A Master Plan for Nursing Education In Washington State

Washington Center for Nursing

March 31, 2008

It's About Washington's Health

WCN
WASHINGTON CENTER FOR NURSING

www.wacenterfornursing.org

This work was funded by Grant N14191 from the Washington State Department of Health

Our recognition and appreciation go to those who invested their time and energy to the creation of the Master Plan for Nursing Education, and to the many who reviewed, edited, advised and consulted. This document could not have been possible without that expertise and guidance. The Master Plan Design Team was instrumental in crafting this document, but it was the myriad of individuals and organizations from across the state who made its completion possible.

Special thanks are due to Marne Franck, BS, Executive Assistant for WCN for her outstanding coordination and management of the report production, to Sharon Streitt for excellence in editing, and to Desautel Hege Communications for design and photographic art.

Stephen Padgett, RN PhD
Project Director, Master Plan Design
Washington Center for Nursing

TABLE OF CONTENTS

Executive Summary

The State of Washington, like other states, is facing a severe nursing shortage which will only worsen in the coming decades. An aging population will increase demand for nursing services at the same time that an aging nursing workforce will be retiring in large numbers. While nursing programs in Washington State have expanded dramatically in the past 10 years, there are still many qualified applicants who are turned away, primarily due to shortages of faculty and clinical sites. There are already reports of other states experiencing reductions in the numbers of applications, due to the inability to be accepted into a nursing program. Further expansion will require creativity, innovation, and coordination.

Expanding capacity to produce more nurses is not enough. We must assure the continued competency of nursing professionals so that they are prepared to meet the health care needs of Washingtonians in the 21st century. This requires a broad vision of the education system, its goals, and its methods. The health care and public health systems of the future will increasingly require professional nurses who are highly educated and prepared to practice in a variety of roles – direct care, teaching, research, and policy development.

This Master Plan offers a comprehensive approach to the transformation of nursing education in Washington State. We have identified four sets of interlocking issues that face nursing education in the 21st century: **competency, supply, diversity**, and **access and distribution.**

To prepare a professional community that will be competent for the 21st century, Washington nurses and nursing students must be able to pursue their education through the baccalaureate degree and above, through multiple pathways and with a strengthened collaborative effort among the various types of programs. Barriers to a seamless transition through the educational system must be eliminated. We need renewed attention to the development of excellence in teaching, diverse and innovative program designs and delivery systems, and strengthened partnerships with clinicians.

Expanding the capacity of nursing schools requires addressing the shortages of faculty and clinical sites. We propose raising faculty salaries, clarifying expectations for faculty workload, expanding faculty recruitment efforts, and increasing the mentoring of new faculty. The shortage of clinical sites can be addressed through the more efficient and effective use of existing resources and expanded use of alternative resources. Regional coordinating groups for the management of clinical education resources, enhanced collaboration between schools and clinical agencies, use of alternative sites, high-fidelity simulation, and other strategies are crucial to enhance and extend the teaching of clinical skills.

A sustained commitment to “best practices” in the recruitment and retention of minority students and faculty is required to increase the diversity of the nursing community and establish a professional membership that more closely reflects the racial, ethnic, and cultural richness of the population of the state. We need an integrated, sustainable, and comprehensive approach to overcome the multiple barriers that have barred too many minority and underrepresented individuals.

Finally, the challenges of geographic access to nursing education must be addressed so that educational opportunities are available in all parts of the state, including rural and remote areas.

The strategies outlined here were developed through a lengthy process of dialogue and engagement with multiple stakeholders. The Department of Health provided a grant to the Washington Center for Nursing in 2005 calling for the development of a Master Plan for Nursing Education. A Design Team began work in 2006. Fourteen focus groups were conducted around the state during March and April 2007, with nearly 200 nurses in a variety of roles participating in these open discussions. A statewide Education Summit was held in May, 2007 to add to the content and direction of discussions. Draft versions of the Master Plan have been in circulation since August 2006, and comments from many reviewers and interested parties have been received and incorporated.

This plan is intended to provide a framework for comprehensive transformation of the nursing education system in Washington State and offers a set of interconnected recommendations. A number of the proposed strategies are useful in addressing more than one area or have synergistic effects with other strategies. A comprehensive approach requires the blending and balancing of multiple goals. At the same time, this plan will continue to evolve and develop through dialogue and partnership among multiple stakeholders. The strategies described here have been identified as the top priorities for urgent efforts, and are intended to form the basic "building blocks" of long-term system transformation.

This Master Plan supports the recommendations of numerous professional nursing organizations, as well as "Washington Learns," Governor Christine Gregoire's goal of increased numbers of baccalaureate degrees, and the Prosperity Partnership's identification of nursing as a profession in Washington needing more individuals with baccalaureate degrees.

Master Plan Recommendations:

Assuring the Continued Competency of Nursing Professionals:

1. Expand all RN programs, especially in areas currently underserved
2. Strengthen articulation agreements among LPN, ADN, and BSN programs
3. Expand dual admission to ADN and BSN programs
4. Ensure that every ADN program has a formal agreement with at least one WA-approved BSN program by 2012
5. Encourage development of LPN-BSN programs
6. Find resources for and expand innovative pilot programs such as the "fused" models for BSN
7. Identify opportunities to decrease "steps" in progression toward BSN and graduate degrees
8. Resource and expand innovative use of distance learning and alternative delivery systems
9. Increase support for the recruitment and retention of students from: minority and underserved populations, incumbent healthcare workers, and rural and underserved areas
10. Develop pathways for returning military nurses to transition to civilian practice
11. Increase financial aid to nursing students
12. Increase funding to nursing schools
13. Expand capacity of BSN and RN-BSN programs in institutions of higher education across the state, both public and private
14. Support and expand non-traditional programs, e.g. LPN-BSN, "Fused" models for BSN, dual enrollment
15. Support innovative use of distance learning and alternative delivery systems
16. Ensure that all RN's newly licensed in Washington State hold or obtain a BSN within 10 years of initial licensure, beginning in 2020
17. Provide enhanced loans/scholarships for graduate nursing students
18. Secure funding for expansion of graduate nursing education programs
19. Encourage support by clinical agencies for their staff nurses returning to graduate school
20. Create closer collaboration among educators, researchers, and clinicians to promote evidence-based practice and practice-relevant research
21. Develop innovative and alternative education systems combining distance learning and classroom experiences
22. Incorporate the recommendations of the Carnegie Foundation's study of "Preparation for the Professions"
23. Foster collaborative development of evidence based "best practices" and shared resources related to improved teaching through WCN and CNEWS
24. Promote development and sharing of expertise related to distance learning and alternative education delivery systems
25. Promote educator tracks and faculty-role preparation as part of graduate nursing programs

26. Encourage the vision of teaching as a form of advance practice
27. Foster collaborative development of evidence-based 'best practices' and shared resources related to improve teaching through WCN and CNEWS
28. Increase recognition of the role of clinical staff and agencies in educational activities
29. Promote closer collaboration among educators, researchers, and clinicians
30. Encourage development of a positive work environment and professional practice structure
31. Facilitate and support development of comprehensive and rigorous models for residency programs for all new RN graduates
32. Support senior practicum or "capstone" experiences for all final-semester RN students
33. Support enhancing the preceptor-student relationship, including training, recognition, and rewards

Assuring an adequate supply of nursing professionals:

34. Manage the stakeholder workgroup to evaluate the total compensation for nursing faculty and make recommendations regarding changes in faculty salaries
35. Identify sustainable sources of funding (state, federal) to support appropriate salary increases
36. Manage the stakeholder group to analyze workload and career satisfaction issues in all types of programs and make appropriate recommendations
37. Identify elements that improve faculty retention
38. Identify faculty responsibilities and expectations in each sector of the education system
39. Share assessment tools and evaluation formulae across schools
40. Identify and share best practices in teaching
41. Include evaluation and recommendations for improving working conditions and career satisfaction for part-time and clinical instructors
42. Identify funding for faculty development (e.g. professional meetings and conferences)
43. Expand graduate nursing programs that include educator and faculty-role preparation
44. Support enhanced loan/scholarship packages to promote teaching, especially in underserved areas
45. Encourage support from universities for graduate students interested in teaching through teaching assistantships and tuition waivers
46. Encourage support from clinical agencies for staff nurses returning to graduate school
47. Promote improved collaboration between schools and clinical agencies to provide creative employment opportunities for clinical faculty (e.g. joint appointments, job sharing)
48. Foster partnerships between universities and community colleges to promote faculty development

49. Promote outreach to and involvement with nurses in staff development and other clinical-practice educator roles
50. Identify appropriate opportunities for non-nursing educators to participate in teaching
51. Formalize regional coordination of sites and spaces through consortia of schools and agencies
52. Identify crucial clinical skills and coordinate best use of simulation labs and clinical sites
53. Evaluate the goals and methods of clinical education
54. Foster improved collaboration between schools and clinical practice agencies
55. Create statewide coordination of high-fidelity simulation capabilities
56. Ensure that every nursing program has access to high-fidelity simulation for teaching
57. Ensure that nursing faculty gain expertise in the implementation of simulation technology
58. Support continued expansion of non-traditional clinical sites (e.g. community clinics, long-term care, public health, schools)
59. Foster coordinated development and sharing of simulation-related curricula, scenarios, and teaching strategies
60. Support evaluation of technological tools, teaching methods, and student outcomes
61. Utilize the experienced workforce in new and creative ways as a mechanism for knowledge transfer
62. Provide adequate funding for faculty salaries, classrooms, and lab space for pre-requisite courses
63. Ensure access to new learning technologies and expertise in their best uses
64. Increase funding for administrative support staff and program-director leadership capacity
65. Reduce attrition at the ADN level by 50%

Promoting a More Diverse Profession:

66. Ensure the regular collection, analysis, and distribution of data on minority nurses in clinical practice, administration, education, and research
67. Promote statewide and regional coordination of resources, programmatic strategies, and contacts to promote recruitment and retention of minority nurses and nursing students
68. Identify and support diverse, non-nursing incumbent healthcare workers who may be interested in moving into professional nursing roles
69. Create minority nursing networks for peer support, education, and needs assessment
70. Coordinate with existing state organizations involved in this work
71. Identify successful elements of local and national models of minority recruitment and retention initiatives
72. Combine into statewide model programs including: strategies to identify high-potential/high-risk individuals, Provision of “wrap-around” services (including financial

aid, mentoring, and academic support), Dedicated staff person for outreach and recruitment, and improved recruitment and retention of minority nursing faculty
73. Dedicated staff person for outreach and recruitment, service coordination
74. Improved recruitment and retention of minority nursing faculty
75. Identify strategies for leveraging sustainable funding for continuing operations
76. Combine and expand programs offering grants, work study stipends, paid internships, and loan payback to students
77. Identify and enlist long-term funding sources for recruitment and retention programs including public-private partnerships
78. Develop mentoring programs at each school and create state-wide networks
79. Develop strategic alliances with minority nursing organizations
80. Identify sources for financial support of minority faculty research, professional development, travel, and networking
81. Develop mentoring programs for minority youth at middle and high schools
82. Form strategic partnerships with organizations supporting awareness of health, math, and science careers targeted toward minority youth
83. Support education reform to strengthen math and science curriculum in public K-12 systems

Enhancing Educational Access throughout Washington State:

84. Conduct a formal analysis of regional access resources and deficits
85. Create new access points and networks in areas with identified deficits
86. Increase financial aid to graduate students from rural and underserved areas
87. Expand outreach programs for graduate students from and in rural and underserved areas
88. Secure support from clinical agencies for staff nurses returning to graduate school
89. Facilitate effective partnerships between graduate educators and clinical practice sites
90. Provide adequate resources for innovative and alternative education systems combining distance learning and classroom experiences
91. Integrate distance-learning and face-to-face educational approached
92. Support resources for adequate educational environments in non-traditional settings
93. Reduce isolation and support the creation of student communities
94. Inventory rural and underserved areas to identify potential and existing residency sites and partners
95. Assess interest and resources among potential partners and specific focal areas

GLOSSARY OF KEY TERMS

- **AACN-**American Association of Colleges of Nursing-National body that accredits and oversees Baccalaureate and higher nursing education programs. Establishes the standards and expectations for faculty and programs at this level.
- **ADN-**Associate or Associate of Arts degree in Nursing
- **APN-**Advanced Practice Nurse. RN with a Master's or Doctoral degree who may function as an Advanced Register Nurse Practitioner managing a practice of patients or working in a practice. Also may be a Nurse Midwife, Nurse Anesthetist, or Clinical Nurse Specialist with the appropriate graduate level education. APN's sometimes teach nursing.
- **BSN**-Bachelor of Science in Nursing degree
- **CNEWS**-Council on Nursing Education in Washington State. The Deans and Directors of every approved nursing program in this state. Leads planning for nursing education, brings innovation into education, evaluates effectiveness of nursing education.
- **LPN**-graduate of a Licensed Practical Nurse program who has passed the NCLEX-LPN examination and obtained an LPN license to practice. LPN's provide direct care, collect data for assessment, administer medications, and performs treatments. Works under the direction of an MD, RN, ARNP, or PA. LPN's work in a variety of settings.
- **MPNE**-Master's Program in Nursing Education. Pre-licensure program designed for individuals with a Bachelor's degree in fields other than nursing. Upon completion, the candidate earns a Master's degree and is eligible to take the RN-NCLEX and apply for a license to practice.
- **NCLEX**-National Council Licensing Examination. The exam of the National Council of State Board of Nursing that must be passed successfully to apply for a license to practice nursing.
- **NCQAC-**Nursing Care Quality Assurance Commission. Known as the licensing Board in many states. The NCQAC is responsible for protecting the public by ensuring the competency of licensed nurses, licensing and disciplining nurses, and approving schools of nursing.
- **Nurse Educator-**RN with a Master's or Doctoral degree who teaches nursing students, conducts research, and practices nursing. RNs with a bachelors degree may teach at the LPN level
- **NLN-**National League for Nursing. National body that oversees and accredits Diploma and ADN nursing programs. Establishes the standards and expectations for faculty and programs at this level
- **Pre-licensure programs**: Associate Degree, Baccalaureate Degree, Master's Entry Program in Nursing, or Diploma program that prepare students to take the RN or LPN licensing examinations (NCLEX-LPN or NCLEX-RN) and obtain a license to practice
- **RN**-graduate of an Associate Degree, Baccalaureate Degree, Master's Entry Program in Nursing, or Diploma program that has passed the NCLEX-RN examination and obtained an RN license to practice. RN's promote health and wellness, manage and provide complex care, educate patients and families, collaborate with physicians to plan, deliver, and evaluate care. RN's direct and supervise other staff. RN's work in a variety of settings.
- **RNB or RN-BSN**-Bachelor of Science in Nursing obtained after licensure as an RN

- **WCN**-Washington Center for Nursing. Private 501c3 non-profit charity created by the Washington Nursing Leadership Council to address the issues impacting the nursing shortage. Governed by a Board of Registered Nurses from across the state and many care settings. Recipient of Department of Health Grants #N14191, which identifies activities and deliverables related to nursing and the nursing shortage. Grant #n14101 was the result of SB5599 which authorized the Department of Health to collect a $5 surcharge from every RN and LPN license issuance and renewal, and award a portion of that money to a “Nursing Resource Center” for work described by that legislation.

Introduction

For many decades we have seen cycles of shortage and surplus in nursing. The shortages have led to increased wages for staff nurses, increased recruitment of students, expansion of educational programs, and at several key junctures, the invention of new kinds of programs (Fondiller, 2001a, 2001b; Sochalski, 2002). The surpluses have produced stagnant wages and declining enrollments that ultimately led again to shortages, and the cycle started again – or so the pattern has been.

This nursing shortage is different. The difference now is the result of the confluence of two major demographic phenomena, along with a number of significant social and cultural changes (Auerbach, Buerhaus, & Staiger, 2007; Buerhaus, Donelan, Ulrich, Norman, & Dittus, 2006). The aging of the "baby boomer" generation (those born between 1946 and 1963) will have the dual effect of reducing the supply of nurses while also dramatically increasing the demand for nursing care. The first of this cohort will turn 65 in 2011, with those born in the peak year (1957) turning 65 in 2022. The average age of registered nurses (RNs) nationally in 2004 was 46.8 years; the average age of nursing faculty was 51.6 years, and doctorally-prepared nurses had an average age of 55.4 years (Bureau of Health Professions, 2006). In Washington State, 31.6 % of the current RN population is aged 55 years or more (Skillman, Andrilla, & Hart, 2007). Just as the demand for nursing care is expected to increase, due to the aging of the general population, an enormous cohort of experienced professionals will be leaving the field. Who will replace them?

Predictions of workforce demand and supply are always uncertain but there is no debate that the coming nurse shortage will be staggering in size and scope. National projections by the Health Resources and Services Administration (HRSA) in 2002 indicated a shortfall of approximately 800,000 RNs by the year 2020. A more recent and optimistic estimate predicted a shortage of *only* 340,000 RNs – still an enormous number (Auerbach et al., 2007).

The Center for Health Workforce Studies at the University of Washington recently estimated that the RN shortfall in this state, without changes in health and education policy and practices, would reach nearly 25,000 RNs by 2020. To meet the predicted demand for RNs under the current system, we would need to increase RN graduation rates by 400 per year *each year* for the next 15 years (Skillman, Andrilla, & Hart, 2007).Since the challenges of this shortage are different, the responses must also be different. We cannot merely wait for the storm to pass, or expand existing programs in the usual temporary ways. Facing these challenges also offers us an opportunity to develop a vision of a transformed nursing education environment that is more integrated, innovative, effective, and inclusive.

This Master Plan is the collaborative product of many individuals and groups, especially the Washington Center for Nursing (WCN) and the Council on Nursing Education in Washington State (CNEWS).

The Washington Center for Nursing (WCN) is a non-profit 501(c)3 charity, whose mission is to contribute to the health and wellness of Washington State residents by ensuring that there is an adequate nursing workforce to meet the current and future healthcare needs of the citizens of the state of Washington. A grant from the Washington State Department of Health directed the WCN to submit a Master Plan for Nursing Education in Washington State by December 2007 (later extended to March 2008). In January of 2007 a Project Director was hired to facilitate the production of the Master Plan.

The Council on Nursing Education in Washington State (CNEWS) is comprised of the deans and directors of all nursing programs in Washington State. One of the roles of CNEWS is to lead planning for nursing education in our state. Background work in 2006 identified the multiple forces influencing nursing education in Washington, as many discussions were occurring outside of CNEWS about changing the nursing education systems (Hare, 2006). A subcommittee of CNEWS was created to function as the Design Team for the development of the Master Plan (see Appendix 3 for a list of CNEWS members as of April 2007).

In March and April of 2007, the Washington Center for Nursing and CNEWS conducted 14 focus groups across the state with nearly 200 nurse administrators, nurse educators, staff nurses, nursing students, and others on the issues to be addressed in a Master Plan for Nursing Education. On May 24th, 2007, the Washington Center for Nursing hosted the 3rd Invitational Leadership Summit on Nursing, bringing together more than 180 stakeholders from nursing schools, clinical agencies, regulatory agencies, and professional nursing organizations.

The key themes and findings from the background research, the focus groups and the leadership summit formed the basis for this Master Plan. Earlier drafts have been circulated among key stakeholders, and responses elicited for revisions. The final version of this plan will be submitted to the Department of Health in March 2008.

Overview of the Issues

There are several overlapping clusters of issues related to nursing education and supply.

