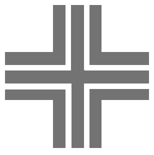
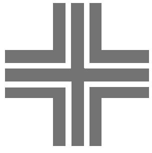


Health Care Sector Employment Initiative

Taking "AIMM" at a Growing Crisis

A project of the
Oregon Workforce Investment Board

FINAL REPORT
Fall 2002



ABOUT THIS REPORT

For More Information

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Acknowledgments

This report was made possible through the dedication of numerous health care, education, regulatory board, and workforce professionals who contributed their time and effort over the course of many months. State steering committee members and strategy team members are listed at the back of this Executive Summary. The Steering Committee of the Health Care Sector Employment Initiative appreciates the willingness of the legislative Interim Task Force on Health Care Personnel to coordinate the work of the two groups, and is pleased that the task force supports our complementary recommendations.

In addition, thanks are due to Suzanne Caubet, a Portland State University graduate student who, during an internship with the Governor's Office of Education and Workforce Policy, provided valuable assistance with the initial discussion document that started the health care initiative process. Thanks also to Lisa Cimino and Mari Anne Gest of the Governor's Office of Education and Workforce Policy. The Oregon Department of Community Colleges and Workforce Development and the Oregon Employment Department have also provided important assistance during the course of this project.

- Research sources used to develop this report, including articles, reports, presentations, summits, and Internet sources, are listed at www.workforce.or.us/healthcare/FinalHealthcareReport.pdf.

This report was printed through a generous donation from Providence Health System.

ACTION SUMMARY

TAKING IMMEDIATE "AIMM" AT THE GROWING CRISIS

Oregon's health care workforce challenges are urgent. Delaying action would have unthinkable, far-reaching consequences. Four priorities will direct short-term efforts to alleviate critical skills shortages. Achieving these priorities will require a collaborative approach to advocacy and financing.

Assure Ample Capacity to account for existing shortages and projected growth.

Increase capacity and the training pipeline by making key investments in targeted programs so Oregon can enroll more students and get more people ready to enroll. Actions must address classroom, faculty, and program capacity issues with creative public-private partnership financing.

Players: The Legislature and the Governor, with private sector health care support and investments.

Increase Accessibility by expanding delivery methods using distance learning and building simulation centers.

Focus on maintaining and expanding the capacity to offer classes in programs for targeted occupations or for prerequisites that are needed to enter these programs. Include all types of distributed learning (interactive video, online education). Develop creative finance and bonding packages to build multi-disciplinary simulation centers in key urban and rural areas to offer additional and improved clinical training.

Players: Boards of Education and Higher Education, Department of Community Colleges and Workforce Development, Oregon University System, Oregon Department of Education (K - 12), private universities and career schools, hospitals, long term care facilities, others with IP video, RODEO Net, Oregon Health Career Center, Area Health Education Centers, Economic and Community Development Department, local economic development entities.

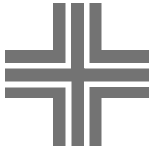
Maximize Mobility through articulation agreements, common curriculum, and clear and enhanced career pathways for students and current workers.

Make sure learners can make informed choices about career paths and can more easily complete a health care program with classes from multiple colleges and universities. Focus on making the most efficient use of the students' time and resources.

Players: Boards of education and higher education, Oregon Community Colleges and Workforce Development Department, Oregon University System, Oregon Department of Education (K - 12), private universities and career schools, the Oregon Employment Department.

Maintain Quality with stable investment in programs and student assistance.

Players: The Legislature and the Governor, with private sector health care support and investments. Boards of Education and Higher Education, Community College and Workforce Development, Oregon University System, Student Assistance Commission.



It is imperative that the public and private sector work in partnership. While some efficiencies will be achieved with existing resources, additional investments of public and private resources will be required to achieve these short-term priorites, as well as the five over-arching goals defined on pages 11 through 16.

THINGS YOU CAN DO TO HELP WITH THE **TAKING "AIMM" INITIATIVE**

- Make presentations to representative organizations and their leaders
- Volunteer to make presentations to other key stakeholder groups or organizations
- Educate your current and newly elected public officials about the *Taking AIMM Initiative*
- Publish an article in your organization's newsletter or post an article to your web site, providing links to this report
- Encourage your representative organization or institution to send an endorsement letter supporting the *Taking AIMM Initiative*, and supporting legislation and other activities to implement it
- Email the cover letter and web site link for this report or its executive summary to your organization's members and other interested parties, and ask for their assistance
- Write letters to the editor or guest editorials for your local newspaper about the *Taking AIMM Initiative* and our growing health care workforce crisis
- Provide financial resources to publish or distribute outreach materials, including a public relations kit
- Ask your organization's public relations or marketing staff to help spread the word about the *Taking AIMM Initiative* in its materials
- Commit to have the *Taking AIMM Initiative* included in your organization's legislative agenda

Working together, we can make a difference for Oregon, providing more skilled workers in the health care employment areas most affected by shortages.

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EXAMINATION

Health Care In Oregon

From birth through hospice, the health care industry touches virtually everyone. Oregon families depend on health care workers for everything from childhood immunizations, orthodontia, and setting broken bones, to accident rehabilitation, blood pressure screening and treatment, and cancer care. Medical and dental services are also critical to Oregon's employers, who depend on a healthy workforce, and to our communities' ability to attract and retain the businesses vital to a healthy economy.

Quality health care requires quality people—doctors, nurses, pharmacists, dentists, plus scores of technicians, therapists, and assistants—staffing hospitals, clinics, nursing homes, and service facilities throughout rural and urban Oregon. The health care industry is one of the state's and the nation's largest employers. The Bureau of Labor Statistics recently estimated that more than a third of America's 30 fastest growing occupations will be in health services. There are currently 11.3 million health services jobs in the U.S., and this number is projected to grow to 12.7 million by 2008. Oregon health care employment is well over the 100,000 mark, and growing fast.

