practices" that are working, dissect them and share what works across settings and health care spectrum. - Work environment will be studied for the aging workforce and redesigned.	
	South Dakota[1] Department of Health, post-secondary educational institutions and local healthcare organizations to develop a clinical education consortium and clearinghouse to coordinate internship sites and address barriers to rural internships.	Education Board/Regulation
Encourage graduates to seek employment	**South Dakota**[1] Local healthcare organizations to develop recruitment programs and to cross train healthcare employees in rural facilities.	
Sustain workforce	**New Mexico**[6] Private-public partnerships to establish cooperative support services for practices. Create cooperative business and clinical support services for practices. These cooperative ventures could be established on a local, regional or statewide basis. - billing and collection services - clinical records transcription and maintenance services - laboratory and radiology services - payroll and accounting - office space for practices - medical supply joint purchasing	State Associations Community
	New Mexico[6] - Enforce the Clean Claims Act. A clean claim for a payment for health care service has no defect or impropriety. A defect or impropriety includes lack of required sustaining documentation or a particular circumstance requiring special treatment, which prevents timely payment from being made from a claim. Violation of the Clean Claims Act can result in penalties issued to the insurance company from the Insurance Department. - Promote development of automated billing and medical data capacity in health practices.	Government

Focus	Workforce Pipeline --- STATE ASSOCIATIONS	Cross reference to other Stakeholders
Prepare K-12 for health care careers	**South Dakota**[1] Department of Education, the Health Occupations for Today and Tomorrow Program, and Healthcare Organizations are addressing the following areas: -Use technology and web-based resources to promote health careers and providing career program list for high school students to add in class choices. -Provide mentoring opportunities for students, which encourage math and science classes. -Provide more job shadowing opportunities and addressing HIPAA restrictions.	Education Employee Government
	New Mexico[6] Private and Public partnerships to develop a Health State modeled on the Boys State and Girls State experience for high school students considering health professional careers.	Community
Recruit traditional/ nontraditional students		
Education training programs		
Encourage graduates to seek employment	**South Dakota**[1] Department of Health and local healthcare organizations to establish a clearinghouse for vacancies and recruitment programs for healthcare workforce and clinical site opportunities.	Board/Regulation
Sustain workforce	**New Mexico**[6] Private-public partnerships to establish cooperative support services for practices. Create cooperative business and clinical support services for practices. These cooperative ventures could be established on a local, regional or statewide basis. - billing and collection services - clinical records transcription and maintenance services - laboratory and radiology services - payroll and accounting - office space for practices - medical supply joint purchasing	Employers Community
	New Mexico[6] New Mexico Health Resources, a statewide recruitment clearinghouse, plans to expand the range of activities to include a broader range of the state's health professional needs. -target a broader range of health professionals -expand support to allow NMHR to be the 'one-stop shop' for health professionals -increase support for nationwide advertising and targeted recruiting -provide linking support for local recruiters with similar needs -expand cooperative private sector support for generic health professionals.	Community

	Workforce Pipeline --- STATE ASSOCIATIONS	Cross reference to other Stakeholders
Sustain workforce (continued)	**New Mexico**[6] New Mexico encouraged cooperation among legislators, licensing and regulating board to streamline and coordinate efforts with the following focus: -Conduct study of state licensing processes and make recommendations that would simplify and consolidate these processes. Examine possibilities of multi-state licensing. -Make uniform requirements for credentialing by Medicaid and other state programs. -Create a competency-based licensing/certification process. Allow cross license recognition of competencies. For example, core competencies required in one health profession to be used in partial satisfactions of the requirements in another. -Review potential for new/expanded health professional practice based on identified needs.	Board/Regulation

Focus	Workforce Pipeline --- COMMUNITY	Cross reference to other Stakeholders
Prepare K-12 for health care careers	**New Mexico**[6] Private and Public partnerships to develop a Health State modeled on the Boys State and Girls State experience for high school students considering health professional careers.	State Associations
Recruit traditional/ nontraditional students		
Education/ training programs		
Encourage graduates to seek employment	**New Mexico**[6] Establish incentives for professional relocation: - Differential Medicaid reimbursement for providers in specific areas. - Tax incentives for establishing, maintaining practice in specific areas. - Low/no cost capital financing for new practice. **New Mexico**[6] Private-public partnerships train local economic developers on community-based approaches to health workforce improvement including both recruitment and retention efforts. **New Mexico**[6] Promote health sector collaboration in communities for shared purchasing, administrative services, and technology. This should include cooperative efforts in payroll, accounting, IT support, and coding/billing/collections. Collaboration should be promoted between health care entities as well as between health care and other business sectors. **Arkansas**[9] Rural health loan repayment program: 1) Communities pay back loans in return for a 4 year commitment by physicians. 2) If a student commits to this loan program, it will increase their chances of admission if they are placed on the alternate list.	Government Education

Focus	Workforce Pipeline --- COMMUNITY	Cross reference to other Stakeholders
Sustain workforce (continued)	**New Mexico**[6] New Mexico Health Resources, a statewide recruitment clearinghouse, plans to expand the range of activities to include a broader range of the state's health professional needs. -target a broader range of health professionals -expand support to allow NMHR to be the 'one-stop shop' for health professionals -increase support for nationwide advertising and targeted recruiting - provide linking support for local recruiters with similar needs -expand cooperative private sector support for generic health professional	State Associations
	New Mexico[6] Private-public partnerships to establish cooperative support services for practices. Create cooperative business and clinical support services for practices. These cooperative ventures could be established on a local, regional or statewide basis. - billing and collection services - clinical records transcription and maintenance services - laboratory and radiology services - payroll and accounting - office space for practices - medical supply joint purchasing	Employers State Associations

Additional Nationwide Workforce Activities

Regional Workforce Centers

Northeast: State University of New York at Albany
Southeast: University of North Carolina at Chapel Hill
North Central: University of Illinois at Chicago
South Central: University of Texas Health Science Center at San Antonio
Northwest: University of Washington
Southwest: University of California at San Francisco

State Workforce Centers

Alabama	Indiana	New York	West Virginia
Alaska	Iowa	North Carolina	Wisconsin
Arizona	Maryland	North Dakota	
California	Massachusetts	Oregon	
Colorado	Michigan	Pennsylvania	
Connecticut	Mississippi	South Dakota	
Florida	Nebraska	Tennessee	
Hawaii	Nevada	Vermont	
Idaho	New Jersey	Virginia	
Illinois	New Mexico	Washington	

State Workforce Summits

Colorado	Mississippi	Vermont
Illinois	Missouri	Wisconsin
Iowa	Minnesota	
Kansas	New Mexico	
Maine	South Dakota	
Maryland	Texas	

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