The first priority is assuring the future **competency** of the nursing workforce. This includes making certain that students and new graduates acquire the knowledge and develop the skills demanded of today's new nurses, receive the appropriate level and type of education, and make a successful transition from school into practice. Fostering the relationship between educational preparation and the practice environment is therefore crucial.

The second concern of this report is the overall **supply** of nurses – the quantity of working nurses in relation to the demand for their services. The two major barriers to expansion of nursing education programs are the shortages of qualified faculty and of sites for clinical education; therefore, the focus of this section of the Master Plan is on alleviating the shortages of faculty and clinical sites. Other barriers to expansion, such as limited classroom space for pre-requisite classes and inadequate administrative support, are also addressed.

A third aspect of nursing education planning is **diversity** – the extent to which the nursing workforce and faculty reflect the racial, ethnic, and cultural composition of the population of this state. For far too long, the nursing profession has not been representative of the rich diversity of our population. As a result, some clients have not received culturally sensitive or culturally appropriate care, and health care which was delivered had not always been optimal for the client. Additionally, educational programs may have admission and retention barriers that contribute to the scarcity of ethnically and racially diverse nursing students and therefore graduates entering the profession.

Finally, there are the issues of **access** relative to the geographic locations of nurses and nursing education programs. At present, nursing educational opportunities are concentrated in the western part of the state, particularly along the I-5 corridor between Seattle and Tacoma. Access to nursing education, both entry-level and higher education, is much more limited in the eastern, peninsular, and rural areas. All of the preceding issues, supply and demand, pre-licensure and continuing education, transition to practice, and diversity, have a distinctive shape and complexity in rural and underserved areas, and the solutions therefore require particular attention. Even in parts of western Washington, transportation issues and the location of nursing programs can reduce access to educational opportunities.

Practice environments, retention, and health care system reform

The primary focus of this report is on the nursing education system across the spectrum of practice and education levels, with the goal of increasing the quantity of nurses entering practice. A second major influence on the supply of nurses in the workforce is the retention of nurses after their initial entry into practice, and the extent to which they continue to work as nurses.

Transforming the education system is most appropriately envisioned in conjunction with a transformation of the practice environment as well. While precise numbers about nursing turnover and attrition rates are difficult to obtain, common estimates are in the range of 30-40% of new graduates leaving their first job within the first year (Casey, Fink, Krugman & Propst, 2004; Kovner, Brewer, Fairchild, Poornima, Kim, & Djukic, 2007). These attrition rates are enormously expensive for healthcare organizations (particularly hospitals), as well as extremely inefficient for the education system. Taxpayer dollars as well as private contributions are not well invested in nurses who complete a program but do not practice, or practice for only a short time. The effects of the loss of clinical expertise and the "wisdom at work" of experienced clinicians are incalculable, and in the context of the renewed concern with safety and quality in clinical practice, potentially disastrous (Hatcher, Bleich, Connolly, Davis, O'Neill, & Stokley, 2006).

The nursing shortage cannot be solved merely by producing more new nurses, if those nurses choose not to remain in the workplace. Clinical agencies and their nursing leaders must find ways to make those environments more habitable and supportive of nursing practice at the highest levels, and to reward nurses adequately for their work.

There is extensive documentation of the frustrations of staff nurses in all practice settings, especially in hospitals which are still the major site of nursing practice. Many hospital staff nurses and staff nurses in other roles, are frequently exhausted, angry, and demoralized. They commonly report feeling unable to provide safe and appropriate care to their patients, and unable to use their education and knowledge effectively due to resource constraints, poor system design, or troubled relationships with other providers and administrators (Gordon, 2005; Institute of Medicine, 2004; Kovner, Brewer, Wu, Cheng, & Suzuki, 2006).

While these issues are not the primary focus of this report, they form a significant part of the background against which this report and its recommendations should be read. The issues of workplace habitability and satisfaction, interdisciplinary collaboration, safety, respect, salaries and benefits, scheduling, opportunities for career advancement all contribute to the professional practice environments in which nurses work and teach, and in which students learn.

There is a large body of work on "Magnet" hospitals that describes these hospitals as providing supportive environments for nursing practice, increasing their recruitment and retention of nurses, and meeting or exceeding quality measures for patient outcomes. (McClure & Hinshaw, 2002). Eight essential attributes were identified as distinguishing this category of hospitals, including support for education, clinically competent co-workers, positive nurse-physician relationships, clinical autonomy, control over nursing practice, nurse-manager support, adequate staffing, and an organizational culture focused on patient care (Kramer, Schmalenberg & Maguire, 2004a, 2004b, 2004c). Magnet hospitals complete a multi-year, rigorous transformation of their culture to foster professional autonomy for nurses and enhanced employee satisfaction through workplace environment improvements.

Magnet hospitals demonstrate nurse recruitment and retention that exceeds non-Magnet organizations. Kramer and Schmalenberg (2003) emphasized that the perception of adequate staffing is "not just the numbers," but is related also to skill-mix, experience and longevity of staff, group cohesion, patient characteristics, and availability of other resources.

The entry of a new nurse into any practice environment involves not just the learning of procedural skills or organizational particulars but also learning the unwritten cultural rules and the actual practice of nursing in that setting. "Magnet" designation is only one path to organizational excellence. Another program developed by the American Association of Critical Care Nurses, known as the "Healthy Work Environments" program, describes the characteristics of a work environment that promotes professional practice and promotes recruitment and retention of nurses (American Association of Critical Care Nurses, 2005). Hospital, healthcare and public health agencies have many ways of fostering supportive practice environments for nurses.

Transformation in the professional practice environment for nurses will require substantial change in the healthcare system. Nurses are often both over-worked and under-utilized, and a healthcare system that makes better use of their skills and knowledge would be both more sustainable and more effective. Conversely, transforming the professional practice environment and the U. S. healthcare system in order to more effectively serve the needs of the public will require a well-educated and informed body of nurses, working in practice, research, teaching, and policy roles.

Many of the strategies proposed here for enhancing pre-licensure education, for easing the transition to practice, and for promoting graduate education, research, and opportunities for advanced practice will also have the effect of enhancing and strengthening the professional practice environment. Similarly, the recommendations that have been made elsewhere for improving the professional practice environment for nurses (see for example, Institute of Medicine, 2004; Hatcher et al., 2006) would strengthen and enhance the environment for education.

Core Themes

This Master Plan offers a bold vision of systematic transformation and a set of concrete and interconnected recommendations. While every element is not equally necessary for the success of the whole, this plan should be evaluated as a comprehensive package. A number of the strategies that are proposed are useful in addressing more than one area or have synergistic effects with other strategies.

The main section of this plan is organized around the core issues identified in preliminary discussions with our stakeholders: the opportunities to enhance the quality and competency of graduate nurses; the shortages of faculty and clinical sites, the need to improve diversity of nurses and the issues of access into nursing education by both traditional students and incumbent healthcare workers and the geographic distribution of educational programs. Within each topic area is a set of proposals, with some of the recommendations recurring under several topics.

Across all topics, however, there are several **core themes**, which are the needs for:

- Collaborative planning and coordination across sectors and regions
- Enhanced partnerships among education, research, and practice
- More effective communication with policy-makers
- Leadership within and across sectors of education and practice

These core themes form an interconnected pattern, a framework for a set of changes that need to occur together in order to truly transform the environment of nursing education and practice.

Collaborative planning and coordination, across sectors and regions

One of the fundamental problems of the current situation is the general lack of coordination, regional planning, and procedures for thoughtful and deliberate allocation of resources among the multiple agencies, systems, employers, and advocacy groups. As a result, there is an uneven mix of programs and services, areas of overlap and repetition, and other areas with significant omissions and gaps. Planning for future growth in an orderly, responsible way that takes into account present and future population and healthcare needs is hampered by the fragmented nature of the education system, the lack of current, reliable data on many issues, and the multiplicity of private and public agencies responsible for various aspects of the system.
We are not proposing a single agency be in charge of all aspects of nursing education but that more coordination and planning be done among the current stakeholders, with some additional infrastructure and adequate funding.

Enhanced partnerships among education, research, and practice

One of the most consistent and prominent themes we heard in the focus groups, in the invitational summit, and in other conversations with stakeholders around the state was the desire and need for more dialogue and collaboration across sectors. Nurses in practice feel

separated from those in education, and vice versa. Researchers and clinicians do not collaborate as closely as either group would like.

Education that is involved with current challenges of clinical practice is more relevant and useful for students. Practice that is informed by the latest research is most useful for patients, and the scientific basis for practice is visible and vibrant for practitioners. Research that is oriented toward the questions and challenges of clinicians and teachers is most relevant and provides the foundation for evidence-based practice (Day, 2005; Benner & Sutphen, 2007).

This spirit of partnership does not mean that any of these sectors exists merely to serve the others. Education, research, and practice sectors each have legitimate differences and distinct interests. Authentic partnership is founded on respect for those differences and is strengthened by the diversity of perspectives and talents.

More effective communication with key stakeholders about nursing education

A large number of stakeholders have an interest in the issues of nursing education and practice with a correspondingly wide range of perspectives on those issues (Hare, 2006). The issues under debate in nursing education are complex and inter-connected and sometimes are not well understood or described outside of nursing. More effective communication channels must be established among nurse educators, researchers, clinicians, policy-makers, and involved citizens so that policies and decisions are based on accurate information and comprehensive understanding of the nursing education and practice environments.

Leadership within and across sectors education and practice

Each of the preceding core themes of planning, partnership, and communication depends on effective and inspirational leadership. The *combination* of these elements will require extraordinary leadership and will be a particular challenge at a time when many of the current nursing education leaders are expected to retire soon. There is a pressing need for current leaders to actively recruit, mentor, and support the next generation of nursing leaders. Organizations such as the Council of Nursing Educators in Washington State (CNEWS), Northwest Organization of Nurse Executives (NWONE), Washington Nursing Leadership Council (WNLC), Washington State Nurses Association (WSNA), SEIU-1199NorthWest, (SEIU-1199NW), and the United Staff Nurses Union Local 141 (USNU Local 141), and many others are vital resources for developing nursing leadership, vision, and collaboration.

In looking ahead to the rest of the 21st century, our challenge is to build a system of nursing education and practice that will prepare a professional workforce to meet the needs of the citizens of Washington State. Our challenge has been to hold on to a bold and broad vision of what that means and to identify how best to arrive there. We must design a system that will enable students to become the best nurses they are capable of being and to receive the education they need in order to develop their minds, their hands, and their hearts, to make the transition from school to practice as smoothly as possible and to continue to develop their knowledge and skills as they make the journey from novices to experts.

It is crucial to avoid the temptation of short-term fixes, “magic bullets,” or easy solutions for complex problems. Romanticizing about the past does not move us forward. We need to build an integrated education and practice system that includes multiple pathways toward our multiple goals, builds on the success of the past, and looks toward the responsibilities of the future. A broad and comprehensive view of nursing practice leads us toward a comprehensive view of nursing education and the importance of developing a thoughtful plan for sustainable change (Gubrud-Howe et al., 2003).

The consumers of health care in our state today, and in the future, will need nurses who are educated to be critical thinkers, who exercise sound clinical judgment, and who are leaders in direct care of individuals, families, and populations as well as in administration, research, and education. Nurses who are prepared to meet complex healthcare needs will require education at a variety of levels, both entry-level and advanced, and for a variety of roles, including direct care in the hospital and in the community, management, teaching, research, and policy development.

All of these are in the domain of “nursing practice,” and all are the responsibility of the nursing profession. The core task of any profession is to regulate its own membership, including education, credentialing, standards, and discipline, in order to serve the public good. We will not lose our way as long as we keep *the good of the public* clearly in view as our guide and our primary responsibility.

Licensed Practical Nurses

This report concentrates primarily on the education of Registered Nurses and advanced practice Registered Nurses. This choice was made because the nursing shortage is most acutely a shortage of RNs, and it is the RN education system that was judged to be most in need of attention.

The information we received through the statewide focus groups, the Education Leadership Summit, and from other key stakeholders did not indicate a need at present to expand the number or size of LPN programs. While LPN programs are currently considered to be meeting the workforce needs of the healthcare system that does not mean that there are not opportunities for changes. LPNs play a crucial role in many parts of the healthcare system. There are close links between LPN and RN education systems, and Practical Nursing education is strategically important as an entry route into the nursing profession.

We do not have current data to assess the need for LPNs across the state, but we do know that the number of LPN licenses issued has been static for the past five years. This may portend problems. Many LPNs indicate a desire to continue their education and become licensed as RNs. Most of the LPN programs in Washington State are integrated with RN programs, and continuation from one to the other is relatively simple. Therefore, the number of students who become licensed as LPNs does not reflect the numbers who intend to remain as Practical Nurses. Likewise, the “demand” for LPNs can vary widely, depending in part on the supply of RNs. Historically, Licensed Practical Nurses have been in many ways the “reserve army” of nursing – called up when RNs are in short supply, and relieved of duty when there is a surplus.

Certain sectors of the healthcare system are particularly dependent on LPNs, and they are sometimes the sectors that are lower in status and pay: long-term care, ambulatory care, and rural health. Historically, the LPN role has also been an entry point into healthcare for economically disadvantaged and minority persons. As we wish to increase the diversity of the overall nursing profession, current and future LPNs offer a vital pool of talent.

As a study of the LPN workforce commissioned by the Health Resources and Services Administration noted:

> Although LPNs organized into professional groups in the early 1940s, there is little literature about the practice, work, demand or efficient utilization of the licensed practical nurse. Additionally, there is little guidance as to how to most effectively make use of this practitioners' skills to enhance patient care and augment the nurse workforce (Seago, Spetz, Chapman, Dyer, & Grumbach, 2004, p9).

To the extent that this Master Plan inspires and provokes further deliberation about a comprehensive approach to nursing education and practice, that dialogue must include LPNs as participants, as well as a consideration of the proper role of LPNs in the next century of nursing practice. WCN is planning an “LPN Summit” later in 2008 to bring key stakeholders together to explore issues impacting this segment of the nursing workforce.

I) ASSURING THE CONTINUED COMPETENCY OF NURSING PROFESSIONALS

Background

The issues identified and the strategies proposed in this section emerge from discussions among multiple stakeholders with a range of interests and viewpoints. A common thread in these discussions is the need for substantial changes in the content of nursing education and in the delivery systems which provide it, in addition to the expansion of the quantity of nurses (which will be described in the following section). The process of change is underway already, though unevenly; the Master Plan provides an opportunity to proceed with that work in an integrated and comprehensive manner.

While many participants agree on the need for changes, the impetus for those changes comes from different directions. Educators may focus on new research on effective teaching practices, the insights of experienced teachers, and evolving ideas about program design. Clinicians may be more attentive to the challenges of an increasingly complex and fast-paced practice environment. However the questions are framed, the goals remain the same: how best to provide nurses with the knowledge and skills necessary to help assure a healthy population for the state of Washington.

It is important to consider the current debate about nursing education in a historical context. In the past, a majority of nurses received their education in hospital-based training schools. Health care was much simpler with longer hospital stays, fewer drugs, and little technology. Regulations to promote patient safety had not yet become a focus of healthcare. Nursing practice is immeasurably more complex today, with patients much sicker and in more diverse settings (Burritt, Wallace, Steckel, & Hunter, 2007). Nursing education has evolved to present time, based in Community Colleges and Universities, providing the basic broad preparation for professional practice.

In the past few decades, nursing research efforts and knowledge have grown enormously. Baccalaureate, master's, and doctoral programs are flourishing. Research projects at all levels, from small exploratory studies to large, multi-center clinical trials, are conceived, managed, and evaluated by nurses. There is an infrastructure of support for research by nurses, including journals, conferences, and grant funding at institutional and federal levels. Nurses are endowed professors, sit on the boards of major foundations and scientific review panels, and direct major health policy initiatives. It is important to remember how recent this move into higher education has been, and how large the gaps still are between various sectors of the nursing education community.

The future of the health and healthcare systems in which nurses practice is increasingly uncertain. Costs continue to rise, as does the proportion of Americans without adequate access to that health care. There is increasing attention to the problems of safety, to management of chronic rather than acute illness, to the rapidly-growing elderly population, and to the application of technological advances and genetics to clinical practice. We have compelling evidence of the importance of prevention, but we do not have a reliable national system for providing preventive care. The public health system, which is the backbone of our population-level health system as well as the provider of health care for many low-

income communities, remains in serious disarray, despite a decade of multi-sector partnerships and infrastructure reform efforts (Berkowitz & Nicola, 2003). Public Health nurses are among the lowest paid members of the profession (Quad Council, 2006).

It is possible that there will be major system reform efforts launched in the next few years as a result of a growing political consensus on the need for a comprehensive overhaul. Nurses should be major participants in these overall system transformations. While the shape of the future health and healthcare systems in the United States cannot be predicted, nursing practice will continue to evolve in response to the needs of the population.

The debate about basic preparatory education for professional nursing cannot overshadow the importance of "lifelong learning" through a variety of means. Nurses must continue to gain knowledge throughout their careers, through continuing education classes, conferences and professional meetings, workplaces in-services, journal clubs, and many other strategies.

Healthcare employers, policy-makers, and nurses themselves are increasingly regarding the BSN as the preferred degree for registered nurses. Participants in the focus groups conducted by the WCN across the state consistently identified BSN-completion programs as the largest local need for educational expansion, with pre-licensure BSN and ADN programs close behind. Many employers in these focus groups and in other forums have indicated a preference for Registered Nurses with BSN degrees when they are available (Goode, Pinkerton, McCausland, Southard, Graham, & Krsek, 2001), and the national organization of nurse executives has identified the BSN as the preferred degree for professional nursing (AONE, 2005). Public Health Departments in Washington State and the Veteran's Administration System nationally opt for the BSN nurse whenever possible.

In the U.S. military, a BSN is required for RNs. Internationally, the European Union has moved toward a baccalaureate as the required entry-level degree, following the Bologna Accord (Zabalegui, Macia, et al., 2006).

The National Advisory Council on Nurse Education and Practice (NACNEP), policy advisors to Congress and the U.S. Secretary for Health and Human Services on nursing issues, has urged that at least two-thirds of the nurse workforce hold baccalaureate or higher degrees in nursing by 2010 (AACN, 2007).

In Washington State, the Governor's "Washington Learns" Commission noted that Washington State ranks 35th among all states in baccalaureate education and has endorsed the goal of increasing the number of baccalaureate degrees granted to state residents (*Washington Learns*, 2006). What this commission said about the broader educational system is relevant to nursing:

> It is an economic necessity that we change our entire educational system from early learning through graduate school so that it is not merely basic, it is excellent (*Washington Learns*, 2006, p4).

The Prosperity Partnership, a consortium of business and labor groups promoting economic development in the four major counties of the Puget Sound region, has included nurses in its identification of "high demand" fields which require an additional 10,000 bachelor's degrees by 2020 (Prosperity Partnership, 2006).

At its October 2007 meeting, the Council on Nursing Education in Washington State (CNEWS) unanimously passed three recommendations regarding Nursing Education:

1. That every LPN program have a formal progression agreement with at least one private or public Washington-approved RN program by 2010.
2. That every ADN program have a formal progression agreement with at least one private or public Washington-approved BSN program by 2012.
3. That every RN newly-licensed in Washington have or obtain a BSN within 5 years of initial licensure beginning in July, 2020.

This last recommendation does not change requirements for entry into practice. It involves a different approach that maintains current educational pathways into practice while establishing a uniform standard for experienced nurses. CNEWS verified that previously licensed RNs would not be affected by the third recommendation and would be "grand parented" into the pool of licensed nurses. Processes will be established to review unique situations where a nurse has been unable to meet this requirement, where extenuating circumstances exist. This proposal for change reflects the judgment of this group of nursing education leaders concerning the importance of increasing the proportion of BSN-prepared nurses in Washington State.