> *"Addressing Oregon's growing health care employment crisis is one of the state's top workforce priorities."*
>
> *John Kitzhaber, M.D.*
> *Governor*

However, the need for health care services is growing even faster. The number of Oregonians aged 65 and older is over 438,000, and this population is expected to increase by over 100 percent by the year 2025. An aging population, changing technology, a trend toward more preventative care, and shifts away from in-patient, institutionalized care to out-patient and even home-based services mean that Oregon needs a large, stable pool of well trained service providers certified in many different specialities.

A Growing Crisis

Like most of the nation, Oregon is facing a shortage of health care workers. There are simply not enough people in many occupations, and skills shortages within the available workforce also limit employers. A shortage of registered nurses is particularly acute. The Northwest Health Foundation, in its 2001 publication *Oregon's Nursing Shortage, A Public Health Crisis in the Making,* stated, "The nursing shortage is adversely affecting patient care, the safety and morale of the nursing workforce, and is driving up the cost of care." This same report states that the average age of an RN in Oregon is 47—and an aging workforce is a problem in many health care occupations. A host of thorny issues drive health care shortages, and create complex barriers to fixing them. Examining these issues requires an in-depth look at working conditions and other workplace factors that affect health care providers and employees. It must also investigate education and training options, capacities, and articulation in Oregon, employers' recruitment

and retention concerns, and the many state and national regulatory issues affecting health care.

One of the reasons health care workforce issues are so numerous and complex is the equally diverse mix of players in the health care arena. Any attempt at removing the barriers to health care employment must reach a wide audience, including a broad range of public and private, for-profit and non-profit employers; community colleges, universities, and other training providers; labor unions and workers; insurance companies and federal programs like Medicare and Medicaid; state and local economic development, education, and workforce policy groups; regulatory agencies certifying workers and workplaces; and career planning advisors ranging from high school counselors to One Stop career center staff.

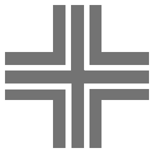
A Meaningful Plan

Solving the health care personnel crisis won't be easy, but it is crucial. In late 2001, the Oregon Workforce Investment Board led the charge, responding to workforce shortages and other employment concerns in health care by creating the Health Care Sector Employment Initiative. It formed a state steering committee to oversee an ambitious effort to research, identify, and analyze the most important factors in health care employment for eleven key occupations, in order to create recommendations for a broad-reaching statewide strategic plan.

This report outlines the work of the state steering committee and its three strategy teams, presenting the findings and recommendations that were reviewed and validated during Oregon's 2002 health care summit. Hundreds of health care partners, educators, and policy makers prioritized the recommendations for short- and long-term goals including new programs, new curriculum, new partnerships, and resource plans. While some efficiencies can be achieved with existing resources, it will take an additional investment of public and private resources to accomplish the goals outlined on pages 11 through 16.

Factors Creating The Health Care Shortage

- An aging population is creating a huge increase in demand
- The same demographics are limiting the pool of qualified workers—more health care workers are (or will soon be) retiring than are entering the field
- Many targeted health care jobs are dominated by female workers; a limited number of males and minorities are entering the field
- Skilled workers are leaving health care because of working conditions including 24/7 shifts, mandatory overtime, lifting and other physical demands, and emotional stress
- Reimbursement requirements often lead to nurses and others spending more time on paperwork than on patient care
- It is difficult to align training programs to promote upward career mobility, worker re-entry, or training for individuals with English as a Second Language (ESL) needs
- Shorter hospital stays and other cost containment strategies have changed the skill mix needed by the health care team and increased the need for outpatient and home health care
- Regulations (for example, staffing ratios and training sites) limit flexibility in responding to workforce shortages



The Oregon Health Care Sector Employment Initiative

The Oregon Workforce Investment Board (OWIB) is charged with advising the governor on a broad range of topics related to Oregon's comprehensive workforce system. It is made up of leaders from private sector business, labor, state and local governments, and government agencies. A majority of the nearly 40 members represent the private sector. In 2001, the OWIB responded to increasing reports of shortages and skills deficits in the current health care workforce—and growing concerns about Oregon's ability to recruit and train a sufficient number of future health care workers—by creating the Health Care Sector Employment Initiative.

This intensive and statewide approach to serving the workforce needs of a specific group of related occupations was prescribed after a number of local workforce boards began campaigns to identify and resolve similar problems in their regions. Local workforce boards reported that the issues behind health care worker shortages are complex and varied, and that making headway will require statewide strategies and partnerships. Indeed, while this report recommends a wealth of Oregon-based strategies to combat many problems, federal assistance is also needed to get at the root of some of our nation's barriers to a stable and adequate health care workforce.

Oregon's Targeted Occupations

	Projected Growth 2000-2010	Employment in 2000
Radiologic technician/ technologist	33.5%	2,100
Medical assistant	30.4%	3,800
Medical records clerk	28.1%	1,100
Pharmacist	17.2%	2,400
Registered nurse	15.4%*	25,600
Dental hygienist	14.0%	2,800
Dental assistant	14.0%	4,000
Dentist	13.8%	1,100
Licensed practical nurse	11.3%	3,500
Certified nursing assistant/ medication aide	10.3%*	13,200

**Many analysts think these projections are low.*

The overall goal of the initiative is to increase the number of health care workers in targeted occupations, while providing better training and career opportunities to current and future workers in these jobs. Solutions will benefit workers and employers, and promote safe and affordable health care.