In response to thoughtful feedback on this proposal, we recommend that the last of the recommendations be amended to ensure that all RN's newly licensed in Washington have or obtain a BSN within **10** years of initial licensure, beginning in July 2020. This extension acknowledges the infrastructure changes that need to occur, and allows for systematic acquisition of additional education by working adults over a longer period of time.

There is a growing body of research that suggests that a greater proportion of BSN-prepared staff increases the quality of care provided – reduces errors, increases patient "rescues," and promotes patient safety (Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Estabrooks, 2005; National Quality Forum, 2006). Attainment of Magnet status by hospitals requires a larger proportion of BSNs (Kramer & Schmalenberg, 2003).

As health care becomes more complex, front-line nurses need more education to maintain their professional competency. Health care is increasingly focused on managing chronic illness, coordinating care across systems, promoting health, and preventing illness. New technologies of care and electronic records, the collaborative work across multiple disciplines, the focus on patient safety and evidence-based practice – all require higher levels of education than were previously necessary. Nurses need to be recognized as knowledge workers, not just as hands-on caregivers (Kaeding & Rambur, 2004).

While originally proposed as a two-year program (Fondiller, 2001b), an associate degree in nursing actually takes at least three years due to pre-requisite courses, delays in class availability, the extensive coursework and clinical education required, and other practical issues. Associate-degree nursing students compete with other students on a campus to complete prerequisite courses; this frequently causes delays.

Increasing the numbers of nurses prepared at the BSN level also increases the pool of potential nursing faculty, researchers, and professional leaders. Delays in getting a BSN mean delays in obtaining graduate education, thus contributing to the faculty shortage (Bevill, Cleary, Lacey, & Nooney, 2007). For nurses to assume the leadership positions in health and healthcare that we have been proposing for a generation, a larger pool of better-educated nurses is essential.

Some arguments in favor of the BSN focus on the benefits to the nurse as an individual. If a community college program (ADN) requires almost as much time to complete as a BSN program (three to three-and-a-half years versus four years), then the short-term advantages of the ADN pathway are reduced. We may be hindering (rather than helping) the advancement of some students by advising them to pursue a "stepwise" approach to nursing education (Buchbinder, 2007).

The challenge is to make baccalaureate education more accessible, and to mitigate the economic, social, cultural, geographic, and practical barriers that hinder those who would pursue it. Nursing education for the 21st century in Washington requires multiple pathways toward higher levels of knowledge and practice. A healthy and comprehensive system incorporates many parallel and articulated elements, while providing particular focus on underserved areas and populations.

GOALS

- Expansion of LPN-BSN, ADN, BSN, MPNE, and RN-to-BSN capacity
- High quality education, adequately supported by surrounding institutions
- Increased collaboration among education, research, and practice
- Baccalaureate and graduate nursing education available to all who desire it and are academically qualified

TARGETS

- Expanded access to BSN education available in all parts of the state, through generic (pre-licensure), RN-BSN, and "fused" programs
- Expanded access to graduate education, especially for minority students and future nurse educators
- Residency programs available to all new RN graduates
- Increased funding for nursing programs, students, and faculty

STRATEGIES

Build an integrated network of nursing education opportunities through multiple pathways

We recommend the following guidelines be used in planning for expanded access and capacity:

- Target expansions of the nursing education system to currently under-served and high-demand areas, using a mix of delivery models and program designs, creatively sharing resources across locations and programs, and maintaining academic rigor
- Expand existing Washington-approved programs
- Provide multiple pathways to education advancement
- Include the entire spectrum of education levels in planning and access

In order to expand nursing education into underserved areas and for underserved populations, there is an urgent need for creative and innovative systems for delivering BSN education across the state, through partnerships between existing institutions and programs, and new bridges to link those programs.

For example, there is a long-standing and very successful set of programs in Washington State, in both public and private institutions, for Registered Nurses with associate degrees to obtain a BSN – what are commonly called "RN to BSN" or "BSN completion" programs. These programs build on the courses already taken at the community college level, as well as the experience and knowledge of RNs from the practice world, to provide a targeted educational experience. Such programs also can be offered in partnership with employers, with at least some classes provided on-site, via distance learning, or through flexible work schedules.

Dual enrollment in ADN and BSN programs is currently being used in Washington. Students are admitted to the ADN program, complete and may take the NCLEX-RN exam but simultaneously have admission to the "partner" BSN program so that they can move seamlessly into that program. Such programs could be expanded with a minimum of expense (Bargagliotti, West-Sands, Burchum, & Selbe, 2002). The advantage of this approach is that it uses existing programs; the disadvantage is that the connection between the programs is merely sequential and not always integrated for maximum efficiency.

The **fused model** is an innovative program design being developed through a partnership between Washington State University, Columbia Basin College, and Walla Walla Community College that would allow the attainment of a BSN degree within four years. In this program, students complete the Associate Degree in Nursing program and are eligible to take NCLEX-RN at completion. They also enter the BSN portion immediately and complete that degree in 1.5-2 years. What is unique is that both programs develop the overall curriculum and agree not to duplicate any classes. This reduces competition for educators, as both are not competing for educators with a special background (for example, pediatrics). Community health, leadership, care management, research, and policy are taught at the BSN level. These programs would provide BSN education in rural and underserved areas, recognize and utilize the faculty resources of the community colleges, efficiently use clinical and simulation experiences, and advance the educational level of participating nursing faculty through access to continuing graduate education (master's and doctoral).

Another experimental approach involves a nursing program at a community college offering a baccalaureate degree (BSN). Olympic College (OC), in partnership with the University of Washington – Tacoma (UWT), has recently developed a BSN program, one of four pilot programs at community colleges across the state to offer bachelor's degrees. Community colleges in other states are also experimenting with such programs**.** A full evaluation of these programs has not been conducted, and the challenges, costs, and opportunities associated remain to be analyzed. Preliminary discussions with some of the participants suggest that close and sustained collaboration between OC and UWT was crucial in program planning, faculty development, and the identification of library and other infrastructure requirements. Successful programs will need to be tailored to the needs and resources of local communities, and will require the strong support of local partners (e.g., local healthcare agencies and local baccalaureate programs). There is much in business literature about effective diffusion of major change efforts that needs to be understood before assuming that replication of this work should be promoted across the state. Given

scare faculty resources on the part of both community college and baccalaureate nursing programs, the potential of others to duplicate this effort requires careful study.

There is currently only one **LPN to BSN program** in Washington (at Pacific Lutheran University), though such programs are not uncommon in other states (Cornett, 1995; Ramsey, Merriman, & Blowers, 2004; Redmond, 1997). We recommend that more such programs be developed across the state, as they have the potential to accomplish several policy goals. LPNs are a valuable pool of experienced healthcare workers. Demographically, LPNs are more likely to include members of minority and under-represented communities (Seago et al., 2004). Programs which facilitate LPNs obtaining both RN licensure and baccalaureate education in a single step are a more efficient use of time and other resources both for students and for the education system, increase the social and cultural diversity of the RN professional community, and provide opportunities for the extension of education to rural and underserved communities.

Master's Programs in Nursing Education (**MPNE)** are pre-licensure programs targeting individuals who already have a non-nursing Bachelor's or higher academic degree who wish to become nurses. These are accelerated programs that provide nursing education without requiring repetition of liberal arts and science education. Their impact on the nursing workforce is being evaluated nationally. Washington has several programs.

Incumbent non-nursing healthcare workers are an additional pool for nursing. Some employers are already supporting their employees in returning to school to become LPN's or RN's, to enhance their own education and add to the nursing workforce.

Another untapped resource for increasing the pool of skilled and experienced nurses may be nurses returning to civilian practice after military service. Nursing schools, agencies, and the Nursing Commission (NCQAC) should continue to collaborate to promote the smooth transition of returning military veterans to civilian nursing practice. RNs have a simple transition. LPNs may require additional education to be eligible to become licensed as LPNs, depending on the branch of the service from which they come. Spouses and partners of military personnel temporarily in Washington may also be a source of nursing faculty. Improvement in communication with military transition offices to ensure that they have current information on work and education opportunities is needed.

Improving quality of teaching and learning in schools

The transformation of the teaching and learning of nursing is a complex project that will take many years and must be based on a repertoire of principles, strategies, and practices that are supported by a broad consensus of educators. These practices and principles can provide the framework for further exploration and sharing of excellence in Washington State.

A structure or a network through which those "best practices" can be tested, consolidated, and shared with all Washington nurse educators needs to be developed. The Washington Center for Nursing and CNEWS should collaborate to develop the most efficient and effective institutional framework for such work.

Existing faculty should be encouraged to continue their education through scholarships, loans, and financial rewards made available to make this step reasonable and practical for

working professionals. Universities offering higher degrees in nursing should form partnerships with community colleges to identify potential students and to provide financial support, through teaching assistantships, research assistantships and fellowships (with release time).

Existing distance education methods should be expanded and enhanced; studies regarding the effectiveness of different modalities should be funded. This knowledge will help with the continuing education of the faculty workforce and will enhance the capability of the education system to meet the needs of working students and rural communities.

In nursing graduate programs over the past decade, there has been a trend away from programs that focus specifically on preparing nurse educators and toward programs that prepare advanced practice nurses (ARNPs). We need to revisit those policies and programs in order to increase both the quantity and quality of nurse educators. Graduate schools should examine their own programs to evaluate the extent to which they offer students guidance in pursuing education a career and provide support for and attention to teaching as a skilled practice.

Programs providing courses in education for master's-prepared clinicians leading to a certificate in nursing education should be encouraged and funded. The capacity of doctoral programs in nursing, both PhD and DNP, should be evaluated in terms of their ability to contribute to the pool of nurse educators in the state.
(Note: Strategies for increasing the supply of nursing faculty will be discussed in more depth in a separate section below, under "Shortages of Faculty.")

Excellence in teaching should be taken into account in promotion and tenure decisions, even at research institutions. Mentoring and support for new and existing faculty could enhance their quality of life as well as quality of teaching. Formal mentoring programs for new faculty that cross institutional boundaries could be established; larger institutions could provide workshops and consultation for smaller programs, tuition could be paid for all participants, and new faculty could spend paid orientation time at a different school for learning purposes.

Another element of this process involves a cultural shift that raises the value and priority of nursing education and teaching and reconfigures the relationships among education, research, and practice. Teaching must regain its status as an honorable, important, skillful domain of practice, intrinsic to practice. This return to esteem for teaching is linked with a larger cultural shift that sees formal education, practice, and research as partners in the development of the field of nursing, as well as in the production and maintenance of individual nursing professionals.

We must ensure that teaching is seen as another form of advanced practice and a worthy career for those who seek challenges and opportunities. Schools and clinicians should work together to strengthen and promote the visibility and desirability of teaching and to convey a more positive image of nurse educators and faculty. The recent ad campaign by Johnson & Johnson that focuses on nurse educators is a helpful example in this direction.

At the WCN Invitational Leadership Summit in May 2007, results from the Carnegie Foundation's study of "Preparation for the Professions" were presented to participants (see Appendix 2). This work made recommendations in the fields of nursing, medicine, engineering, law, and the ministry. The noted nursing researcher Dr. Patricia Benner and

the medical historian Dr. Molly Sutphen led the nursing component of this project. Their study yielded some key recommendations:

- Use of practice-and patient-focused teaching as a source of integration, such as unfolding clinical cases, and patient, student, and faculty narratives
- Integration of the medical discourse and the social, human experience of illness, (e.g., connecting physiological and human activity and responses)

Their study of excellence in teaching also found a number of characteristics of excellent teachers and signature pedagogies; these are delineated in Appendix 2.

The Washington State Nursing Care Quality Assurance Commission (NCQAC) has identified the wide variance in clinical hours devoted to various specialties across different programs as a problematic feature of current nursing education in our state. (NCQAC, 2007). Decisions about such program elements historically have not been based on outcomes evaluation. In an era of acute shortages of clinical space, we need to know how best to use our scarce resources. Across the country, nurse educators are beginning to experiment with alternative arrangements for clinical teaching; such experiments should be evaluated, and successful elements incorporated into Washington nursing programs. CNEWS and WCN are well positioned to collaborate with other stakeholders to lead evaluation of the appropriate clinical hours at each level of pre-licensure education and to make recommendations to create excellence in this area

One of the challenges for new faculty is to prepare adequate classroom materials – lectures, reading materials, case studies, and guest speakers – on all the relevant topics. The quality of teaching and the quality of faculty work life both would be improved by greater opportunities for shared resources. One example of such resources could be the production of high quality teaching videos presenting complex nursing topics, not to replace the individual faculty presentations, but to supplement them. Other kinds of shared resources could include sample syllabi, online discussion boards, speaker bureaus, and regional conferences for faculty in teaching specialties. These activities could be coordinated through the WCN, CNEWS, or through other collaborative partnerships, in order to contribute to the spread of excellence and depth in nursing education.

Expectations of teaching as part of professional practice

A recommendation repeatedly voiced by participants in our statewide focus groups, and by stakeholders during the Invitational Leadership Summit in May 2007, was for a closer collaboration between educators and clinicians. This theme speaks to the importance of education systems working closely with nurses in all areas of clinical practice.

Both the teaching and practice of nursing will be enhanced by a greater recognition on the part of all sectors that education is not the exclusive domain of schools and teachers but is instead an essential component of professionalism, and therefore the responsibility of all members of the profession. In many sites, teaching and learning are already part of the organizational culture; students are welcomed and appreciated, continuing education by the staff is expected and valued, and organizations acknowledge and enact their responsibilities to support these activities. In other locations, these elements are less established or have been unevenly implemented.

Specific means for clinicians and healthcare organizations to demonstrate their commitment to nursing education would include:

- Clinicians participating as preceptors, mentors, formal and informal educators, and supporting colleagues who return to school
- Employers rewarding clinicians for precepting, mentoring, and returning to school
- Clinical agencies and their clinicians incorporating research and the evaluation of evidence in clinical decision-making and policy development
- Clinical agencies and administrators fostering a positive work environment, utilizing data from any of a number of studies on this issue.

Educational institutions have opportunities to demonstrate their commitment to a collaborative approach to nursing education by partnering with clinical agencies in developing:

- Educational programs that are accessible to working adults and respond to the needs of clinicians
- Traditional and experimental sites for clinical education
- Opportunities for researchers, educators, and clinicians to work together more closely in developing research projects

Improving the transition to professional practice

A major source for improving the quality and competency of new and continuing nurses will result from enhanced partnership between schools and clinical agencies. This collaboration should take a number of forms: closer collaboration between faculty and clinical staff, senior practicum before graduation, and residency programs for new graduates.

There are many opportunities for collaboration between faculty and clinical staff during clinical rotations and in bridging clinical and classroom instruction.

A senior practicum or “capstone” experience is already used by many schools. These take the form of student immersion in a clinical location under the supervision of an individual preceptor with whom they work, in conditions that approximate the role of a professional nurse.

One of the most important recent developments in helping new nurses make the transition into professional practice has been the growth of residency programs for new graduates. Many clinical agencies have developed some version of these programs, though they vary widely in duration, intensity, and structure (Hare, 2007). In contrast with traditional “orientation” programs focusing on procedures, tasks, and agency policies, new-graduate residency programs include a comprehensive and structured progression of increasing independence combined with ongoing support. These programs are typically 6–12 months in length, in order to provide crucial support during the most vulnerable periods of role transition and the highest incidence of new nurses leaving jobs and the field. They also commonly include peer support, promotion of critical thinking, use of research findings, and a competency-development framework such as Benner’s “novice to expert” model (Diefenbeck, Plowfield & Herrman, 2006; Halfer, 2007; Krugman, Bretschneider, Horn, Krsek, Moutafis, & Smith, 2006; Pine & Tart, 2007). The increasing complexity of healthcare

practices and systems today has made it unrealistic to expect that students will be exposed to all major clinical experiences prior to graduation. Hence, residencies.

The recent WCN study on minority new grad transitions revealed that hospitals with a formal transition program had a 90% employee retention rate after one year of employment of new grads participating in such a program (Hare, 2007).

Another theme that emerged in the focus groups and Leadership Summit was the desire to enhance the preceptor-student relationship. Staff who *precept* students – those nurses employed by clinical agencies who supervise, teach, and mentor an individual for an extended period of time, and who are not clinical faculty – are in a particularly important position and deserve particular attention. These nurses should receive additional pay for this work in recognition of the additional responsibilities it conveys, the importance it has in the education of students, and the value of this increasingly scarce resource to the nursing profession. Some schools have experimented with additional ways to recognize and reward staff nurses who choose to mentor students (e.g., CE credits or vouchers, Internet access, adjunct appointments), and these efforts should be expanded significantly.

Given the importance of this student-preceptor relationship, a standardized and strengthened education for preceptors should be developed and made available to clinical agencies either on site or via distance education modalities (Hare, 2007). Staff who have been preceptors should be engaged to help with the development of this curriculum and to explore opportunities for better integration of research, clinical practice, and policy development.

Preceptor workshops should be developed and offered to clinical agencies by the educational institutions. When possible these workshops should be held on site and attendance should be encouraged and paid. Ongoing provision of information on best practices in nursing education must be encouraged and funded. Additional incentives to clinicians to serve as preceptors should be developed and shared throughout the school year, including tuition waivers for academic courses or continuing education, library privileges, and certificates of appreciation.

ASSURING THE CONTINUED COMPETENCY OF NURSING PROFESSIONALS

RECOMMENDATIONS

A. Build an integrated network of nursing education opportunities through multiple pathways

1. Expand all RN programs, especially in areas currently underserved
2. Strengthen articulation agreements among LPN, ADN, and BSN programs
3. Expand dual admission to ADN and BSN programs
4. Ensure that every LPN program has a formal agreement with at least one WA-approved public or private RN program by 2010
5. Ensure that every ADN program has a formal agreement with at least one WA-approved public or private BSN program by 2012
6. Encourage development of LPN–BSN programs
7. Find resources for and expand innovative pilot programs such as the "fused" models for BSN
8. Identify opportunities to decrease "steps" in progression toward BSN and graduate degrees
9. Resource and expand innovative use of distance learning and alternative delivery systems
10. Increase support for the recruitment and retention of students from:
    a) minority and underserved populations
    b) incumbent healthcare workers
    c) rural and underserved areas
11. Develop pathways for returning military nurses to transition to civilian practice
12. Increase financial aid to nursing students
13. Increase funding to nursing schools

B) Increase the proportion of registered nurses in Washington State prepared with BSN or higher degrees

1. Expand capacity of BSN and RN-BSN programs in institutions of higher education across the state, both public and private
2. Support and expand non-traditional programs, e.g., LPN–BSN, "fused" models for BSN, dual enrollment
3. Support innovative use of distance learning and alternative delivery systems
4. Ensure that all RN's newly licensed in Washington State will hold or obtain a BSN within 10 years of initial licensure, beginning in July 2020.