State Steering Committee

The OWIB recruited a steering committee from key stakeholders in workforce development, health care, and related education programs. Co-chaired by OWIB members representing business and labor, the state steering committee selected eleven occupations *(above)* along a wage continuum of jobs in critical need of new workers, new strategies to overcome significant workforce challenges, or both. The steering committee has overseen the work of three appointed strategy teams. These teams each specialized in a different set of related issues, researching

health care workforce problems in depth, and presenting recommendations to the steering committee. In all cases, members have worked according to guidelines designed to keep participants focused on the initiative's common goals, without taking positions that further a particular organization's unique agenda. The mission of the initiative was to address specific issues that could best be resolved at the state level.

Three Strategy Teams

The **employment strategy team** looked at recruitment and retention challenges. It included representatives of local and regional workforce investment boards, other workforce partners, state agencies, labor market economists, community based organizations, employers, and labor.

The **workplace issues team** studied workplace conditions and regulatory issues affecting health care workers. This team included statewide employers, health care organizations, labor organizations, advocates, and representatives of regulatory boards.

The **occupational training and education team** focused on problems related to educating and training health care workers. The team represented K - 12 education, the Oregon University System, private colleges, private career schools, and regulatory boards.

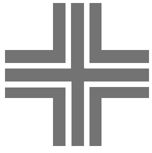
The three strategy teams reviewed and refined lists of health care workforce issues related to their area of focus, and then ranked the importance of resolving the identified concerns. A great deal of discussion, open sharing, and basic research then led to proposed strategies, as well as a list of potential barriers to successful implementation of the recommendations. The teams then crafted suggestions for managing or alleviating these barriers. All of the information was forwarded to the state steering committee for review and preparation for presentation at the May 2002 health care summit. The work of the strategy teams is outlined in the Diagnosis section, beginning on page 5.

"Health care employers need to work together to solve some of these critical workforce problems. If they don't solve them, we have seen in other states that the government will prescribe solutions, often with unintended consequences."

Annette Talbott
Governor's Workforce Policy Coordinator
Governor's Office of Education and Workforce Policy

The Health Care Summit

The state steering committee invited employers, workers, labor organizations, educators and training providers, workforce organizations, local governments, and other health care workforce partners to a summit in May of 2002. Close to 200 attented to review and discuss the findings and recommendations of the initiative teams, providing a broad cross-section of interested Oregonians with the opportunity to discuss, refine, and validate the proposed strategies. Using feedback from the summit, the steering committee prepared implementation and resource plans for the OWIB, the governor, the legislature, and legislative task forces. The most urgent priorities are presented on page *i*, Taking Immediate "AIMM" at the Growing Crisis.



DIAGNOSIS

Research And Findings

The strategy teams initially took a broad view of the issues. As they dissected their findings, a great many problems and possible solutions came to light. Teams worked to prioritize issues, and a clearer picture of the most important needs emerged. To strengthen their analysis, each team completed a criticality survey to allow members to rank the impact of specific issues and challenges, and to rate the proposed solutions according to their potential effectiveness and ease of implementation.

The three strategy teams looked at four groups of issues (recruitment and retention, education and training, workplace conditions, and regulations and reimbursement policies). It is important to note that there is obvious overlap among the four areas. For example, retention is a problem because too many trained health care workers leave the field prematurely. One reason some workers leave is they believe they do not get adequate time to care for patients. Less time with patients is related to reimbursement requirements that force nurses and others to spend more time on paperwork. At the same time, some workers are frustrated by mandatory overtime and irregular schedules. Mandatory overtime is largely a result of worker shortages—which are, in part, caused by trained workers leaving the field. The steering committee's strategic plan, outlined in the goals and strategies section of this report, brings all of the issues studied by the three strategy teams back together again, creating a multi-disciplinary, holistic approach to revitalizing health care employment.

Recruitment And Retention

The employment strategy team worked on issues related to attracting new health care workers and keeping existing workers on the job. As the aging health care workforce retires and health care employment demands continue to grow, it will be increasingly important to bring younger workers into the field.

There are many reasons why too few people are choosing to enter health care. Some jobs, like radiologic technician, need better marketing to help young people learn about the opportunity. For nursing, one issue is negative media coverage about working conditions. In the case of dental

Case Study

Diversity in the Workforce

Recruiting more minorities and non-traditional students to the health care industry is one important strategy for easing worker shortages.

An important added benefit of a more diverse workforce would be improved health care service delivery to minority populations. Studies show that increased diversity in health care workers minimizes health disparities in the minority community, including access to health care and the types of care received.

"In the same way that female health providers have increased the quality, accessibility, and responsiveness of our health care system for women and girls, health care professionals who share a common language and/or racial and ethnic background with their patients are likely to improve quality, accessibility, and responsiveness for those patients." From a May 2001 report to the Washington State Board of Health.

hygienists, a lack of training capacity in Oregon is at the heart of the problem.

Keeping trained workers on the job is another important issue for Oregon and the nation. An obvious problem is demographics. Many health care workers are retiring or will soon retire, including much needed faculty to train new practitioners.

Another critical retention piece is the lack of clear pathways to move workers into different health care disciplines. Entry level workers have difficulty combining additional training with work, and certification issues also make mobility difficult. For example, there is often no easy way to count work experience for credit, nor count classes passed in one program toward similar classes in another. Employers want to help their employees climb a career ladder, but haven't yet found the best ways to partner with schools and provide the necessary clinical opportunities to build a smooth stairway to increasing levels of challenge and reward.

There are a myriad of reasons why workers leave the health care field. A number of them are identified in the chart on pages 9 and 10. The challenge will be choosing groups of issues that employers and educators can best resolve, as well as issues that will make a positive difference for the highest number of people. Addressing concerns about lifting, biohazards, and other safety issues; focusing on work schedules and staffing mix; and supporting quality communication and respect among all staff (including managers, physicians, nurses, allied health professionals, and support staff) would have a huge impact on health care worker retention.

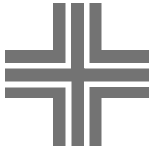
Education And Training

The occupational training and education team examined issues related to preparing Oregonians for careers in health care and upgrading their skills. Education and training issues touch on nearly all of the areas of focus for the Health Care Sector Employment Initiative, including recruiting, career mobility, and even licensing.

One of the most important reasons for today's worker shortages is training capacity. In health care, as with many industries, it is very difficult to match training capacity with employment demand. This challenge may be particularly acute in health care because required clinical experience often complements classroom training, and licensing and certification rules may limit training flexibility. For some occupations, and especially in rural areas, there are also critical shortages of trained faculty—either now or predicted in the near future, due to scheduled retirements.

The team looked at all of the elements of health care education, including:

- Attracting young people to health care training programs
- Helping students determine if they are well suited to health care jobs
- Connecting students who need financial aid with scholarships and loans
- Helping students find child care and transportation
- Offering part-time programs or classes on evenings and weekends, to accommodate working students



- Providing mentors or coaches during the training process
- Working with students who face employment barriers including disabilities and limited English language proficiency
- Identifying ways to assess the number of students in all kinds of training, and forecasting the number of graduates in each discipline

All of these elements present barriers to training, and the team determined that a broad-based set of tools will be needed to combat capacity issues and other limitations to a full pipeline of health care workers in training.

The education and training community will also play an important role in providing the skill upgrades workers need to grow into new positions through lateral transfers or broadened credentials. With today's global marketplace and rapid technological change, upgrading worker skills is important in most industries. Health care faces unique challenges, in that so many positions require certification or licensure, and the training and clinical experience requirements for each job are strictly defined and often packaged with specific training programs. Thus, skills learned on the job or through earlier training cannot easily be credited toward a new job, even though the skills may be closely related.

Schools do not have a common curriculum for health care occupations based on established competencies. In fact, the occupational training and education team found that the current system does not focus enough on modular sets of skills, allowing training to be more standardized from school to school while promoting discrete exit points that lead to employment and/or licensing. The old system of education worked well through most of the twentieth century, but current trends in health care will continue to demand more and more standardization across Oregon and the rest of the United States.

Workplace Conditions

Health care in America has undergone tremendous change since the days when house calls, long hospital stays, and pay-cash-as-you-go were common. Today's complex and varied insurance plans, Medicaid and Medicare, compressed hospital stays, home care provided by health aides, and other cost containment measures, higher levels of patient acuity, and the rapid pace of technological change have redefined heath care service delivery across the nation. Many of these issues affect workplace conditions—a broad category of topics including work load, staff skill mix and collaboration, the amount of time spent with patients, safety, paperwork requirements, and career mobility. Workforce shortages adversely affect workplace conditions, creating frustrated workers who sometimes choose to leave health care, exacerbating the shortages. Some of the workplace concerns identified by the team include:

- Many health care jobs are stressful and physically demanding
- Work on weekends and holidays and round-the-clock shifts can create difficulties for families
- Shortages and other pressures often result in an inefficient use of staff, where highly trained

individuals are doing paperwork or providing basic care that does not require their level of training and experience

- When many temporary workers are needed it can upset team stability
- Asking staff to "float" between specialty areas can cause stress, inefficiency, and safety concerns
- Many health care workers believe there is a lack of appreciation between skill levels which causes tension, especially between associate and bachelor's degree nurses, and between support staff and professional staff
- Many supervisors need better training in supervisory skills, team building, effective communication, and promoting cultural and diversity competencies
- For the reasons explained in education and training, it can be very difficult for incumbent workers to transfer into new health care positions or obtain training to efficiently advance their careers

Although many employers have worked diligently to improve workplace conditions, there are many challenges which require a long-term and global strategy. Obviously, successful recruitment will help to alleviate some of the shortages which are degrading working conditions. Training options that improve mobility will also help. Especially in the short term, it will also be important to focus on the changing needs of an aging workforce, in order to keep older workers on the job. Incentives like reduced hours, assistive technology and lift teams to reduce injuries and fatigue, and phased retirement packages will motivate older workers to continue working.

Case Study

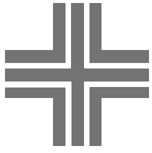
Health Care Staffing Regulations

Regulations require that long-term care facilities in Oregon provide set ratios of staff to patients in three time blocks: day, swing, and night shift. This policy is designed to ensure a sufficient level of patient care over a 24-hour period. From this point of view, it makes a lot of sense. However, the policy offers little flexibility to accommodate staffing challenges caused by skill shortages or special needs. It also prohibits long-term care facilities from scheduling workers in two twelve-hour shifts, even when workers request longer shifts in order to work fewer days per week.

Regulations and Reimbursement Policies

Licensing boards and federal regulations haven't kept pace with the changing practice of health care, and are based on the assumption that there is an adequate supply of workers. Challenges stem from a lack of flexibility in staffing ratios and training sites, and in maintaining or renewing licenses for workers returning to their jobs after an absence. Oregon also faces challenges in reimbursement policies which currently tend to penalize employers for having already adopted cost efficient methods of service delivery. Although the strategy team recognizes that the top priority of regulations must be patient safety and quality care, policy boards may be able to adopt regulations that will better address today's workforce needs, helping employers make the best use of the available workforce.

Strategy teams also touched on issues of particular concern in rural areas and in public health. These topics need more exploration; however, some strategies outlined in Course of Treatment (page 11) will offer remedies or help alleviate workforce concerns in rural areas.



WHAT ARE THE MAJOR ISSUES BEHIND HEALTH CARE WORKER SHORTAGES?