C) Expand support for graduate education in nursing

1. Provide enhanced loans/scholarships for graduate nursing students
2. Secure funding for expansion of graduate nursing education programs
3. Encourage support by clinical agencies for their staff nurses returning to graduate school
4. Create closer collaboration among educators, researchers, and clinicians to promote evidence-based practice and practice-relevant research

5. Develop innovative and alternative education systems combining distance learning and classroom experiences
6. Identify opportunities to share resources between independent universities

D) Advance the quality of teaching

1. Incorporate the recommendations of the Carnegie Foundation's study of "Preparation for the Professions" (see Appendix 2)
2. Foster collaborative development of evidence based "best practices" and shared resources related to improved teaching through WCN and CNEWS
3. Promote development and sharing of expertise related to distance learning and alternative education delivery systems
4. Promote educator tracks and faculty-role preparation as part of graduate nursing programs
5. Encourage the vision of teaching as a form of advanced practice
6. Foster collaborative development of evidence-based'best practices' and shared resources related to improved teaching through WCN and CNEWS

E) Increase expectations of teaching as part of professional practice

1. Increase recognition of the role of clinical staff and agencies in educational activities
2. Promote closer collaboration among educators, researchers, and clinicians
3. Encourage development of a positive work environment and professional practice structure

F) Improve the transition to professional practice

1. Facilitate and support development of comprehensive and rigorous models for residency programs for all new RN graduates
2. Support senior practicum or "capstone" experiences for all final-semester RN students
3. Support enhancing the preceptor-student relationship, including training, recognition, and rewards
4. Promote closer collaboration among educators, researchers, and clinicians
5. Encourage development of a positive work environment and professional practice structure

II) ASSURING AN ADEQUATE SUPPLY OF NURSES

Washington State is facing a severe shortage of nurses in all areas of the state. One of the most frustrating elements of the current nursing shortage is that there seem to be enough people who want to be nurses but who are not admitted to nursing school. What is true nationally also holds true in Washington State: there are many more qualified applicants than spaces available in pre-licensure nursing programs, and all programs have fierce competition and long waiting lists.

Predictions of workforce supply and demand are always uncertain, as they are composed of several calculations about items that are subject to great change and instability. The Center for Health Workforce Studies at the University of Washington, in a study conducted for the Washington Center for Nursing, recently estimated that the RN shortfall in this state, without changes in education and practice policy, will reach nearly 25,000 RNs by 2020. To meet the predicted demand for RNs under the current system, we would need to increase RN graduation rates exponentially by 400 per year *each year* for the next 15 years (Skillman, Andrilla, & Hart, 2007). This is an extremely unlikely scenario (see Appendix 1 for a description of the enrollment numbers under this plan). Nursing leaders and employers need to develop a more sustainable work environment and models of nursing practice that will be plausible and effective within the context of future conditions.

Improved retention in nursing programs can add to the supply of nurses. The NCQAC's recent report from 2005-2006 indicated that while the attrition rate for BSN programs is 4%, it is 22% at the ADN programs. Reducing the ADN attrition by 50% could add ~200 more RN's into the workforce annually.

Data collected by CNEWS and the Washington Center for Nursing in 2006 found that the pool of qualified applicants to nursing programs for fall 2006 exceeded program capacity by approximately 750 spaces. More recent data from the NCQAC suggests that the numbers of rejected applications may be significantly higher. We propose that initially 750 new spaces is a reasonable goal for expanding capacity in Washington nursing programs. This target will not "solve" the nursing shortage, but it will be a significant step in that direction.

The major barriers to the expansion of pre-licensure nursing programs are the shortages of faculty and the shortages of clinical sites. In some programs there are also shortages of space in pre-requisite classes resulting from a lack of financial resources and inadequate physical facilities; this creates a bottleneck of students trying to enter nursing programs. This section concentrates on the shortages of faculty and clinical sites, with some recommendations relative to other factors.

A) **SHORTAGES OF FACULTY**

Background

The shortage of nursing faculty at all levels of education is a national problem. It is analogous to the shortages of staff nurses in that it is also the result of a cluster the inter-related factors of demographics, salary and compensation, workload issues, professional status, access to graduate education, and the relationship of teaching to clinical practice and research (Yordy, 2006).

The same demographic factors that produce the overall nursing shortage affect the supply of nursing faculty even more acutely. Because nurses have traditionally practiced for a number of years before returning to graduate school, they begin their academic careers relatively later than in other fields. The average age nationally of nursing faculty was nearly 52 years; doctorally-prepared nurses had an average age of 55 years (Bureau of Health Professions, 2006), and the average age of full professors was nearly 58 years (American Association of Colleges of Nursing [AACN], 2006).

The National League for Nursing (NLN) reports that 75% of the current faculty population is expected to retire by 2019 (NLN, 2005). In Washington, the Nursing Care Quality Assurance Commission's annual report for 2005–2006 noted that 83 full-time faculty are expected to retire by 2010 (NCQAC, 2007). This number represents approximately 25% of full-time LPN and ADN faculty, and 14% of the full-time BSN/master's entry RN faculty. The University of Washington School of Nursing reported in 2005 that approximately 40% of its faculty would reach retirement age by 2010 (Report of the Program Review Committee, 2005). This massive turnover means that not only will there be a huge demand for new teachers, but the mentoring available to younger faculty also will be in serious jeopardy. Can we replace 83 educators, let alone increase numbers, in two years?

The NLN also noted an increase in the percentage of part-time nursing faculty, from 29% to 39%. While flexibility in employment options is desirable, an excessive reliance on part-time faculty increases the burden on full-time faculty for curriculum development, student advising, committee meetings, and other responsibilities inherent in being part of an educational institution.

Approximately one half of the full-time faculty in BSN and above programs are doctorally prepared, and less than 7% of those teaching at the associate degree level are so prepared. This is considerably lower than in other comparable fields (Kaufman, 2007a). This suggests a disparity in the educational resources of the nursing profession compared to similar fields and prompts a concern that the educational preparation of new nurses may not be sufficient to meet the challenges of future healthcare systems.

Effective nursing education leadership is also significantly jeopardized, with approximately 40% of the members of CNEWS (nursing deans and program directors) expected to retire in the next two years. At a time when significant transformations of education and practice are expected and needed, this loss of leadership offers a serious challenge for the orderly process of major systems change.

The minimum qualification for teaching in an RN program is a master's degree in Nursing or a related field; however, many nursing programs in Washington are currently receiving a waiver of this requirement from the NCQAC due to difficulties finding qualified faculty (Ellis,

2007). This is an indicator of the difficulties in recruiting faculty, and perhaps also of the undersupply of master's-prepared nurses interested in teaching. Tenure-track positions in colleges and universities normally require a doctoral degree. Washington State University, for example, currently meets its teaching needs by hiring master's-prepared instructors due to the difficulty in recruiting doctorally-prepared professors.

We do not have data regarding how many master's-prepared nurses would like to teach full or part time but are unable or unwilling to do so because of financial or scheduling constraints, access to local educational programs, concerns about workload, or other factors. There is strong testimony, however, from knowledgeable stakeholders and graduate students themselves suggesting that there are substantial numbers of potential educators, although a significant gap in supply almost certainly remains.

The major barrier to recruiting and retaining qualified faculty into existing programs is the relatively low compensation offered in comparison to the salaries and benefits available to nurses in clinical positions. According to reports from participants in our focus groups as well as data from the NLN survey on faculty compensation, nurses who leave clinical practice to take faculty positions sustain as much as a 30-40% loss in earnings (Kaufman, 2007b). While academic salaries may never be as high as those in clinical practice, the more severe disparities can be reduced with more adequate funding.

All faculty levels are affected, though not in the same ways. Salaries for nursing faculty in community colleges are substantially and consistently lower than even their graduating seniors and lower than salaries at upper-division schools and are impacted by collective bargaining agreements (Ellis, 2007). The present salary gap between educator and clinician salaries is often estimated at between 25–50%. We do not yet know with any certainty how much nursing faculty salaries will need to be raised before faculty positions are competitive with other employment options, such as clinical positions. Salaries at public institutions are limited by the steadily declining state contribution to nursing education. Independent schools, which graduate approximately 40% of the BSN-prepared nurses and a significant portion of nurses with advanced education, face their own limitations and funding constraints.

Pre-licensure nursing programs are expensive to operate because of the required and necessary teaching ratios, as with all clinical practice professions. Funding formulae from state sources do not account for this teaching intensity (Horns & Turner, 2006). Instead, state funding for basic nursing education, as a proportion of costs, has steadily declined over the past 10 years, especially at the state universities (Higher Education Coordinating Board, 2005).

In addition to low salaries, a number of other factors contribute to the shortage of adequately-prepared nursing faculty. In contrast to years past, nurses with graduate degrees now have a multitude of other roles to choose from in addition to teaching and healthcare management, the traditional options for nurses with advanced education.

The relatively low salaries for nursing faculty, especially clinical instructors, are also a reflection of a wider problem in professional education, which is the status of teaching in relation to other academic roles. In the hierarchy of higher education, especially among programs that prepare professional clinicians, research and publication are the most highly rewarded activities. Classroom teaching is sometimes considered less important or less prestigious, and clinical teaching is perceived by some to be at the very bottom of the

hierarchy. Clinical instructors are those who teach students primarily in the clinical setting, at the point of delivery of care, rather than primarily in the classroom. Clinical instructors often receive few of the normal academic rewards such as tenure and participation in school governance, may be part time, and may have variable levels of involvement with the academic institution.

Clinical instructors may have little formal job security or control over their schedules or the sites to which they are assigned. There may be little or no continuity from one year to the next in clinical locations. As a result, there may be little or no ability to prepare, to connect with an agency and staff, or to become familiar with agency policies and patient populations. Such conditions are not merely inconvenient for the instructor but also form a serious barrier to excellence in clinical teaching.

Graduate nursing education has many of the same accessibility issues as entry-level education, (i.e., location, scheduling, affordability, perceived relevance and value). Many potential faculty are place-bound and must pursue geographically accessible educational opportunities. This access might be provided via physical proximity, distance education, or a combination of the two. Many graduate students have full-time jobs where their contributions are vital and are supporting or helping to support families. Affordability and scheduling are often challenges. As with pre-licensure education, our efforts to increase accessibility cannot lead us to compromise standards of education, nor to require that graduate nursing students become “superheroes” in order to do everything (work, school, families). We must find ways to promote efficiency and effectiveness in educational modalities, while also extending sufficient financial and practical support to allow for genuine learning environments.

To attract the best candidates and to ensure job satisfaction and professional advancement for nursing faculty, it is imperative that we provide graduate educational opportunities that are accessible throughout the state. It is important to fund students throughout their academic careers, beyond the master’s degree through nursing PhD and Doctor of Nursing Practice (DNP) programs, and to encourage young professionals to pursue advanced education.

In line with the goals and priorities established in the preceding section, it is vital that the expansion of nursing programs include all levels of education: ADN, BSN, RN-BSN, and graduate education. The following calculations are necessarily approximate and tentative, as specific faculty requirements will vary depending on the details of location, program design, levels of education, and other factors. We have used a rough calculus of 1:10 for faculty: student ratios, based on the requirements for clinical educators (NCQAC regulations specify no more than 10 students per instructor in a clinical setting). Other settings and programs (e.g., classroom, online, and graduate education) can allow more students per instructor. At the same time, faculty are experiencing class sizes of up to 80 students, creating unmanageable workloads. It is vital in these expansion efforts that the quality of educational experiences not be compromised or diluted, and that quality not be maintained only through the recurrent over-extension of faculty and administrative staff.

GOAL:

Assure an adequate supply of qualified, appropriately credentialed, and fairly compensated nurse educators

TARGETS:

- 750 new RN program spaces across the state
- 150 new faculty FTEs statewide, concentrated in geographic areas of greatest need and distributed across programs as they expand, from pre-licensure through graduate level
- An increase in sustainable funding for market competitive faculty salaries

STRATEGIES:

Increase faculty compensation

A stakeholder group should be formed to develop comprehensive policies and strategies related to faculty compensation and workload, and working conditions for part-time and clinical instructors. This workgroup should be composed of nursing faculty, school administrators, nurse clinicians, representatives from relevant state agencies (such the Higher Education Coordinating Board and the State Board of Community and Technical Colleges), collective-bargaining representatives, and other important stakeholders.

This group should:

- Complete an assessment and analysis of total compensation for faculty at all levels of nursing education
- Identify sustainable sources of income to support salary increases, including:
    - State-level funding sources via legislative action, HECB, SBCTC, and "high-demand" sources
    - Federal-level funding sources, including graduate medical education (GME) funding, federal loan support and repayment, and federal funding for targeted areas of high need (e.g., rural access)
- Identify other forms of faculty support such as additional opportunities for research, seed money to develop research proposals, sabbaticals, support staff, and tuition forgiveness for faculty and their dependents (which can help also improve retention of faculty)
- Evaluate the effects of changing from 9-month to 12-month appointments for UW/WSU faculty, with accompanying increases in state funding to support such a change
- Develop a targeted information campaign for key decision-makers, in order to distribute and explain the proposed interventions

Enhance Career Satisfaction for Faculty

A stakeholder group should be formed to study career satisfaction issues at all levels and make recommendations that will enable schools to:

- Develop a work environment that will sustain long-term relationships (e.g., multi-year appointments, opportunities for continued education, engagement in the scholarship of teaching)
- Identify teaching, service and scholarship, clinical practice, and other faculty-specific responsibilities and expectations in each sector of the education system
- Collaborate with regional and national accrediting groups (e.g., Commission on Collegiate Nursing Education; National League for Nursing Accrediting Commission) to develop useful language and expectations
- Develop and distribute a comprehensive assessment and analysis of faculty workload
- Share assessment tools and evaluation formulae across schools
- Identify tasks and responsibilities currently done by nursing faculty that could be done instead by administrative staff
- Develop faculty work expectations that are realistic, manageable, and predictable
- Assess the need for additional faculty and/or administrative staff based on revised workload and expectation estimates
- Identify and share best practices in teaching, fund pilot studies and report outcomes

The resulting recommendations can be adopted and adapted by various types of schools depending on program mission, faculty preferences, and student population. The adoption of these recommendations will allow schools to plan and budget for a faculty and administrative staff that is adequate for student population and composition, as well as promote transparency and consistency in salary, compensation, workload, and promotion decisions.

Expand faculty recruitment efforts

It is vital that we recruit more nurses into teaching roles. Enhanced loan and scholarship packages should be targeted toward educators, including loan forgiveness and payback features for those who enter teaching for specified periods of time. Support for graduate education focused on teaching will benefit both public and private institutions.

Clinical agencies should provide support for staff nurses returning to graduate school, and universities should provide support for graduate students who are interested in teaching through teaching assistantships with tuition waivers.

Improved collaboration between schools and clinical agencies can provide creative employment opportunities, including joint appointments, loaned educators, part-time options, job sharing, and “clinical scholar” programs. Inter-institutional partnerships, such as those proposed by the “fused programs” envisioned by Washington State University and several community colleges, offer another pathway to faculty development. In this model, faculty appointed as teaching assistants or adjunct faculty in the community college program would receive a salary and a tuition waiver while they simultaneously pursue a doctoral degree through WSU.

Earlier in the document, we referenced identifying military nurses and their spouses who may already be faculty or have the education to move into these roles.

Financial support in the form of loans repaid for teaching or service in rural areas has proven successful in the past. This kind of program will need to be combined with other sources of support. Current employers of potential graduate students should be strongly encouraged to provide tuition assistance, scheduling accommodations, and release time, if they do not already do so.

NOTE: The strategies outlined in this section presume and depend on the concurrent implementation of the strategies outlined in the preceding section, under "Expand support for nursing graduate education."

Other strategies

Nurses currently in staff development and similar clinical roles are an often under-utilized resource with the potential to be seen by themselves and others as a crucial link between clinicians, educators, and researchers. While many practice-based educators do already maintain strong links to nursing education and research programs, these connections could be formalized and recognized, and staff development professionals provided with additional support and resources.

Nursing programs should explore the opportunities for non-nursing educators to participate in teaching, not to replace but to supplement the pool of nursing faculty. Basic sciences, social sciences, research methods, philosophy, history of health care, and health policy are examples of topics that might not require a nursing background. The involvement of scholars from other disciplines would not only provide help in times of shortage but also enrich the scholarly community and extend interdisciplinary collegiality.

Nursing programs might also develop more creative roles for experienced registered nurses with baccalaureate degrees to augment the educational efforts of nurse educators with master's and doctoral degrees. Such roles may include: guest lecturer, classroom assistant, skills lab supervisor, tutor, study group leader, mentor for students with special challenges such as limited English proficiency, or coordinator of clinical rotations in various clinical sites. The development of such roles would not only extend the teaching capacity of current programs; they would also help to recruit interested nurses into education roles and give them introductory experiences in the practice of teaching.

Increased sharing of faculty across institutions deserves consideration, particularly in the clinical areas where shortages are most severe, such as obstetrics and psychiatric/ mental health nursing.

Finally, integration of expert educators from non-nursing fields into programs in important. Basic sciences, behavioral sciences, leadership and management, and statistics are examples of academic content which can be taught by faculty from departments other than nursing. Doing so relieves nursing faculty from this work, freeing their time for core nursing education, and exposes students to broader perspectives. Increased team work across disciplines can be modeled at the educational level in this way.

B) **SHORTAGES OF CLINICAL SITES**

Background

The shortage of clinical sites is a result of the simultaneous growth of nursing programs and the shrinkage of inpatient facilities that formed the backbone of traditional clinical education. The shift to shorter stays and outpatient treatment for many procedures and events, especially in areas such as psychiatry/mental health, labor and delivery, and pediatrics, has meant that there are fewer patients in hospitals. Those inpatients are much more acutely ill than previously and may not be suitable for students. Meanwhile, the shift toward home and community settings for treatment, the increasing emphasis on managing chronic conditions, and the renewed interest in prevention efforts mean that clinical education must be redesigned in order to prepare students adequately for their future practice.

There are exciting and innovative approaches being developed in Washington and around the country to address these challenges, including the use of high-fidelity simulation technology, alternative clinical sites, and alternative teaching strategies within clinical sites. A comprehensive and coordinated plan provides the greatest opportunity for achieving our multiple goals of expanding supply, quality, diversity, and access.

Several strategies need to be pursued simultaneously. These include (1) more efficient use of existing resources; (2) more effective use of resources; and (3) expanded use of alternative resources.

Along with these changes, a more collaborative approach to clinical agencies is important. Schools and clinical agencies must work together to find ways to reduce the burden of nursing education on clinical agencies and staff and to incorporate nursing education more fully into the daily practice of the profession. As was noted in the previous section on the faculty shortage, the teaching of students, like the conduct of research and the pursuit of excellence and safety, must come to be seen not as something extra added to the tasks of certain individuals or programs, but as intrinsic to the practice of the profession and therefore a shared, collective responsibility.

GOALS:

- An adequate supply of opportunities for students to acquire and practice clinical skills, and to participate in encounters with actual patients, families, and communities
- The efficient, appropriate, and respectful use of those resources
- Closer partnership between schools and clinical and community agencies, in order to prepare students for professional practice

TARGETS:

- Regional coordination of clinical sites and student placement in all areas of the state
- Identification of expanded list of potential clinical locations and partners in each area
- Regional coordination of simulation labs and resources in all areas of the state

STRATEGIES:

More efficient use of existing resources

- Regional coordination of sites and spaces through consortia of schools and agencies

Working together over the past 10-plus years, a voluntary regional coordinating group in the south Puget Sound area has established an effective, reliable system for the allocation of clinical sites and times. Among other outcomes, this project has resulted in an increase in available student spaces of approximately 25% through increased efficiency and planning. Other states' experience is similar. Similar regional coordinating bodies are in various stages of development in the northern and eastern parts of Washington, with funding from the State Board for Community and Technical Colleges. One of the lessons learned from the south Puget Sound group has been the necessity of having a paid staff person to provide administrative support for this coordination work.