RECRUITMENT

Outreach

Limited:

- Men and nontraditional students
- Marketing for some in-demand occupations
- Connection to K - 12

Capacity

Limited:

- Classrooms in many areas
- Qualified faculty in some programs
- Clinical opportunity
- Accommodation for training students with special needs, including ESL and learning disabilities
- Distance learning for rural students

Training

Limited:

- Scholarships
- Distance or alternative learning
- Student support (e.g., transportation and child care)
- Number of Certified Nursing Assistant students completing training programs
- Screening/coaching to ensure a good career match (reducing turnover later)

MAJOR ISSUES, *continued*

RETENTION

Mobility

Limited:

- Pathways for job growth
- Professional development
- Support for upward mobility (including co-worker resentment)
- Cross training
- Common curriculum
- Crossover credits
- Mentoring
- Models (for counting work/life experience, for showing successful mobility, and for moving workers out of the "education is a one time event" way of thinking)

Demographics

Limited:

- Support for the aging workforce (e.g., retirement packages, phased retirement, flexible schedules, part-time work)
- Child care for younger workers, especially for swing and graveyard shift workers, and on weekends and holidays
- Diversity/cultural competence
- New faculty to replace retiring faculty

Staffing and schedules

Limited:

- Time with patients (too much time on paperwork)
- Choice (recognizing preferences and competencies)
- People (for comfortable staffing levels, the right skill mix, and an effective match of training to the task)
- Balance between home and work life (mandatory overtime, undesirable or constantly changing shifts)

Work climate and compensation

Limited:

- Pay and benefits for certain jobs, compared with similar positions in other industries
- Respect among co-workers and between supervisors, managers and support staff
- Input into decision making
- Physical support (lifting teams, safety, ergonomics)
- Understanding of health care workers' overall job stress

REGULATIONS AND REIMBURSEMENT POLICIES

Licensing

Limited:

- Opportunity for easy reentry (e.g., maintaining/renewing licenses for mothers returning to the workforce)
- Ability to credit related work experience and training
- Worker mobility due to a lack of state-to-state license reciprocity

Regulations

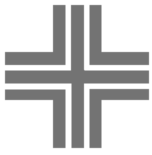
Limited:

- Change in regulations to keep pace with changing health care practices
- Flexibility in staffing ratios and training sites
- Flexibility in required clinical experience
- Ability to balance workforce needs with other important patient needs when regulatory boards adopt new regulations

Reimbursement

Limited:

- Reimbursement because Oregon is penalized for having already adopted many cost effective practices
- Incentives for facilities that provide clinical training for demand occupations



COURSE OF TREATMENT

GOAL #1 - INCREASE EDUCATIONAL CAPACITY & PIPELINE

Assure that public and private educational institutions have adequate financial resources to offer health care programs. Include incentives to increase capacity, and implement this plan by 2003.

A. Increase and fill enrollment capacity in key jobs

Registered nurses - Double enrollment by 2004 and increase an additional 50% by 2008.

Licensed Practical Nurses - Increase number of stand alone programs and graduates by 50% by 2004. This will assure there are sufficient staff to work with RNs, who will continue to be in short supply.

Certified nursing assistants/certified medication aides - Survey workers, trainers, and health care employers to assess growth and replacement openings. Set goal to assure sufficient numbers of graduates are being produced to meet the demand by 2004.

Pharmacists - Maintain and gradually increase enrollment to account for the lack of graduates during the transition to the new Doctor of Pharmacy program plus 17% growth projections.

Dentists - Establish enrollment levels by 2004 that assure number of new graduates will equal growth plus replacement openings.

Dental hygienists - Increase enrollment by 30% by 2004 to account for over 30% projected growth rates.

Radiologic technologists - Increase enrollment by 30% by 2004 to account for over 30% projected growth rates.

Dental Assistants - Assure applicants are recruited to fill existing capacity and assure supply keeps up with 27% projected growth.

Medical records clerks and assistants - Assure applicants are recruited to fill existing capacity and adjust capacity to meet 30% projected growth rates by 2004. Enhance use of certification programs that include medical coding skills that meet industry needs.

B. Increase availability of qualified faculty

Increase recruitment, education, and retention efforts to assure qualified faculty are available to teach existing and expanded programs by 2004.

- Fund scholarships and other financial incentives for nurses and others who attend academic programs (masters and doctorates) that prepare them to be faculty in health professions.
- Increase available faculty in targeted occupations through joint appointments between colleges and universities, use of distance learning, and partnerships with public and private institutions.
- Increase partnership with health care employers and seek commitments to lend staff or fund endowments to cover 50% of the faculty-related enrollment expansion costs.
- Assure faculty salary scales are sufficient to recruit qualified health care faculty with teaching skills.

Provide financial and other incentives, by 2004, for faculty to teach in rural or underserved areas of the state where demand is not being met.

C. Increase clinical capacity

Develop a plan to utilize public-private partnerships and economic development funds to assure rural or underserved areas have access to facilities for clinical training and for needed health services by 2003.

Provide incentives, in 2003 Legislative Session, for employers to increase clinical opportunities.

Plan, design, fund, and build simulation centers or other clinical options by 2005 that offer clinical training for multiple occupations in rural and other areas without clinical capacity.

Develop a program to match available rural and urban facilities with students in clinical training, in order to expand capacity by 2004.

D. Address funding mechanisms and partnerships

Provide a stable funding mechanism for community colleges and universities (both public and private) by 2003-04 that accounts for the higher costs of running health care programs.

Provide incentives to colleges and universities to share health care programs and faculty, and to increase integration, standardization, and cooperation in a systematic way.

Evaluate the need for to increase capacity on a biennial basis.

Develop partnerships between public and private colleges and universities in Oregon and in the Western region.

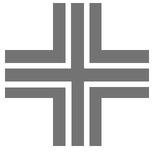
E. Improve awareness of health care careers

Improve recruiting and awareness.

- Educate the public on types of health care careers using public service announcements, websites, and other venues.
- Start health care awareness programs in grade and middle school, and assure that counseling information is available on key courses needed to pursue health care careers.
- Have K-12 health occupation coordinator recruit teachers to offer standardized health care courses in high school that might also be eligible for college credit.
- Work with high schools to adopt or enhance health occupation student associations; provide scholarships for students to participate and stipends to teachers who supervise them.
- Educate counselors and teachers on occupational projections.
- Work with the Oregon School Boards Association, teachers unions, and the Department of Education to enhance information available on health services occupations.