In addition to the voluntary coordination of student clinical schedules, such regional coordinating groups can establish standardized "passport" systems for mandatory student documentation (immunizations, Health Insurance Portability and Accountability Act [HIPAA] training, etc.), and standardized contracts between schools and agencies. These can significantly reduce the amount of duplicative work on the part of students, instructors, and agency staff.

More effective use of learning sites

- Regional coordinating groups to evaluate best use of identified learning sites

Another strategy is to evaluate and negotiate regional resources in relation to the most appropriate use for educational purposes. What are appropriate settings for each level of students to learn what concepts and skills? While traditional approaches to clinical education have several clear advantages and are familiar to instructors and agency staff, they may not be the only way or the best way to use those resources, especially in times of acute shortage. CNEWS and clinical agency leaders are poised to complete this work, using the current "Articulation" plan for all levels of nursing students.

- Evaluation of the goals and methods of clinical education

An even higher level of intervention involves a re-thinking of the clinical component of nursing education: its purposes, techniques, and relationship to the classroom, learning laboratory, and other venues for learning. This dialogue is essential, given the likely continued shortage of clinical sites, the changing nature of healthcare, and the resulting challenges to traditional clinical education models. It is essential that we evaluate the outcomes of clinical experiences and determine the appropriate number of required hours for each specialty. As noted previously, the number of clinical hours required in each specialty area can vary widely across schools (NCQAC, 2007). It is not just the number of hours spent in clinical sites that needs re-evaluating, but also the structure and locations of those experiences and their relationship to classroom and laboratory experiences.

- Improving collaboration between schools and clinical practice agencies

Open and continuing dialogue should be a feature of the relationships between schools and clinical agencies, at all levels of the organizations – deans and nurse executives, as well as instructors and staff. Some schools and agencies already have such dialogues established; others do not.

Schools and agencies should work together to find ways to reduce the burden on the staff of student presence in clinical agencies. One important early step is to recognize that students are not "nurse-extenders" but actually consume staff time, even with a faculty presence; staffing patterns should be adjusted accordingly.

On the state and federal level, resources should be directed toward agencies that support clinical nursing education, as occurs now for agencies that support physician training and receive funding for graduate medical education (Thies & Harper, 2004).

Expanded use of alternatives

Many schools have already begun to explore and develop the use of alternative types of sites, such as outpatient clinics, community agencies, long-term care, daycare, schools, etc., and to connect those with identified skills, knowledge, and competencies. This requires creativity, persistence, and cooperation from community agencies and locations. It is important to integrate the "soft footprint" (i.e., lower burden on agency and staff) approaches described above, as alternative sites may be less accustomed to students than hospitals have become. Having many students in multiple sites simultaneously creates new challenges for educators who are responsible for seeing that the learning experiences are salient and safe.

The use of high fidelity simulation is a fast-growing and exciting part of current nursing education that has the potential to raise the level of skills training and reduce the burden on clinical agencies. Several points are important to keep in mind in connection with simulation labs. Laboratory simulation is a complement to, not a replacement for, interactions with actual clients. Purchasing the technology is only the first step in the development of an effective simulation lab. Writing appropriate scenarios, developing faculty expertise in using the tools and integrating them with classroom and clinical projects, redesigning curricula, and teaching students how to take the best advantage of these resources are crucial as well.

It is vital that we continue to develop tools for the coordination and sharing of resources in simulation, just as we are doing in clinical education and placement. Simulation technology and equipment are expensive and should be used at optimal levels. Schools, agencies, and a variety of organizations can collaborate to purchase and utilize this equipment. A task force in this area has already been established through CNEWS, and it has produced a discounted purchasing plan from vendors. This group is developing a network of resources for increasing faculty expertise for implementation, tools for evaluation, and standards of excellence. The education of the faculty to provide effective simulation experiences is vital. This education must be funded, and time must be provided for faculty to participate in this new work. While very little research has been completed to date on the impact and effectiveness of simulation, it appears to be viable as an adjunct to teaching and learning.

C) **OTHER LIMITING FACTORS**

While the shortages of faculty and clinical sites have been identified as the major barriers to nursing program expansion, there are other sources of constraint. Several that deserve special mention are:

- Shortages of classrooms, lab space, and faculty for classes

Students often encounter a “bottleneck” in programs at the level of the basic prerequisite courses. The shortage of space in these classrooms is due to high demand and inadequate supply, compounded in some cases by students who take the courses repeatedly in order to achieve the highest possible grade (thereby improving their chances of being admitted to a highly-competitive nursing program). These prerequisite classes are not usually part of the nursing program but are taught through other departments. Expanding the capacity of nursing programs therefore relies on coordination of resources with other parts of the education system.

- Availability of technology for distance learning and high-fidelity simulation
- Experience and expertise with the new technology for distance learning and simulation

Up-to-date technology is necessary but not sufficient for excellence and innovation in education. The availability of such technology varies across institutions, as does the financial support for developing expertise. As noted in the previous section, funding structures must support the sustainable use of the technology, and not merely its initial purchase. What schools need in this area is both adequate funding (e.g., for technology and salaries) and resources to develop faculty expertise in implementing such programs. We also need more rigorous evaluation programs to determine the efficacy and utility of these innovations.

NOTE: The challenge of providing access to comprehensive nursing education in rural and remote areas is discussed in a separate section later in this report. Administrative infrastructure and support staff, especially in community colleges

Programs that are dependent on faculty who are stretched too thin are not sustainable. Adequate funding formulae must take into account the myriad roles and tasks beyond classroom and clinical teaching. A realistic assessment of dean, director, and faculty workload (as proposed earlier) can provide the basis for allocating additional administrative resources, especially in two directions: staff support for non-teaching functions, and support for leadership development in community-college program directors. The coming decade will be a crucial time of transformation for the nursing education system, and leaders at every level must be nurtured and supported. In some cases, there may be opportunities for greater efficiencies in administration and leadership through the consolidation and coordination of adjacent programs.

ASSURING AN ADEQUATE SUPPLY OF NURSES:

RECOMMENDATIONS

A) Increasing the supply of nursing faculty

1) Increase faculty compensation

(a) Manage the stakeholder workgroup to evaluate the total compensation for nursing faculty and make recommendations regarding changes in faculty salaries
(b) Identify sustainable sources of funding (state, federal) to support appropriate salary increases

2) Enhance career satisfaction for faculty

(a) Manage the stakeholder group to analyze workload and career satisfaction issues in all types of programs and make appropriate recommendations
(b) Identify elements that improve faculty retention
(c) Identify faculty responsibilities and expectations in each sector of the education system
(d) Share assessment tools and evaluation formulae across schools
(e) Identify and share best practices in teaching
(f) Include evaluation and recommendations for improving working conditions and career satisfaction for part-time and clinical instructors
(g) Identify funding for faculty development (e.g., professional meetings and conferences)

3) Expand faculty recruitment efforts

(a) Expand graduate nursing programs that include educator and faculty-role preparation
(b) Support enhanced loan/scholarship packages to promote teaching, especially in underserved areas
(c) Encourage support from universities for graduate students interested in teaching through teaching assistantships and tuition waivers
(d) Encourage support from clinical agencies for staff nurses returning to graduate school
(e) Promote improved collaboration between schools and clinical agencies to provide creative employment opportunities for clinical faculty (e.g., joint appointments, job sharing)
(f) Foster partnerships between universities and community colleges to promote faculty development
(g) Promote outreach to and involvement with nurses in staff development and other clinical-practice educator roles
(h) Identify appropriate opportunities for non-nursing educators to participate in teaching

B) Enhancing the capacity for clinical education

1) Facilitate more efficient use of existing clinical-site resources

   (a) Formalize regional coordination of sites and spaces through consortia of schools and agencies
   (b) Identify crucial clinical skills and coordinate best use of simulation labs and clinical sites
   (c) Create cross-program dialogue about optimal length of clinical rotations at each level of education

2) Promote more effective use of clinical-site resources

   (a) Support regional coordinating groups to evaluate best use of identified clinical education sites
   (b) Evaluate the goals and methods of clinical education
   (c) Foster improved collaboration between schools and clinical practice agencies

3) Expand the creative use of appropriate alternatives for clinical education

   (a) Create statewide coordination of high-fidelity simulation capabilities
   (b) Ensure that every nursing program has access to high-fidelity simulation for teaching
   (c) Ensure that nursing faculty gain expertise in the implementation of simulation technology
   (d) Support continued expansion of non-traditional clinical sites (e.g., community clinics, long-term care, public health, schools)
   (e) Foster coordinated development and sharing of simulation-related curricula, scenarios, and teaching strategies
   (f) Support evaluation of technological tools, teaching methods, and student outcomes
   (g) Utilize the experienced workforce in new and creative ways as a mechanism for knowledge transfer

C) Removing other obstacles

1) Provide adequate funding for faculty salaries, classrooms, and lab space for pre-requisite courses
2) Ensure access to new learning technologies and expertise in their best uses
3) Increase funding for administrative support staff and program-director leadership capacity
4) Reduce attrition at the ADN level by 50% (~200 nurses/year)

III) PROMOTING A MORE DIVERSE PROFESSION

Background

We have compelling evidence that a healthcare workforce that reflects the diversity of the population is able to provide better quality health care than one that does not (Institute of Medicine, 2003; Missing Persons, 2004). For this reason, the Institute of Medicine has recommended that the proportion of underrepresented U.S. racial and ethnic minorities among health professionals be substantially increased.

The following table summarizes recent national data:

	RN US population	**LPN US population**	**Overall US population**	**WA State population**
African American	4.2%	26%	12.2%	3.4%
Asian, Native Hawaiian, or other Pacific Islander	3.1%	3%	4.1%	6.8%
Hispanic or Latino	1.7%	3%	13.7%	8.9%
American Indian or Alaska Native (non-Hispanic)	0.3%	(unknown)	0.7%	1.4%
2 or more races, non-Hispanic	1.4%	(unknown)	1.3%	
Total minority population	11%	32%	32%	20.5%

Sources: Access Washington, 2001; Bureau of Health Professions, 2006, pp 26-27; Seago et al., 2004.

We have less information than we need on the diversity of the nursing workforce in Washington as such information is not routinely collected with other licensing information. There is little reason to suspect that the nurse population in Washington is significantly more representative of the state population than is the case on a national level.

The effort to develop a more diverse nursing workforce needs to focus not just on *recruitment* of students but also on *retention* of students, faculty, and practicing nurses. Minority and underrepresented students historically have had higher rates of attrition at all points in the education system and in the transition to practice. The reasons for this are a combination of economic, educational, and socio-cultural factors. Minority students are in general more likely to come from lower socio-economic strata and from schools that did not adequately prepare them for higher education. They are also likely to have more concurrent challenges to their time and attention. The paucity of teachers, role models, peers, and mentors from similar backgrounds exacerbates the social marginalization and educational difficulties minority students' experience. The fragility of economic arrangements may lead to more frequent interruptions of academic progress, and aggravate feelings of futility and despair (Amaro, Abriam-Yago, & Yoder, 2006; Andrews, 2003; Buchbinder, 2007; Evans, 2007; Katz, 2007; Noone, Carmichael, Carmichael, & Chiba, 2007).

Studies have shown that some interventions are significantly more effective than others in increasing the diversity of students and nurses. As may be expected from the preceding

description of the challenges faced by some minority students, effective recruitment and retention programs provide a comprehensive set of support services, including economic, academic, and social support. Such programs are resource-intensive in the short term, but over the long term are worthwhile social investments (Jimenez-Cook & Kleiner, 2005).

The role of minority faculty at all levels is critical. As role models and mentors for minority students, as teachers for minority and majority students, as participants in the process of creating an inclusive, culturally-aware curricula and admission criteria, and as researchers advancing the science of nursing, minority faculty are pivotal to the progress of this initiative. Interestingly, the 2004 National Sample survey reported that "Black or African American, non-Hispanic and White, non-Hispanic nurses were the racial/ethnic groups with the highest percentage of master's and doctoral degrees." (Bureau of Health Professions. 2006. The registered nurse population: Findings.) Progress is being made but we have opportunity to increase the numbers achieving these levels of education.

Recently the American Association of Colleges of Nursing, in conjunction with the Johnson & Johnson Campaign for Nursing's Future, announced the establishment of a Minority Nurse Faculty Scholars Program (AACN, 2007). This is a scholarship program for under-represented minority nursing students who plan to work as nursing faculty upon graduation. Scholarship programs such as this are essential, and graduate nursing programs in Washington State must be ready to recruit and support the scholars in such programs.

As is true in many sections in this report, there are significant overlaps in the strategies proposed here. The focus of this section is on increasing the racial and ethnic diversity of students and faculty in nursing programs; elsewhere, we have articulated the goal of increasing the accessibility of nursing programs to all potential students in Washington. We are committed to increasing the accessibility of nursing education for many groups, including first-generation college students, incumbent and displaced workers, and others for whom a nursing career might be a challenging path. The commitment to racial and ethnic diversity should be pursued as an important part of a wider commitment to increasing accessibility. It is vital that the goal of increasing diversity remain clearly articulated and prominent.

As noted by the authors of the Sullivan Report:

> Today's physicians, nurses, and dentists have too little resemblance to the diverse populations they serve, leaving many Americans feeling excluded by a system that seems distant and uncaring. In future years, our health professionals will have even less resemblance to the general population if minority enrollments in schools of medicine, dentistry, and nursing continue to decline and if health professions education remains mired in the past and—despite some improvements—inherently unequal and increasingly isolated from the demographic realities of mainstream America. Failure to reverse these trends could place the health of at least one-third of the nation's citizens at risk (*Missing Persons*, 2004, p1).

Nursing should lead the way toward a more representative professional community.

GOALS:

- A nursing professional community that more closely reflects the diversity of the population of Washington State
- A nursing professional community that is competent in working within multicultural communities

TARGETS:

- Identify strategies to ensure that the nursing population mirrors the state population in diversity
- Establish comprehensive recruitment and retention programs for students of color within all nursing schools
- Increase rates of graduation by nursing students of color at all levels of nursing education
- Increase in faculty of color in tenure track positions across all types of programs

STRATEGIES:

There have been a large number of programs in the Pacific Northwest and around the country, in nursing and in other college fields, designed to increase the number of students of color and under-represented populations (Sutherland, Hamilton, & Goodman, 2007). Many of those were established as pilot programs with temporary funding. The most successful elements should be identified, packaged, and disseminated as a statewide model, with adaptations to various types of programs and locations but a broad common core. This model or a robust alternative should be adopted by all Washington State nursing programs.

A preliminary review of the common elements of success suggests the following:

- Identification of high-potential individuals who are also at high risk for not completing their nursing program
- Provision of "wrap-around" services:
    - Financial aid: grants, scholarships, work-study, and "pay-back" loans
    - Assistance with the application process including assistance with application completion, scholarships for application fees, and navigator services to assist applicants through the application/admission process.
    - Mentoring, role models, social support, childcare, etc.
    - Academic support, tutoring, pre-matriculation enrichment programs, and peer study sessions
- Dedicated staff person for outreach and recruitment, service coordination
- Improved recruitment and retention of minority nursing faculty

A National Leadership Symposium on Increasing Diversity in the Health Professions was convened in 2007 by the Sullivan Alliance, an organization which grew out of the Sullivan Commission on Diversity in the Healthcare Workforce, originally sponsored by the WW Kellogg Foundation. The participants in this summit described the following elements as characterizing successful diversity programs (Summary Proceedings, 2007, pp 7-8):

- Student-focused pipeline activities
    - e.g., “Taking a holistic view of students’ needs and designing programs to meet those needs”
- Community-Campus bridging activities
    - e.g., “Developing programs that expose those in leadership positions to diversity issues and train upcoming leaders”
- Community-focused activities
    - e.g., “Advocating collectively for diversity at the state and national level”

The Sullivan Alliance also identified leadership and accountability as significant elements of successful efforts to increase diversity, consistent with one of our Core Themes across topic areas.

Finally, the Sullivan Alliance underscored the importance of framing diversity as a standard of excellence in professional preparation. Especially in the current climate of nursing shortages and crisis, it is tempting to focus exclusively on narrow and simplistic qualifying standards, such as grade point average or standardized-test scores, in the recruitment of students. An unintended consequence of such policies is to reduce even further the numbers of minority students. Similarly, some approaches to reducing attrition include rewarding programs that have low attrition and penalizing those with higher dropout rates or longer times for program completion. These policies may have the unintended effect of discouraging the recruitment of minority students.

It is especially vital that baccalaureate programs develop effective outreach programs and enhance their accessibility to minority students, as described earlier in the section on assuring continued competency. Increasing the pool of minority nurses with graduate-level preparation requires increasing the numbers of minority nurses with BSNs. Insofar as community college programs have traditionally been seen as more accessible to minority students, low-income and working adults, the challenge for nursing education is to build more bridges between community college programs and upper-division schools.

A crucial step in the development of an effective statewide plan to increase nursing diversity will be the formation of meaningful partnerships with minority nursing organizations such as the following national organizations and their local affiliates:

- Asian American/Pacific Islander Nurses Association
- National Alaska Native American Indian Nurses Association
- National Association of Hispanic Nurses
- National Black Nurses Association
- Philippine Nurses Association of America
- Mary Mahoney Professional Nurses Association
- National Coalition of Ethnic Minority Nurse Associations
- Ebony Nurses Association

Alliances with campus minority groups have been proposed as another opportunity to reach out to potential nursing students, and to learn from the communication methodologies that have been successful for these groups.

Financial support for students and for programs

As described above, a comprehensive package of support services is crucial to achieve increased diversity in educational programs, and it is crucial that these diversity initiatives be provided with adequate and sustainable funding. It is often possible to obtain grant funding for short-term support, but what these initiatives most often lack is continuing operational funding. Support of this kind would most appropriately come from state and federal governments.

Support for students should come in the form of scholarships, work study stipends, and loans with pay-back features. Students may benefit from counseling and assistance in searching for obtaining financial aid. Financial aid must be sufficient to reduce to manageable numbers the hours of work outside of school that students feel is necessary; excessive outside work while in school sets up students for failure, exhaustion, reduced learning, or all of the above.

Public-private partnerships need further exploration as potential avenues for the funding of nursing education for diverse and under-represented populations.

Leadership development for minority nursing faculty

The leadership roles of minority nursing faculty have already been identified as crucial to this effort, but minority faculty members cannot be expected to perform these additional tasks, in addition to what all faculty are expected to do, without additional support. This support includes financial aid for graduate school, research, and professional development; mentoring, coaching, and career advice from more senior faculty; and the development of networks that reach across departments and institutions. As individual institutions may not have a large enough number of minority faculty, schools must collaborate to develop and sustain minority faculty who otherwise may be too isolated and overburdened. Counseling, advising, and mentoring of minority students, if a significant part of their time and effort, should be included in evaluations and promotion decisions. However, it should not be assumed that responsibility for all minority students in a program rests solely with minority faculty. All nursing faculty must be vested in the creation of a diverse and inclusive nursing community.

Long-term strategies: Alliances with K-12 educators, counselors, and parents

Long-term strategies to promote increased diversity in nursing include working with other partners across the state to enhance the academic quality of K–12 schools, especially those serving minority populations. Nurse educators should work with middle and high school students and their parents to explore and prepare students for a broad range of health, science, and professional careers.

Some minority students do not take college-preparatory courses (especially in math and sciences) in high school, perhaps believing that a professional or science career is not very likely. Exposure to minority role models from nursing and other health sciences may help to change this impression and provide bridging experiences for these students and their families. Schools should work with minority professional groups to develop contacts in the community and to develop mentoring and peer-support resources. Developing relationships

between minority student groups and nursing programs offers an additional avenue for students and faculty to create relationships and find communities of support.