Develop and market assessment tools by 2003 to help students and employers assess whether a health care career matches student aptitudes and interests.

Provide additional career awareness, coaching and counseling services, and mentoring programs for K-16 students interested in health care. Begin in 2002-2003, with the aid of employers, labor, and professional and health care associations.



Goal #2 - Enhance Students' Educational Experience

Adopt curriculum focused on competencies, more educational options, increased flexibility in schedules, improved credit transfers and articulation, adequate academic and social supports, and increased access to financial assistance.

A. Improve focus on competencies

Adopt/improve articulated education models for key health care occupations in 2002-2003 in public colleges and universities. Use improved curriculum focusing on skills and competencies.

Approve statewide curriculum for nursing and other key health care occupations by 2003-04, beginning with bundled prerequisite courses for key occupations by 2002, and standardized pre- and post secondary courses by 2003.

Work with employers and regulatory boards to plan modularized training in skill-based segments that lead to increased compensation and employment opportunities. Complete plans in targeted occupations by 2005.

B. Increase flexibility, options, and support systems

Increase learning opportunities for targeted health care occupations.

- Increase distance learning, evening and weekend classes, and staggered start dates for key classes by 10% in the next 5 years.
- Provide accurate information on access to health care education by 2002.

Increase financial assistance and work-study opportunities by 2003 through increased scholarship programs and employer endowments for students and those willing to teach in demand health care programs.

Establish goals to diversify the health care workforce and provide academic, psychosocial, and financial support for minority students by 2003.

C. Develop optimal mobility using career pathways

Develop recommended career pathways as the key to life-long learning. Include apprenticeship opportunities, a possible Health Service Corps, and increased recognition of work experience by 2003.

Adopt career mobility strategies.

- Educate employees, students, and employers on the concepts and principles of career paths, beginning in 2002-03.
- Encourage more high schools to adopt programs that allow students to graduate with skills that qualify them to work in entry level occupations (e.g., there are CNA programs now in some high schools).
- Offer more bridge and re-entry classes for students and workers by 2004.

GOAL #3 - IMPROVE RECRUITMENT OF HEALTH CARE WORKERS

Ensure that there is a sufficient supply of competent staff is critical to assuring there is access to quality and affordable health care.

Establish regional recruitment plans that look at the distribution of jobs, recognize local facilities' needs, and allow training to occur close to home, when possible.

Offer benefit packages to recruit workers (child care, professional development options, and loan forgiveness programs) but be wary of bonus strategies and other short-term fixes.

Create targeted pilot programs.

- Serve entry level workers to increase work readiness and support through probationary periods.
- Serve dislocated workers with some transferable skills (e.g., from the high tech industry), and target NAFTA-eligible workers.

Set up a database program that arranges volunteer opportunities and job shadow opportunities between employers and high schools by 2003.

Develop support systems for workers on a 24/7 work schedule, including child care and transportation, with assistance from employers, child care agencies, and others.

Assure access to quality data to make informed choices for upcoming 2002-2012 occupational projections. Include better and more timely projection mechanisms to review pipeline capacity, and include employers and regulatory boards in these conversations.

GOAL #4 - ENHANCE RETENTION AND WORK ENVIRONMENT

Provide a safe and quality working environment where collaborative decision-making is valued and flexible benefits, which address the needs of an aging and increasingly diverse workforce and encourage professional development, are offered.

A. Increase employer involvement

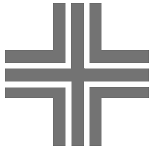
Have employers offer additional professional development opportunities.

Provide financial incentives, tuition reimbursement, work-study options, and flexible scheduling to allow workers to advance on a career pathway.

B. Commit to improving the work environment

Get commitment from key players - including employers, labor, and health care associations to jointly sponsor quarterly best practice seminars in 2002-04.

- Address the needs of aging workforce (e.g., phased retirement options, "pooled" benefit options, and covering health care for older workers).
- Implement magnet philosophies and practices, and value collaborative models, participatory governance, and healthy, nurturing, and supportive work environments.



Adopt and improve retention strategies such as minimizing the use of overtime, adopting work-life and family friendly policies, offering flexible and seniority-based scheduling with staff input, and recognizing preferences not to float to different work areas.

Provide quality physical environment for workers (e.g., increased use of safety committees and purchase of assistive technology).

Address supervisory skill training (e.g., communication skills, effective use of staff— including ancillary and support staff—and strategies to develop staffing ratios based on competencies, authorized scopes of practice, and patient needs).

"You wouldn't ask a neurosurgeon to float to orthopedic surgery."

ICU Nurse
Oregon's Nursing Shortage: A Public Health Crisis in the Making
Northwest Health Foundation, 2001

Establish mentoring programs for staff including leadership development opportunities to assist with succession plans.

Establish cultural diversity training and competencies.

Improve the diversity and language skills of health care workforce.

GOAL #5 - SEEK REGULATORY AND LEGISLATIVE IMPROVEMENTS

Adapt to the changing nature of health care by updating reimbursement policies, administrative regulations, and state and federal laws while balancing patient safety, delivery of quality care by skilled staff working in a safe environment, and the needs of employers in various care settings.

A. Realign reimbursement policy

Realign Reimbursement Policy.

- Place the highest priority on the delivery of patient health services by health professionals.
- Allow reimbursement for more work performed by students, with adequate oversight, to support and improve capacity of facilities to provide training and clinical experiences.
- Reward states which are managing costs efficiently, so there is increased parity with other states.

Establish, fund and maintain a centralized health care workforce data reporting system to assure access to quality data on a continuous basis.

Provide a flexible regulatory environment.

- Examine entry and reentry into health care occupations.
- Expand opportunities for training, testing, and certification through multiple delivery modes and at multiple sites.

Provide flexibility to obtain waivers (e.g., requirements that faculty who teach certified

nursing assistants have one year of long-term care experience or that staffing ratios have to be based on three shifts a day).

Ensure adequate funding for mandated requirements.

B. Engage regulatory boards in workforce policy

Expand or clarify the authority of licensing boards to engage in workforce issues, provide adequate funding to support this work, and assure boards can share data with labor market economists to make more accurate projections.

Develop and evaluate regulatory models that make the best use of the available workforce.

Review state health care regulations on a biennial/periodic basis.

- Assure the scope of practice acts are keeping up with changing health care practices and technologies.
- Ensure boards are adopting a balanced response to "workforce needs" and consumer safety.
- Explore multi-state or regional license recognition to allow for optimal career mobility.
- Determine if regulatory boards are conferring to recognize or clarify overlapping scopes of practice with other boards.

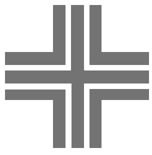
C. Develop legislative and other solutions to implement the plan

Develop legislative, funding, and investment options to implement this strategic plan.

- Prepare budget concepts to present to the 2003 Legislature including use of economic development "community facilities" grants and bonds as needed.
- Introduce legislation to authorize employer-funded endowments designed to systematically increase capacity, hire and train more qualified faculty, and offer increased scholarship opportunities to students in health care fields.

Ask the Oregon Workforce Investment Board and the governor to direct some Workforce Investment Reserves to implementing the strategic plan, starting in July of 2002.

Solicit foundation and other public and private grants to implement the plan.



APPENDIX

SIGNIFICANT WORK AND TRAINING ISSUES FOR OREGON'S TARGETED OCCUPATIONS

This appendix presents a brief look at the most pressing workforce issues affecting the occupations chosen for this employment initiative. Where issues are largely similar between related occupations, the discussion is grouped.

"The (national) rate of growth of new jobs in health care occupations is projected to 28.8 percent, more than twice the rate of employment growth projected for non-health occupations."

In Our Hands: How Hospital Leaders Can Build a Thriving Workforce
AHA Commission on Workforce for Hospitals and Health Systems, 2002

Wage and demand information comes from the Oregon Employment Department, revised in May of 2002. Data is for Oregon, and wage and employment data have been rounded to the nearest 100. Growth rates are a combination of openings due to replacements plus new jobs created through growth between 2000 and 2010. In some cases, projected job growth may be low. Employers report that they expect even more openings for some jobs, including registered nurse and certified nursing assistant. The education and training information shown is the minimum requirement. In many cases, additional postsecondary education is required to obtain a competitive level of training. For some jobs, as noted, data is not available for the exact title discussed, but may show a combination of information for two similar jobs. This may be because an occupation that has historically been tracked may no longer represent the skills currently needed by employers. Medical records clerk, below, is an example.

Significant workforce issues were determined through discussions with the state steering committee, the three strategy teams, and worker, employer and educator interviews.

Medical Records Clerk, Certified Medical Assistant

Average wage in 2001	$24,600
Est. employment in 2000	1,100
Growth rate through 2010	28.1%
Education/training needed	Associate

Average wage in 2001	$25,200
Est. employment in 2000	3,800
Growth rate through 2010	30.4%
Education/training needed	On-the-job

Medical records clerks compile, process, and maintain medical records for hospitals and clinics. They must be familiar with computers and data entry, medical terms, and insurance codes. The data (first box) is for medical records technicians, a job requiring slightly higher education and skill levels. Therefore, clerks would earn slightly less and would probably not be required to obtain an associate's degree.

Medical assistants (second data box) schedule appointments, inventory supplies and instruments,

prepare treatment rooms, and set up patients for physicians. They also keep medical records, and perform administrative and clinical procedures.

Employers increasingly prefer that medical assistants be certified. Although there is no regulatory requirement for certification, some private career schools and community colleges offer certificate programs. It is currently difficult to recruit candidates for both occupations.

Certified Nursing Assistant, Certified Medication Aide

Average wage in 2001	$19,300
Est. employment in 2000	13,200
Growth rate through 2010	10.3%
Education/training needed	150 hours

Certified nursing assistants (CNAs) provide basic patient care under the direction of nursing staff. They perform duties such as feeding, bathing, dressing, or moving patients, and changing linens. They must obtain 150 hours of classroom and clinical training, and obtain a certificate from the Oregon State Board of Nursing. Certified medication aides can also dispense some medicines under supervision, and must complete additional training and pass a related exam. The data (above) includes some jobs which are not certified. Employment numbers may be low, as there were 15,700 CNAs certified in Oregon in 2001, and another 1,300 certified medication aides on file.

These occupations suffer significant turnover rates due to low wages and difficult working conditions. Employed by nursing homes, assisted living centers, hospitals, and home health agencies, CNAs represent the second largest health care employment category in Oregon.

Licensed Practical Nurse, Registered Nurse, Certified Registered Nurse Anesthetist

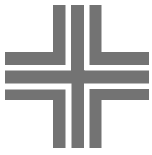
Average wage in 2001	$32,800
Number employed in 2000	3,500
Growth rate through 2010	11.3%
Education/training needed	1 yr. cert.

Average wage in 2001	$49,300
Est. employment in 2000	25,600
Growth rate through 2010	15.4%
Education/training needed	AAS or BSN

Licensed practical nurses (LPNs, first data box) care for ill, injured, convalescent, or disabled persons in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. They may take and record vital signs, dress wounds, collect samples, administer medications or oxygen, and assist in the delivery, care, and feeding of infants.

Registered nurses (RNs, second data box) assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. They may order and interpret diagnostic tests, recommend treatments, deliver infants, and provide pre- and post-natal care.