PROMOTING A MORE DIVERSE PROFESSION:

RECOMMENDATIONS

A) Affirm the state-wide commitment to increasing diversity within the nursing student population as a priority of nursing education

1) Ensure the regular collection, analysis, and distribution of data on minority nurses in clinical practice, administration, education, and research
2) Promote statewide and regional coordination of resources, programmatic strategies, and contacts to promote recruitment and retention of minority nurses and nursing students
3) Identify and support diverse, non-nursing incumbent healthcare workers who may be interested in moving into professional nursing roles
4) Create minority nursing networks for peer support, education, and needs assessment
5) Coordinate with existing state organizations involved in this work

B) Identify and promote evidence-based best practices in recruitment and retention initiatives for minority students

1) Identify successful elements of local and national models of minority recruitment and retention initiatives
2) Combine into statewide model program, including
   (a) Strategies to identify high-potential/high-risk individuals
   (b) Provision of "wrap-around" services, including
      (i) Financial aid: grants, scholarships, and "pay-back" loans
      (ii) Mentoring, role models, social support, childcare, etc.
      (iii) Academic support, tutoring, peer study sessions
   (c) Dedicated staff person for outreach and recruitment, service coordination
   (d) Improved recruitment and retention of minority nursing faculty

C) Increase financial support for students and for diversity programs

1) Identify strategies for leveraging sustainable funding for continuing operations
2) Combine and expand programs offering grants, work study stipends, paid internships, and loan payback to students
3) Identify and enlist long-term funding sources for recruitment and retention programs including public-private partnerships

D) Promote leadership development for minority nursing faculty

1) Develop mentoring programs at each school and create state-wide networks
2) Develop strategic alliances with minority nursing organizations
3) Identify sources for financial support of minority faculty research, professional development, travel, and networking

E) Create alliances with K–12 educators, counselors, and parents

1) Develop mentoring programs for minority youth at middle and high schools
2) Form strategic partnerships with organizations supporting awareness of health, math, and science careers targeted toward minority youth
3) Support education reform to strengthen math and science curriculum in public K–12 systems

IV) ENHANCING EDUCATIONAL ACCESS THROUGHOUT WASHINGTON STATE

Background

The nursing education system, like many other parts of the education system in Washington State, is concentrated in the western part of the state near Puget Sound, and especially along the I-5 corridor. Access to nursing education is more challenging in other parts of the state. In the focus groups conducted by the Washington Center for Nursing in the spring of 2007, a consistent theme across the state was the desire for nursing education that is more geographically accessible, especially for baccalaureate and graduate programs. Participants in the Invitational Nursing Summit in May 2007 likewise identified rural education and access in underserved areas as major issues needing to be addressed within the Master Plan. Even in parts of western Washington, transportation patterns in relation to the locations of schools may make educational opportunities less available. Prolonged commuting times for working adults can be a significant challenge to obtaining continuing education and career advancement.

Skillman, Palazzo, Keepnews, and Hart (2006) found that, compared to urban nurses, rural nurses are more likely to be employed in public/community health, long-term care, and ambulatory care, all of which typically pay lower salaries than hospitals. Skillman et al. (2006) also report that rural nurses are less likely than urban nurses to pursue a baccalaureate or higher degree and were rewarded less than their urban counter parts if they did so.

Potential nurses seeking entry into the profession, and current nurses seeking additional education, deserve the opportunity to pursue this education without undue burdens such as long travel times and distant facilities. Rural and underserved areas also face significant shortages of nurses at every level – staff nurses, educators and managers, and doctorally-prepared researchers and leaders. Recruitment and retention efforts for rural areas are most likely to succeed when they are targeted toward people already in those areas, and provide opportunities for urban nurses to experience the challenges and rewards of rural nursing practice.

In addition, “access and distribution” refer to access into the educational system, regardless of where one lives. A number of recommendations were made in the “Supply” area of this report. Understanding the pathways into and within nursing education, ensuring a seamless system free of barriers to articulation, and having support systems to increase completion rates are all key components of “access” for every potential nurse.

One aspect of the access and distribution discussion has been the tension between creating more nursing education programs versus expanding existing programs. We recommend expansion of existing programs first, even if that might mean creation of additional branches of a program. Distance technologies facilitate this approach. Every time that a new state-funded program is initiated, it absorbs significant funding for administrative overhead. That expense is decreased when an existing program expands, and funds can be directed into the delivery of nursing education. We believe that this approach capitalizes on successful nursing education programs and utilizes tax dollars more effectively.

The Higher Education Coordinating Board's 2004 Strategic Master Plan for Higher Education called for "the development of a resource allocation framework to respond to local, regional, and state needs with clearly stated priorities" (HECB, 2005, p17). Strategies to alleviate the disparities in access to education will require creative innovations in delivery systems, program design, resource utilization, and community partnerships.

The Washington Center for Nursing, in partnership with the Council on Nursing Education in Washington State (CNEWS) and existing nursing organizations, should collaborate with existing rural nursing organizations, rural health and health care organizations, and other groups to facilitate the implementation of these recommendations.

GOALS

- Make the pathways to and within nursing explicit, seamless, and supported
- Increase the number of nurses at all levels based in rural and underserved areas
- Enhance educational opportunities in rural and underserved areas
- Optimize Washington State tax dollars invested in nursing education

TARGETS

- Increase educational access for incumbent healthcare workers in rural areas
- Reduce migration of rural nurses seeking employment in urban settings
- Increase the percentage of nursing educators based in rural and underserved areas who are prepared at the master's and doctoral level
- Increase the number of students participating in new-graduate residencies targeted toward rural practice

STRATEGIES:

Analysis of educational access points in rural and underserved areas

The focus groups, Invitational Summit, and multiple stakeholder conversations have provided sizable testimony about disparities in access to education in rural areas and a desire for additional opportunities. A significant next step is to complete an analysis of regional access points, including types of programs and number of students, an identification of geographic areas where needs are not being adequately met, and an exploration of the feasibility of creating new access points in those communities.

Existing organizations and networks of knowledgeable individuals should be brought together to pool knowledge and resources, e.g. rural healthcare associations, CNEWS, Workforce Development Councils, Area Health Education Centers, and other key stakeholders.

Support strategies that increase access to evidence-based innovative nursing education programs

Innovative nursing programs are those which:

- Integrate distance and face-to-face educational approaches
- Create an intellectual environment for learning (e.g., library access, academic support services)
- Reduce isolated learning and support student-student camaraderie

Innovative pedagogical approaches are those that capitalize on local nursing expertise through clinical experiences and mentorship opportunities, and incorporate an understanding of salient local issues (e.g., rural demographic trends) into nursing curricula.

Distance-learning components of nursing educational programs must be re-designed with the technology and format in mind, and not consist simply of traditional class handouts posted on the Web. The expertise that has been developed among some educators should be shared with others who are initiating or expanding programs, for maximal effectiveness in learning.

Technology that aids in high-quality, long-distance communication and reduces professional isolation should be supported and expanded through collaborative partnerships. Such technologies can be invaluable when used wisely to supplement, but not replace, face-to-face encounters and local expertise.

Increase the number of nursing educators based in rural communities

As with underserved communities, effective recruitment and retention strategies should be developed that target entry-level and graduate students who are located now in rural areas, or who are more likely to relocate and remain in rural areas. Financial aid options should include expanded loan payback options linked with rural service opportunities (via federal and state programs). Master's and doctoral-level educational opportunities that already exist across Washington State should be made more visible.

Many of the strategies identified in the "faculty shortage" section are also relevant here. A particular need for rural educators is for funding to attend conferences and continuing educational opportunities, network with colleagues, and conduct research in remote locations.

Increase awareness of the rewards of rural nursing practice through the creation of a rural residency program

Rural nursing residency programs for new nursing graduates provide an opportunity to build partnerships and establish dialogue among rural and underserved area nursing leaders and educators. Partnerships could also be established with urban educators and employers, perhaps to form "sister cities" or formal links between urban schools and rural agencies. A rural new-graduate residency could also include experience in several care settings such as hospitals, long-term care, and home care, as is being done in Vermont (Boyer, 2002). Additional key steps toward establishing a rural residency network would include:

- Cataloging rural and underserved areas to identify potential residency sites
- Assessing interest and resources among potential partners and specific focal areas (e.g., tribal nations, rural hospitals, etc.)

ENHANCING EDUCATIONAL ACCESS THROUGHOUT WASHINGTON STATE:

RECOMMENDATIONS

A) Analyze educational access points across Washington State, with specific attention to rural and underserved areas
   1) Conduct a formal analysis of regional access resources and deficits
   2) Create new access points and networks in areas with identified deficits

B) Increase the number of nursing educators based in rural and underserved communities
   1) Increase financial aid to graduate students from rural and underserved areas
   2) Expand outreach programs for graduate students from and in rural and underserved areas
   3) Secure support from clinical agencies for staff nurses returning to graduate school
   4) Facilitate effective partnerships between graduate educators and clinical practice sites
   5) Provide adequate resources for innovative and alternative education systems combining distance learning and classroom experiences

C) Support strategies that increase access to accredited nursing programs
   1) Integrate distance-learning and face-to-face educational approaches
   2) Support resources for adequate educational environments in non-traditional settings
   3) Reduce isolation and support the creation of student communities

D) Establish rural residency programs for new graduates
   1) Inventory rural and underserved areas to identify potential and existing residency sites and partners
   2) Assess interest and resources among potential partners and specific focal areas

Conclusion and Next Steps

The various stakeholders participating in this work share common goals: that we have an adequate nursing workforce so that Washington State can continue on its course to become the healthiest state in the nation; that those wishing to become nurses find a seamless, understandable, innovative, affordable education system that equips them with the tools to think and manage the complexities of healthcare today and in the future; that those already in nursing to find an equally seamless and affordable articulation from one level of nursing to

another; that we become an even more attractive state in which to practice and teach nursing; that we use our resources wisely for planned, evidence-based sustainable change; and that we collaborate to produce the transformations needed.

The recommendations in this document will be presented to the NCQAC of the Department of Health (DOH) by March 31, 2008. Subsequent to that date, a meeting of key stakeholders in the DOH with representatives from the WCN Board will occur. By June 30, 2008, a Tentative Implementation Plan and identification of resources needed will be developed and submitted to NCQAC.

Meetings with key stakeholders will continue while we await direction from the DOH. While changes in the recommendations may result from the DOH review, many activities already underway will continue while others will begin.

The WCN Board is committed to leading this important work, and looks forward to continuing its collaboration with colleagues and organizations across Washington State to make the Master Plan a reality.

APPENDICES

Appendix 1

Production of New RN Graduates in Washington State as per CHWS Model: Annual Increase of 400 Graduates, 2010 – 2025

Year	Base (current)	Increase	**Total new grads**	Cumulative
2010	2100	400	**2500**	
2011	2100	800	**2900**	5400
2012	2100	1200	**3300**	8700
2103	2100	1600	**3700**	12400
2014	2100	2000	**4100**	16500
2015	2100	2400	**4500**	21000
2016	2100	2800	**4900**	25900
2017	2100	3200	**5300**	31200
2018	2100	3600	**5700**	36900
2019	2100	4000	**6100**	43000
2020	2100	4400	**6500**	49500
2021	2100	4800	**6900**	56400
2022	2100	5200	**7300**	63700
2023	2100	5600	**7700**	71400
2024	2100	6000	**8100**	79500
2025	2100	6400	**8500**	88000
Cumulative	**33,600**	**54,400**	**88,000**	

See also: Skillman SM, Andrilla CHA, & Hart LG. (2007), *Washington State registered nurse supply and demand projections: 2006-2025*. Final Report #112. Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington.

Appendix 2

From the Carnegie Foundation's study of "Preparation for the Professions"

CHARACTERISTICS OF EXCELLENT TEACHERS AND SIGNATURE PEDAGOGIES

- ***Excellent teachers***:
  - have a clear vision of what kind of nurse they would like to graduate
  - place their students in a collaborative nursing role
  - ask students to answer questions about what is at stake for the patient, what the patient is experiencing, and what the next step is for the patient
  - highlight what is salient about a case or a situation and what is an appropriate response
  - seamlessly integrate the three apprenticeships (i.e., intellectual training; skills of practice and clinical judgment; and ethical practice) to teach how to be a nurse in terms of ethical comportment, knowledge of the humanities, sciences, and social sciences, and practice skills
  - engage in dialogue with students to explore the student's thinking

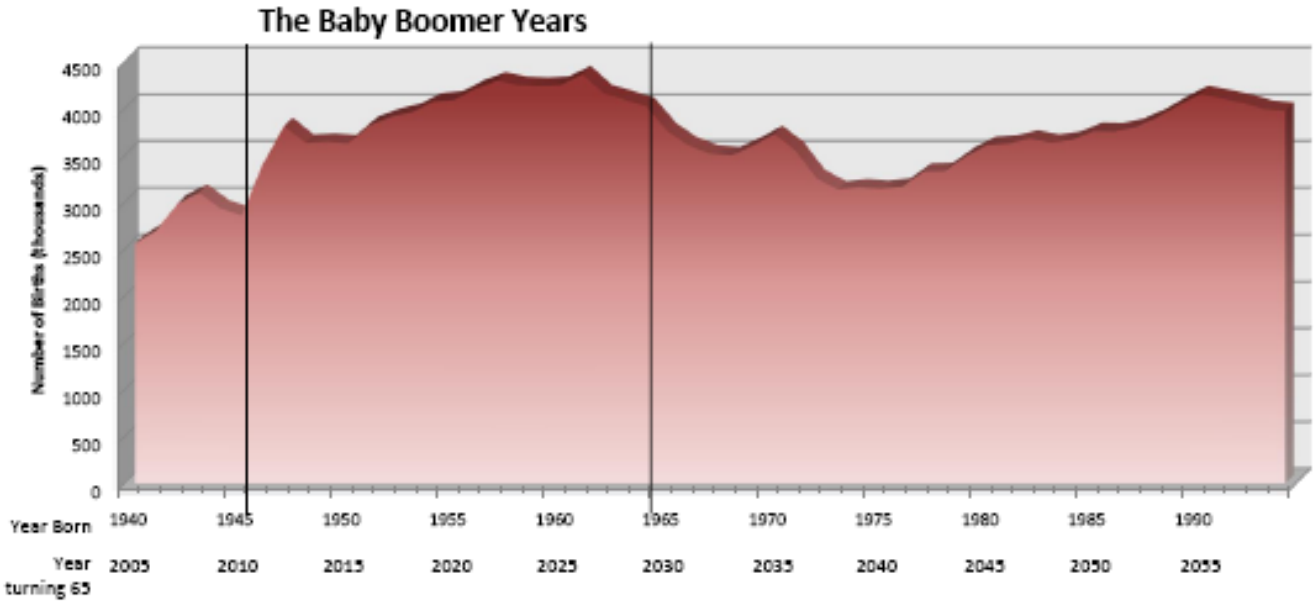
Signature Pedagogies

- *Coaching*, where instructors draw out what the student knows in a bounded clinical situation
- *Simulation*, where students use cases, dummies to represent patients, or equipment common to particular clinical situation that allows them to practice certain skills over and over
- Role-modeling
- Post-conferences
- Pre-clinical preparation
- Post-clinical conferences
- Articulating experiential learning

Source: Carnegie Foundation for the Advancement of Teaching; Preparation for the Professions Program: Study of Nursing Education. Available at: http://www.carnegiefoundation.org/programs/index.asp?key=1829

Appendix 3

U.S. Births: 1940 - 1994

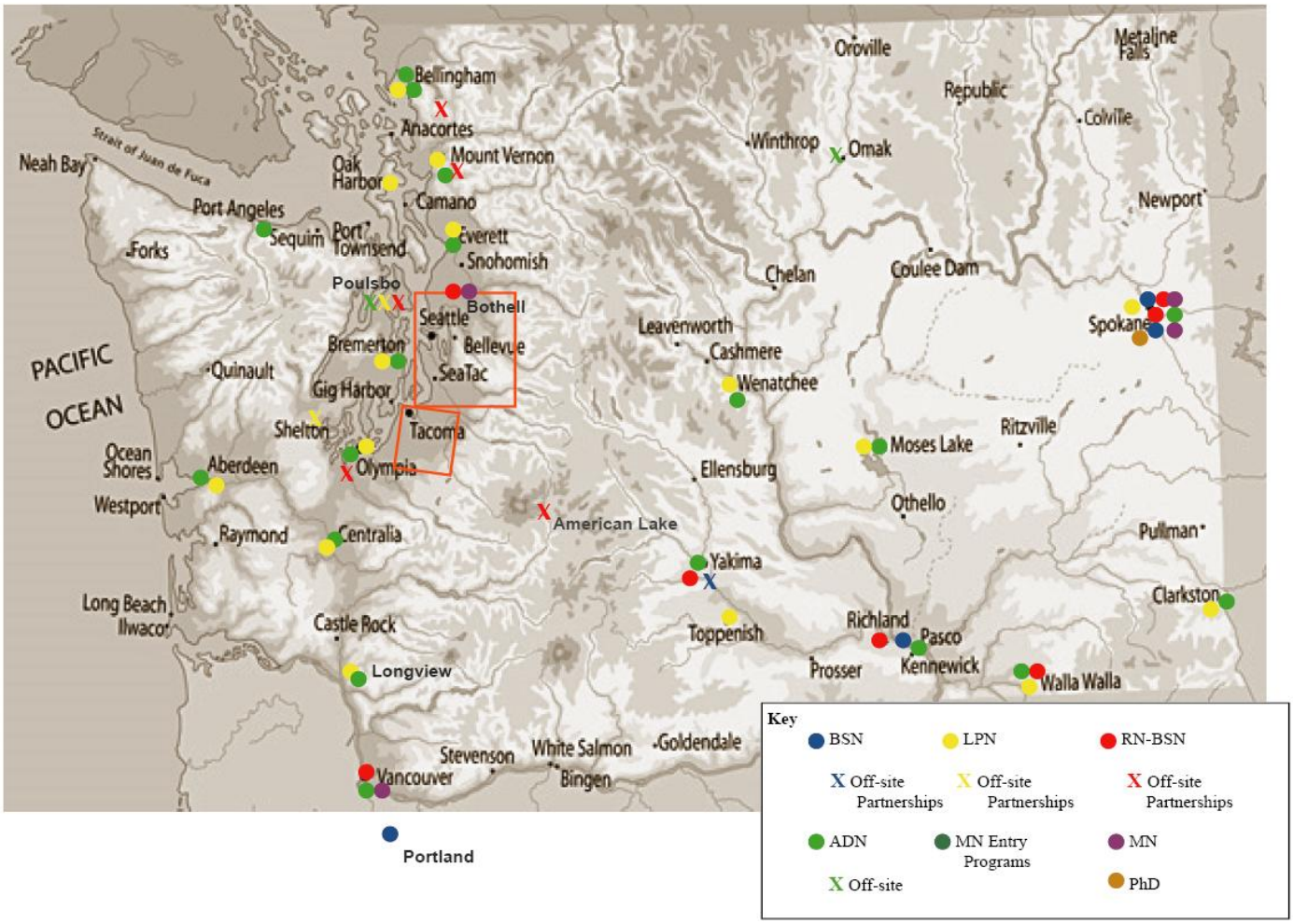


U.S. Department of Commerce, Bureau of the Census.