There are a number of workforce issues associated with these positions. An aging workforce is of primary concern. The strategy teams identified the need for stand-alone LPN programs with specific entry requirements: these are better suited to job candidates who wish to remain at the



LPN level. There is also a strong need for better differentiation in practice between LPNs and RNs. The Oregon Nursing Leadership Council is working on differentiating practices between the LPN, an associate's degree RN, and a bachelor's degree RN, in order to use different skill sets more efficiently. Another issue is the lack of training capacity, including a shortage of qualified faculty. Most RN training programs are full and have waiting lists of applicants, particularly in community colleges. Finally, there is no school in Oregon for Certified Registered Nurse Anesthetists, and they are in demand due to changes in federal reimbursement policies.

Radiologic Technician, Radiologic Technologist

Radiologic technicians maintain and use equipment and supplies necessary to demonstrate portions of the human body on x-ray film for diagnostic purposes.
Radiologic technologists perform these tasks, plus administer CAT scans, computed tomography, ultrasound, and magnetic resonance. Radiologic technologists may administer nonradioactive materials into a patient's blood stream for diagnostic purposes.

Average wage in 2001	$38,200
Est. employment in 2000	2,100
Growth rate through 2010	33.5%
Education/training needed	Associate

For these jobs (data is combined in the data box) adequate recruiting to keep a full pipeline is a strong workforce concern. The AHA Commission on Workforce for Hospitals and Health Systems reports that 71% of U.S. hospitals are experiencing worker shortages in radiology and nuclear imaging. In Oregon, there is a lack of capacity in the Portland Community College program, at the same time there are not enough trainees to fill the Oregon Institute of Technology program. Oregon may need additional community college programs with more flexible schedules to meet job growth needs in the future.

Pharmacist

Average wage in 2001	$67,900
Number employed in 2000	2,400
Growth rate through 2010	17.2%
Education/training needed	professional

Pharmacists compound and dispense medications following prescriptions issued by physicians, dentists, or other authorized medical practitioners. They answer patient questions and provide information about drug interactions, side effects, and dosage. Prescriptions are becoming an increasingly important part of medical care, and pharmacies are growing in number and are open more hours at the same time that the number of pharmacy graduates is decreasing. In a 2001 report titled *The Healthcare Workforce Shortage and Its Implications for America's Hospitals,* 13 percent of all hospital pharmacy positions were reported as vacant.

There are a number of workforce issues associated with pharmacists. A recent change in professional degree requirements now means six years of academic study plus 2000 hours as an intern. Therefore, there are no graduating pharmacists in Oregon in 2002. Also, there has been a recent decline in applicants nationally. Whether this trend will continue is unclear, as the number of applicants did increase in Oregon this past year. There are ongoing regulatory discussions

on the role of pharmacy technicians and the number of technicians a pharmacist can supervise. These discussions will have significant workforce implications.

Dentist

Dentists diagnose and treat diseases, injuries, and malformations of teeth, gums, and related oral structures. They may treat diseases of nerve, pulp, and other dental tissues affecting the vitality of teeth.

Average wage in 2001	$114,000
Number employed in 2000	1,100
Growth rate through 2010	13.8%
Education/training needed	professional

Similar to nursing, demographic issues also affect the dentistry workforce, where retirements are currently outpacing dental school graduates. There are significant faculty vacancies, and the Oregon Health Sciences University has closed its pediatric dentistry program. In Oregon, pediatric dentists and endodontists are especially difficult to find. According to *Profile, 2000,* published by the Area Health Education Centers (AHEC) Program, many dentists also choose to practice less than full time, while an aging population is increasing demands for some kinds of dental services. These problems are particularly acute in rural areas, where shortages are most severe.

Dental Hygienist, Dental Assistant

Dental hygienists (first data box) clean teeth and examine oral areas, and the head and neck for signs of oral disease. They may educate patients on oral hygiene, take and develop x-rays, or apply fluoride and sealants. They also chart conditions of decay and disease for diagnosis and treatment by dentists.

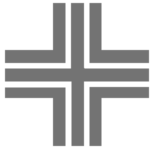
Average wage in 2001	$65,300
Est. employment in 2000	2,800
Growth rate through 2010	14.0%
Education/training needed	associate

Like dentists, many hygienists choose to work less than full time. Again according to AHEC, only 1 in 50 works 40 hours a week or more. Closure of the Oregon Health Sciences University hygiene program has reduced Oregon graduates by one-third. Other schools are operating at capacity, and may not be able to expand due to the shortage and high cost of hiring instructors.

Dental assistants (second data box) assist dentists at the chair, setting up patients and equipment, mixing formulas, keeping records, and performing related duties as required.

Average wage in 2001	$28,700
Est. employment in 2000	4,000
Growth rate through 2010	14.0%
Education/training needed	certification or on-the-job

A recent survey of the Oregon Dental Association found shortages pressing. Some programs are unable to recruit enough candidates, and—as with dentists—filling job openings is more difficult in rural areas.



State Steering Committee

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Diane Lovell, American Federation of State, County and Municipal Employees, Council 75, *co-chair*

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Joan Bouchard, Board of Nursing
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Karen Whitaker, Oregon Health Sciences University
Diana White, Oregon Health Sciences University

"Hospital workers are special people who are always there to respond when patients are at their most vulnerable. Society expects hospital workers to maintain the highest qualifications and to act selflessly, placing the best interests of the patient above all else. This is a unique public trust, one that should result in society placing a high value on all hospital workers. Unfortunately, compensation, schedules, and working conditions often do not support community expectations."

In Our Hands: How Hospital Leaders Can Build a Thriving Workforce

AHA Commission on Workforce for Hospitals and Health Systems, 2002

Photo courtesy of Providence Health System

Health Care Sector Employment Initiative

Oregon Workforce Investment Board

FINAL REPORT
Fall 2002

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