11.09.07

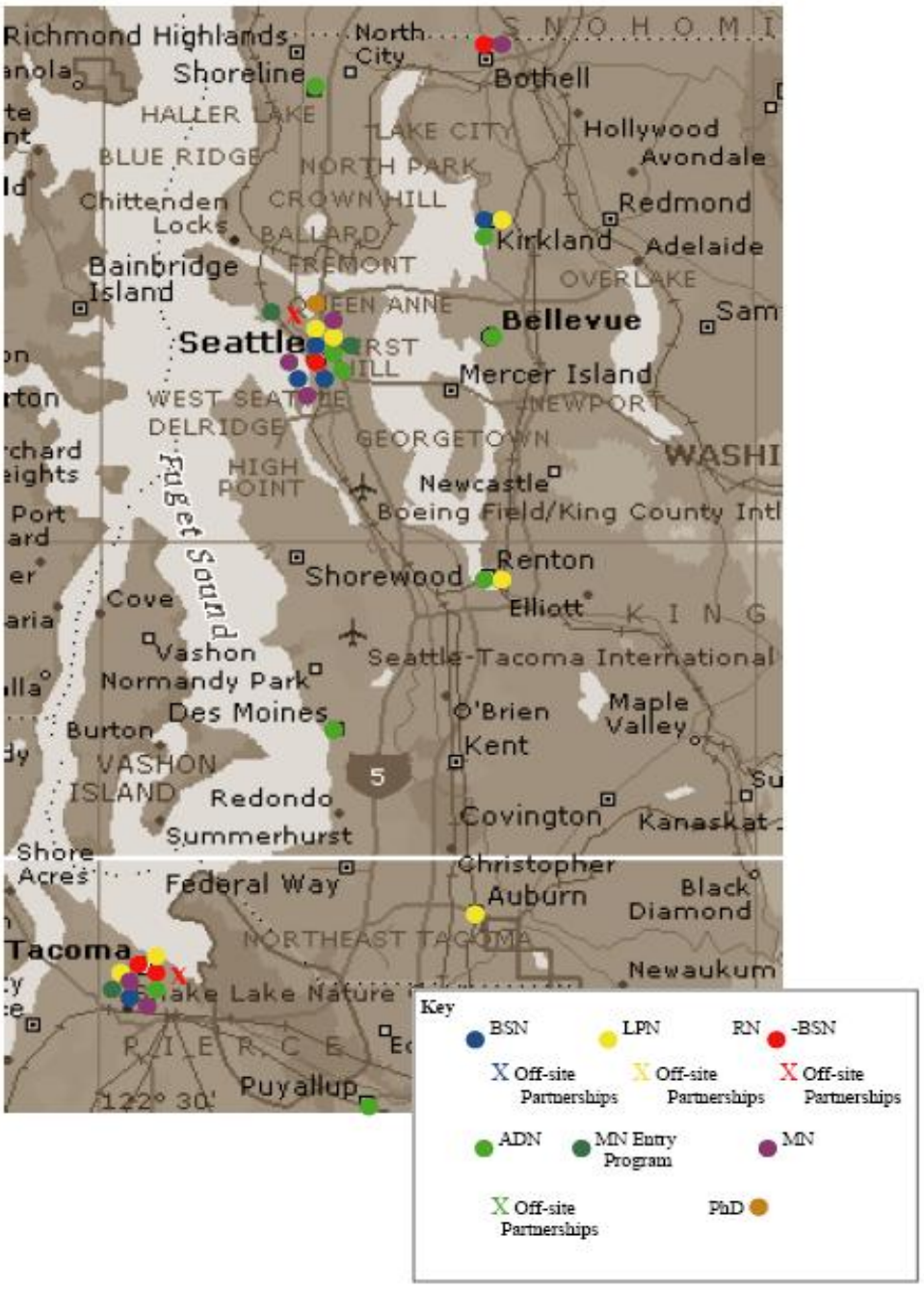
Appendix 4

Geographic Distribution of Washington State Nursing Programs (LPN, A.D.N., BSN and RN to BSN)



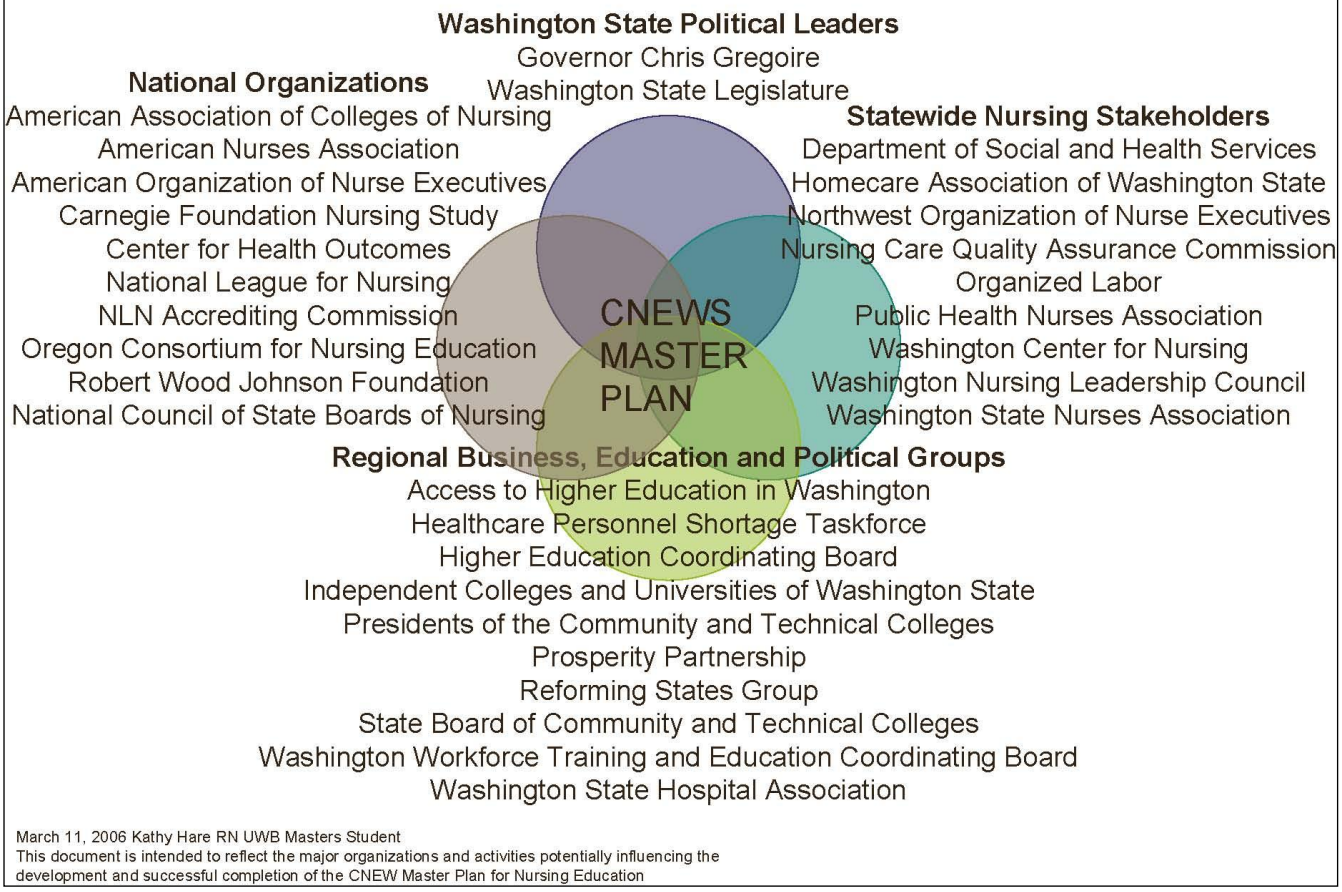
Appendix 5

Geographic Distribution of King & Pierce County Nursing Programs
(LPN, ADN, BSN and RN to BSN)



Appendix 6

Converging Forces Influencing Nursing Education in Washington State



March 11, 2006 Kathy Hare RN UWB Masters Student
This document is intended to reflect the major organizations and activities potentially influencing the development and successful completion of the CNEW Master Plan for Nursing Education

Appendix 7

Membership of CNEWS

As of April, 2007

Bates Technical College **PN**	Colleen Doherty, R.N. M.N. Director/Coordinator	PN Program 1101 S Yakima Tacoma, WA 98405	Work: 253-680-7328 cdoherty@bates.ctc.edu
Bellevue Community College **ADN**	Sybil Weber, MSN, ARNP Nursing Program Chair	Main Campus, Rm R130 3000 Landerholm Circle SE Bellevue, WA 98007-6484	Work: 425-564-2603 sweber@bcc.ctc.edu Fax: 425-564-2012
Bellingham Technical College **PN with RN option, PN**	Rita Van Horn, PhD, RN Director of Nursing	Nursing Program 3028 Lindburgh Avenue Bellingham, WA 98225	Work: 360-752-8481 rvhorn@btc.ctc.edu Fax: 360-752-7281 Cell 360-927-0013
Big Bend Community College **RN with PN option**	Katherine Christen Director	Nursing Department 7662 Chanute St. Moses Lake, WA 98837	Work: 509-793-2130 katherinec@bigbend.edu
Centralia College **PN with RN option**	Nola Ormrod, RN, MSN, Director	Nursing Program 600 W Locust Centralia, WA 98531	Work: 360-736-9391 x449 normrod@centralia.edu Fax: 360-330-7502
Clark College **ADN**	Shelly Quint, RN, MSN, Director	Nursing Program 1800 E McLoughlin Blvd. Vancouver, WA 98663	Work: 360-992-6077 squint@clark.edu Fax: 360-992-6096
Clover Park Technical College **PN with RN option**	Barbara Newlin, RN, MSN Coordinator	Nursing Department 4500 Steilacoom Blvd. SW Tacoma, WA 98499	Work: 253-589-6013 Barbara.newlin@cptc.edu Fax: 253-589-5866
Columbia Basin College **ADN w/PN option**	Mary Hoerner, MN Program Coordinator	Nursing Program 2600 N 20th Ave. Pasco, WA 99301	Work: 509-547-0511 x4010 mhoerner@columbiabasin.edu

Membership of CNEWS, continued

Everett Community College **RN with PN option**	Karen Heys, MN, RN Department Head / Instructor	Nursing Department 2000 Tower St. Everett, WA 98201-1327	Work: 425-388-9471 kheys@everettcc.edu Fax: 425-388-9135
Gonzaga University **RN-BSN/MSN** **BSN, Post Master's Certificate**	Mary Sue Gorski, PhD, ARNP Chairperson Lin Rogers PhD ©, RN Assistant Chairperson	Dept. Of Nursing 502 E. Boone Ave. AD Box 38 Spokane, WA 99258-0038	Work: 509-323-3587 gorski@gonzaga.edu Fax: 509-323-5827 Work: 509-323-6644 rogersl@gonzaga.edu
Grays Harbor College **RN with PN option**	Penny Woodruff, MS, RN Director	Nursing Department 1620 Edward P Smith Drive Aberdeen, WA 98520	Work: 360-538-4148 pwoodruf@ghc.edu
Green River Community College **PN**	Julia Short, MPA, RN, Director	Nursing Department 12401 SE 320th Auburn, WA 98002	Work: 253-833-9111 x 4210/2721 jshort@greenriver.edu
Heritage University **PN**	Sandra L. Wells, RN MSN, OCN Director	Nursing Program 3240 Fort Road Toppenish, WA 98948	Work: 509-865-8578 Wells_s@heritage.edu
Highline Community College **ADN**	Barbara Smith, RN, MN Program Coordinator	Nursing Program PO Box 98000 MS 15-1 Des Moines, WA 98198-9800	Work: 206-878-3710 x3462 bsmith@highline.edu
Lake Washington Technical College **PN/ADN/PN EdCC**	Paul Root, MN, RN Director, Nursing and Medical Support Programs	Nursing Program 11605 132nd Avenue NE Kirkland, WA 98034	Work: 425-739-8255 paul.root@lwtc.edu Fax: 425-739-8136
Lower Columbia College **RN with PN option** **LPN to RN** **Distance Ed & Traditional**	Helen Kuebel, MSN, RN, Director	Nursing Program 1600 Maple St. Longview, WA 98632	Work: 360-442-2861 hkuebel@lowercolumbia.edu Fax: 360-442-2879

Membership of CNEWS, continued

North Seattle Community College **PN with RN option**	Mary Sitterley, RN, MN, MEd Nrg Program Director	PN Program 9600 College Way North Seattle, WA 98103	Work: 206-528-4562 msitterley@sccd.ctc.edu
Northwest University **BSN**	Carl Christensen, RN, PhD, Dean	Buntain School of Nursing 5520 108th Ave. NE Kirkland, WA 98033	Work: 425-889-7837 carl.christensen@northwestu.edu
Olympic College **LPN Program RN Program TADN (Transition to ADN)**	Gerianne Babbo, RN, Associate Dean for Nursing	Nursing Program 1600 Chester Ave. Bremerton, WA 98377-1699	Work: 360-394-2749 gbabbo@oc.ctc.edu
Pacific Lutheran University **BSN, LPN-BSN, RN-BSN, MSN, Entry MSN**	Terry W. Miller, PhD, RN Dean and Professor	School of Nursing Tacoma, WA 98447-0029	Work: 253-535-7674 millertw@plu.edu Fax: 253-535-7590
Peninsula College **ADN**	Marca Davies, MS, RN Coordinator	Nursing Program 1502 East Lauridsen Blvd. Port Angeles, WA 98362	Work: 360-417-6455 marcad@pcadmin.ctc.edu Fax: 360-457-8100
Pierce College **ADN with PN option**	Sarah Magnuson-Whyte, MN, RN Director	Nursing Program 1601 39th Ave S.E Puyallup, WA 98374	Work: 253-840-8375 swhyte@pierce.ctc.edu Fax: 253-840-8388
Renton Technical College **PN with ADN option**	Heather Stephen-Selby, MSN, ARNP Dean, Allied Health Sarah Covington, MSN Director of Nursing	PN Program/PN-ADN 3000 NE 4th Street Renton, WA 98056	Work: 425-235-2352 x5552 Hstephen-selby@rtc.edu Fax: 425-235-7832 scovington@rtc.edu 425-255-2352 x5519
Seattle Central Community College **ADN**	Maria Azpitarte MS, RN Director	Nursing Program 1701 Broadway 2BE3210 Seattle, WA 98122	Work:206-344-4326 mazpit@sccd.ctc.edu

Membership of CNEWS, continued

Seattle Pacific University **BSN, RN-BSN, MSN**	Lucille Kelley, PhD, MN, RN, Dean Dr Christine Henshaw, Associate Dean	School of Health Sciences 3307 3rd Avenue West Marston Hall Suite 106 Seattle, WA 98119-1922	Work: 206-281-2608 lkelley@spu.edu Work: 206-281-2612 chenshaw@spu.edu Fax: 206-281-2767
Seattle University **BSN, Master's entry, MSN, Post – Masters certification in all MSN Programs**	Mary K. Walker, PhD, RN, FAAN Dean & Professor Barbara Anderson DrPH, RN, CNM Assoc. Dean & Prof.	College of Nursing 901 12th Ave PO Box 2220000 Seattle, WA 98122-1090	Work: 206-296-5676 mwalker@seattleu.edu Fax: 206-296-5544 Work: 206-296-5678 banderso@seattleu.edu Fax:206-296-5544
Shoreline Community College **ADN**	Bette Perman, MN, RN Director	Nursing Program 16101 Greenwood Avenue N Seattle, WA 98133	Work: 206-546-4720 bperman@shoreline.edu Fax: 206-533-5103
Skagit Valley College/Mt. Vernon **RN with PN option**	Cynthia Scaringe, RN, MSN Nursing Department Chair	Nursing Department 2405 E. College Way Mount Vernon, WA 98273	Work: 360-416-7790 cynthia.scaringe@skagit.edu Fax: 360-416-6596
Skagit Valley College/Whidbey Island **PN** 2nd year Part-time RN	Jan Helm, RN, BSN Department Chair	1900 SE Pioneer Way Oak Harbor, WA 98277	Work: 360-679-5325 Jan.Helm@skagit.edu Fax: 360-679-5375
South Puget Sound Community College **RN with PN option**	Marilyn Adair, MSN, RN Director	School of Nursing 2011 Mottman Rd. SW Olympia, WA 98512	Work: 360-596-5450 madair@spscc.ctc.edu
South Seattle Community College **PN**	Collette Swan MSN, RN Director of Nursing	Nursing Program 6000 16th Avenue S.W. Seattle, WA 98106	Work: 206-768-6414 cswan@sccd.ctc.edu Fax: 206-763-5156

Membership of CNEWS, continued

Spokane Community College **ADN w/PN option**	Cheri Osler, RN, MS, MA, EdD Director	Nursing Education 1810 N Greene St. MS 2090 Spokane, WA 99217	Work: 509-533-7304 cosler@scc.spokane.edu Fax: 509-533-8621
Tacoma Community College **ADN**	Nancy A Novak, RN, MN Interim Nursing Program Chair	Nursing Program -19-93 6501 S 19th Tacoma, WA 98466	Work:253-566-5178 nnovak@tacomacc.edu Fax: 253-566-5273
University of Washington/Tacoma **RN-BSN, MN, ADN-MN**	Sharon Fought Graduate Program Coordinator Marjorie Dobratz, DNSC, RN Director & Professor,	Nursing Program 1900 Commerce Campus Box 358421 Tacoma, WA 98402-3100	Work: 253-692-5647 sgfought@u.washington.edu FAX:253-692-4424 Work: 253-692-5676 mdobratz@u.washington.edu Fax: 253-692-4424
University of Washington/Bothell **RN-BSN/ MN**	Mary Baroni PhD, RN Director & Professor	Nursing Program 18115 Campus Way NE Bothell. WA 98011-8246	Work: 425-352-3543. mbaroni@uwb.edu or mbaroni@u.washington.edu Fax: 425-352-3237
University of Washington **BSN, MN, MS, PhD, MEPN DNP**	Nancy F. Woods, PhD, RN - Dean Susan L. Woods, PhD, RN Associate Dean Academic Services	School of Nursing Box 357260 Seattle, WA 98195	Work: 206-221-2472 206-221-2463 nfwoods@u.washington.edu Work: 206-616-8407 slwoods@u.washington.edu Fax 206-543-3624
Walla Walla University **BSN**	Lucille Krull, PhD, RN, FNP Dean	School of Nursing 10345 SE Market Portland, OR 97216	Work: 503-251-6115x7302 krullu@wwc.edu Fax: 503-251-6249
Walla Walla Community College **RN w/PN option**	Marilyn Galusha MSN, RN Director	Nursing Education 500 Tausick Way Walla Walla, WA 99362	Work: 509-527-4240 marilyn.galusha@wwcc.edu Fax: (509) 527-4226

Membership of CNEWS, continued

Wash State Univ. **BSN, RN-BSN, MN** **PhD in development 2007**	Anne Hirsch, DNS, ARNP Interim Dean Renee Hoeksel, PhD, RN Interim Assistant Dean	WSU Intercollegiate College of Nursing 2917 W Ft George Wright Dr Spokane, WA 99204 WSU Vancouver 14204 NE Salmon Creek Vancouver, WA 98696	Work: 509-324-7335 hirsch@wsu.edu Fax: 509-324-7336 360-546-9621 hoeksel@vancouver.wsu.edu
Wash State Univ./ Vancouver, **RN-BSN, MN** **DNP in Development**	Dawn Doutrich, PhD, RN, CNS Interim Regionsal Director and Assistant Dean	WSU Intercollegiate College of Nursing 14204 NE Salmon Creek Ave. Vancouver, WA 98686	Work: 360-546-9464 doutrich@vancouver.wsu.edu Fax: 360-546-9038
Wash. State Univ/ Southeast Washington **BSN, RN-BSN, MN**	Lorrie Dawson, PhD, ARNP, Assistant Dean & Regional Academic Director Nursing Programs - Tricities and Walla Walla	WSUTriCities Nursing 2710 University Drive Richland, WA 99352-1643	Work: 509-372-7183 ldawson@tricity.wsu.edu Fax: 509-372-7116
Wash. State Univ/ Yakima **BSN, RN-BS, MN**	Debra Fronck, MSN ARNP Interim Director of Nursing Programs – Yakima	WSU Intercollegiat College of Nursing 1401 W. Prasch Ave. Yakima, WA 98902	Work: 509-494-7900 dfranck@wsu.edu Fax: 509-494-7915
Wenatchee Valley College **RN w/PN option**	Linda Visser, MSN, RN Director	Nursing Program 1300 5th Street Wenatchee, WA 98801	Work: 509- 682.6670 lvisser@wvc.edu Fax: 509-682-6661
Whatcom Community College **ADN**	Connie Rockstad, RN, MSN Coordinator	Nursing Department 237 W Kellogg Rd Bellingham, WA 98226	Work: 360-676-2170x3307 crockstad@whatcom.ctc.edu Fax: 360-676-2171
Yakima Valley Community College **RN with PN option**	Rhonda Taylor, RN, MSN Program Coordinator	Nursing Program PO Box 22520 Yakima, WA 98907-2520	Work: 509-574-4909 rtaylor@yvcc.edu Fax: 509-574-4669 Cell: 509-961-5059

Membership of CNEWS, continued

Associate Members

Organization	Name	Address	Phone / Email
Higher Education Coordinating Board/DOH	Kathy McVay Program Administrator	Health Professions Loan Repay/ Scholarship Program PO Box 47834 Olympia, WA 98504-7834	Work Phone: 360-236-2816 kathy.mcvay@doh.wa.gov
Northwest Organization of Nurse Executives	Gladys Campbell MSN, RN Executive Director	300 Elliott Avenue W. # 300 Seattle, WA 98119	Work Phone: 206-285-0102 gladysC@whsa.org
Washington Center for Nursing	Linda Tieman, RN, MN, CHE Executive Director	3307 3rd Ave W. Suite 106 Seattle, WA 98116-1922	Work: 206-281-2978 tiemal@spu.edu
Washington State Nurses' Association	Judy Huntington RN, Executive Director Joan Garner, MN, RN Director of Nursing Practice & Education	575 Andover Park West, Ste. 101 Seattle, WA 98188	206-575-7979 X 3002 jhunting@wsna.org 206-575-7979 x 3007 jgarner@wsna.org
Washington State Nursing Commission	Usrah Claar-Rice Nursing Education Manager Paula R. Meyer, MSN, RN Executive Director Judith D Personett, EdD, RN, CNAA Chair	Dept. of Health MS 47864 Olympia, WA 98504-7864	Work Phone: 360-236-4745 Usrah.claar-rice@doh.wa.gov Fax 360-236-4738 Work phone: 360-236-4713 paula.meyer@doh.wa.gov jphrss2@yahoo.com

Appendix 8

CNEWS Design Team

Mary Baroni PhD RN
University of Washington, Bothell

Carl Christensen PhD RN
Northwest University

Marilyn Galusha MSN RN
Walla Walla Community College

Anne Hirsch PhD RN
Washington State University

Emily Hitchens Ed.D MN RN
Seattle Pacific University

Helen Kuebel MSN RN
Lower Columbia College

Nola Ormrod RN MSN
Centralia College

Stephen Padgett PhD RN
Washington Center for Nursing- Project Director

Heather Stephen-Selby MSN ARNP
Renton Technical College

Linda Tieman RN MN FACHE
Washington Center for Nursing- Consultant

Penny Woodruff MS RN
Grays Harbor College

Appendix 9

The 2008 WCN Board of Directors

President:
Barbara E. Trehearne PhD RN
Executive Director, Nursing Operations, Group Health Cooperative
NWONE Position

Vice President:
Judith A. Huntington MN, RN
Executive Director
Washington State Nurses' Association
WSNA Position

Secretary/Treasurer
Victoria Fletcher RN MSN CNM
Ass't. Director, Clinician Services, Planned Parenthood of WWA
ARNP Position

Directors:

Bobbie Berkowitz PhD RN FAAN
Professor, University of Washington
School of Nursing
At-Large

Marca Davies MS, RN
Coordinator Peninsula College
CNEWS Position

Tim Davis RN BSN
Staff Nurse, Skagit Valley Hospital
WSNA Staff RN

Kathryn Fletcher RN BSN
Staff Nurse, Harborview Medical Center
SEIU Staff RN

Ethlyn M. Gibson RN MSN
Director,
Pierce College Nursing Program
At-Large

Anne Hirsch DNS, ARNP
Interim Dean, WSU ICN, Spokane
CNEWS Position

Connie Huber RN MBA FACHE
Assistant Administrator,
Providence St. Peter Hospital
NWONE Position

Alma Martinez RN MSN
Manager, Home Health Program,
Prosser Memorial District Hospital
At-Large

Marilyn Savage RN
President, USNU local 141 UFCW
USNU Position

Diane Sosne RN MSN
President, SEIU-1199 NW
SEIU Position

Marni Storey RN MSN
Communicable Disease Prevention & Control
Manager, Clark County Health Department
Public Health Position

Executive Director:

Linda Tieman RN MN FACHE
Washington Center for Nursing

References

Access Washington (2001). *Table DP-1. Profile of General Demographic Characteristics: 2000, Geographic area: Washington*. Olympia, WA: Office of financial Management. Available at: http://www.ofm.wa.gov/census2000/profiles/state/04053.pdf

Aiken LH, Clarke SP, Cheung RB, Sloane DM, & Silber JH (2003). Educational levels of hospital nurses and surgical patient mortality. *Journal of the American Medical Association*, 290(12): 1617-1623.

Amaro DJ, Abriam-Yago K, Yoder M. (2006). Perceived barriers for ethnically diverse students in nursing programs. *Journal of Nursing Education,* 45(7): 247-254.

American Association of Colleges of Nursing (2005) *Post-baccalaureate Nurse Residency Program Executive Summary*. Available at: http://www.aacn.nche.edu/education/nurseresidency.htm

American Association of Colleges of Nursing (2006). *Advancing higher education in nursing: 2006 Annual Report*. Available at: http://www.aacn.nche.edu/2006AnnualReport.pdf

American Association of Colleges of Nursing (2007). *Fact sheet: The impact of education on nursing practice*. Available at: http://www.aacn.nche.edu/EdImpact/index.htm

American Association of Colleges of Nursing (2007). Johnson & Johnson Campaign for Nursing's Future joins with AACN to offer new Minority Nurse Faculty Scholars Program. AACN: Press release, available at http://www.aacn.nche.edu/Media/NewsReleases/JJScholarship.html

American Association of Critical-Care Nurses (2005). AACN standards for establishing and sustaining healthy work environments: A journey to excellence. Available at: http://www.aacn.org/aacn/pubpolcy.nsf/vwdoc/workenv.

American Organization of Nurse Executives (2005). *AONE Practice and Education Partnership for the Future*. Available at: http://www.aone.org/aone/resource/practiceandeducation.html

Andrews DR. (2003). Lessons from the past: Confronting past discriminatory practices to alleviate the nursing shortage through increased professional diversity. *Journal of Professional Nursing*, 19(5): 289-294.

Auerbach DI, Buerhaus PI, & Staiger DO. (2007). Better late than never: Workforce supply implications of later entry into nursing. *Health Affairs*, 26 (1): 178-185.

Bargagliotti LA, West-Sands L, Burchum J, & Selbe J. (2002). A dual degree model for associate and baccalaureate nursing education. *Nursing Education Perspectives*, 23 (5): 234-237

Bellack JP (2005). Threatening our diversity. *Journal of Nursing Education*, 44 (5): 199-200.

Benner P & Sutphen M. (2007). Learning across the professions: The clergy, a case in point. *Journal of Nursing Education*, 46(3): 103-108.

Bevill JW, Cleary BL, Lacey LM, & Nooney JG. (2007). Educational mobility of RNs in North Carolina: Who will teach tomorrow's nurses? *American Journal of Nursing*, 107(5): 60-71.

Berkowitz B. & Nicola R. (2003) Public health infrastructure system change: Outcomes from the Turning Point initiative. *Journal of Public Health Management and Practice,* 9(3): 224-227.

Biviano M, Fritz MS, Spencer W, & Dall TM. (2004). *What is behind HRSA's projected supply, demand, and shortage of registered nurses?* Washington, DC: Health Resources and Services Administration. Available at: http://bhpr.hrsa.gov/healthworkforce/reports/nursing/rnbehindprojections/index.htm

Boyer SA (2002). Vermont Nurse Internship Project: A collaborative enterprise developed by nurse leaders from education, practice, and regulation. *Nursing Education Perspectives,* 23 (2): 81–85.

Buchbinder H. (2007). *Increasing Latino participation in the nursing profession: Best practices at California nursing programs*. Los Angeles: The Tomás Rivera Policy Institute, University of Southern California. Available at: http://www.trpi.org/PDFs/nursing.pdf

Buerhaus PI, Donelan K, Ulrich BT, Norman L, & Dittus R. (2006). State of the registered nurse workforce in the United States. *Nursing Economics,* 24(1): 6-12.

Bureau of Health Professions (2006). *The registered nurse population: Findings from the March 2004 National Sample Survey of Registered Nurses*. Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration. Available at: http://bhpr.hrsa.gov/healthworkforce/rnsurvey04/

Burritt JE, Wallace P, Steckel C, Hunter A. (2007). Achieving quality and fiscal outcomes in patient care: the clinical mentor care delivery model. *Journal of Nursing Administration,* 37 (12): 558-563.

Carnegie Foundation for the Advancement of Teaching; Preparation for the Professions Program: Study of Nursing Education. Available at: http://www.carnegiefoundation.org/programs/index.asp?key=1829

Casey K, Fink R, Krugman M, & Propst J. (2004). The graduate nurse experience. *Journal of Nursing Administration*, 34(6): 303-311.

Cornett BL. (1995). Baccalaureate education for licensed practical nurses. *Nurse Educator*, 20(5): 31-33.

D'Antonio P. (2004). Women, nursing, and baccalaureate education in 20th century America. *Journal of Nursing Scholarship,* 36(4): 379-384.

Day L. (2005). Nursing practice and civic professionalism. *American Journal Of Critical Care*, 14 (5): 434-437.

Diefenbeck CA, Plowfield LA, & Herrman JW. (2006). Clinical immersion: A residency model for nursing education. *Nursing Education Perspectives,* 27(2): 72-79.

Ellis JR (2007). *Nursing Education in Washington State: A White Paper*. Washington State Nurses Association: Author.

Estabrooks, CA, Midodzi WK, Cummings GG, Ricker, KL, & Giovannetti, P. (2005) The impact of hospital nursing characteristics on 30-day mortality. *Nursing Research*, 54(2):74-84.

Evans BC. (2007). Student perceptions: The influence of a nursing workforce diversity grant on student retention. *Journal of Nursing Education,* 46(8): 354-359.

Fondiller SH. (2001a). The advancement of baccalaureate and graduate nursing education: 1952-1972. *Nursing & Health Care Perspectives*, 22 (1): 8-10.

Fondiller, SH. (2001b). Nursing's pioneers in the Associate Degree movement. *Nursing and Health Care Perspectives*, 22(4): 172-174.

Goode CJ, Pinkerton SE, McCausland MP, Southard P, Graham R, Krsek C (2001). Documenting chief nursing officers' preference for BSN-prepared nurses. *Journal of Nursing Administration,* 31(2): 55-59.

Gordon S. (2005). *Nursing against the odds.* Ithaca, NY: Cornell University Press.

Gubrud-Howe P, Shaver KS, Tanner CA, Bennett-Stillmaker J, Davidson SB, Flaherty-Robb M, Goudreau K, Hardham L, Hayden C, Hendy S, Omel S, Potempa K, Shores L, Theis S, & Wheeler P. (2003) A challenge to meet the future: Nursing education in Oregon, 2010. *Journal of Nursing Education*, 42(4): 163-167.

Halfer, D. (2007). A magnetic strategy for new graduate nurses. *Nursing Economics*, 25(1): 6-12.

Hare K. (2006). Converging forces on nursing education in Washington State: The challenges of 21st century change. Seattle, WA: Washington Center for Nursing.

Hare K. (2007). A survey of program characteristics of new graduate residencies and support available for underrepresented new registered nurses of color in Washington State. Seattle, WA: Washington Center for Nursing.

Hatcher B, Bleich MR, Connolly C, Davis K, O'Neill Hewlett P, Stokley Hill K. (2006). *Wisdom at work: The importance of the older and experienced nurse in the workplace*. Princeton NJ: The Robert Wood Johnson Foundation.

Higher Education Coordinating Board (2005). Strategic Master Plan for Higher Education: Update on Implementation. Olympia, WA: HECB. Available at www.hecb.wa.gov/reports

Horns PN & Turner PS. (2006). Funding in higher education: where does nursing fit? *Journal of Professional Nursing*, 22 (4): 221–225.

Institute of Medicine (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care.* BD Smedley, AY Stith, & AR Nelson (Eds.); Committee on Understanding and

Eliminating Racial and Ethnic Disparities in Health Care. Washington, DC: National Academies Press.

Institute of Medicine (2004) *Keeping patients safe: Transforming the work environment of nurses*. Committee on the Work Environment for Nurses and Patient Safety, Board on Health Care Services, A. Page (Ed.). Washington, DC: The National Academies Press.

Jimenez-Cook S & Kleiner BH. (2005). Nursing at the crossroads: Increasing workforce diversity and addressing health disparities. *Equal Opportunities International*, 24 (7/8): 1-10.

Katz J (2007). Native American high school students' perceptions of nursing. *Journal of Nursing Education,* 46(6): 282-286.

Kaeding TH, & Rambur B. (2004). Recruiting knowledge, not just nurses. *Journal of Professional Nursing*, 20 (2): 137-138.

Kaufman K. (2007a). Introducing the NLN/Carnegie National Survey of Nurse Educators: compensation, workload, and teaching practice. *Nursing Education Perspectives*, 28(3): 164-167.

Kaufman K (2007b). Compensation for nurse educators: findings from the NLN/Carnegie National Survey with implications for recruitment and retention. *Nursing Education Perspectives,* 28(4): 223-225.

Kovner CT, Brewer CS, Fairchild S, Poornima S, Kim H, Djukic M. (2007). Newly licensed RNs' characteristics, work attitudes, and intentions to work. *American Journal of Nursing*, 107 (9): 58-70.

Kovner C, Brewer C, Wu Y, Cheng Y, Suzuki M. (2006). Factors associated with work satisfaction of registered nurses. *Journal of Nursing Scholarship*, 38(1): 71-79.

Kramer M & Schmalenberg CE (2003). Magnet hospital nurses describe control over nursing practice. *Western Journal of Nursing Research*, 25(4): 434-52.

Kramer M, Schmalenberg C, & Maguire P. (2004a). Essentials of magnetism: part I. *Nursing*, 34(6): 50-54.

Kramer M, Schmalenberg C, & Maguire P. (2004b). Essentials of magnetism: part II. *Nursing*, 34 (7): 44-47.

Kramer M, Schmalenberg C, & Maguire P. (2004c). Essentials of magnetism: part III. *Nursing*, 34 (8): 44-47.

Krugman M, Bretschneider J, Horn PB, Krsek CA, Moutafis RA, Smith MO. (2006). The National Post-Baccalaureate Graduate Nurse Residency Program: A model for excellence in transition to practice. *Journal of Nurses in Staff Development*, 22 (4): 196–205.

McClure ML, Hinshaw AS. (2002). *Magnet Hospitals Revisited: Attraction and Retention of Professional Nurses.* Washington, DC: American Nurses Association.

Milone-Nuzzo P. (2007). Diversity in nursing education: how well are we

doing? *Journal of Nursing Education*, 46(8): 343-344.

Missing persons: Minorities in the health professions. A Report of the Sullivan Commission on Diversity in the Healthcare Workforce. (2004). WW Kellogg Foundation. Available at: www.aacn.nche.edu/Media/pdf/SullivanReport.pdf.

Noone J, Carmichael J, Carmichael RW, & Chiba SN (2007). An organized pre-entry pathway to prepare a diverse nursing workforce. *Journal of Nursing Education,* 46 (6): 287-291.

Nurse Faculty Shortage Fact Sheet (2005). National League For Nursing. Available at: http://www.nln.org/governmentaffairs/pdf/NurseFacultyShortage.pdf

National Quality Forum (2006). *Nurses Educational Preparation and Patient Outcomes in Acute Care: A Case for Quality*. Washington DC: National Quality Forum. . Available at: www.qualityforum.org

Nursing Care Quality Assurance Commission (2007). Nursing education programs 2005-2006 annual school report: Statistics summary and trends analysis. Olympia, WA: Department of Health. Available at: https://fortress.wa.gov/doh/hpqa1/hps6/Nursing/documents/Nursing_Annual_Report.pdf

Pine R & Tart K. (2007). Return on investment: Benefits and challenges of a baccalaureate nurse residency program. *Nursing Economics*, 25(1): 13-18.

Prosperity Partnership Higher Education Working Group (2006). *Educating Washington Citizens for High-Demand Jobs*. Available at: www.prosperitypartnership.org/foundation/education/whitepaper_final.pdf

Quad Council of Public Health Nursing Organizations (2006). *The public health nursing shortage: A threat to the public's health*. Washington, DC: American Nurses Association.

Ramsey P, Merriman C, & Blowers S. (2004). Community partnerships for an LPN to BSN career mobility project. *Nurse Educator*, 29 (1): 31-35.

Redmond GM. (1997). LPN-BSN: Education for a reformed health care system. *Journal of Nursing Education*, 36(3): 21-27.

Report of the Program Review Committee (2005). University of Washington School of Nursing November 28-29, 2005. Available at: http://www.son.washington.edu/faculty/support/self-study/default.asp

Seago JA, Spetz J, Chapman S, Dyer W, Grumbach K. (2004). *Supply, demand, and use of licensed practical nurses.* Center for Health Workforce Distribution Studies, University of California, San Francisco. Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration. Available at: http://bhpr.hrsa.gov/healthworkforce/reports/nursing/lpn/default.htm

Skillman SM, Andrilla CHA, & Hart LG. (2007). *Washington State registered nurse supply and demand projections: 2006-2025*. Final Report #112. Seattle, WA: WWAMI Center for Health Workforce Studies, University of Washington.

Skillman SM, Palazzo L, Keepnews D, Hart LG. (2006). Characteristics of registered nurses in rural versus urban areas: Implications for strategies to alleviate nursing shortages in the United States. *Journal of Rural Health,* 22(2):151-157.

Sochalski J. (2002). Nursing shortage redux: Turning the corner on an enduring problem. *Health Affairs*, 21 (5): 157-164.

Sutherland JA, Hamilton MJ, & Goodman N. (2007). Affirming At-Risk Minorities for Success (ARMS): Retention, graduation, and success on the NCLEX-RN. *Journal of Nursing Education,* 46 (8): 347-353.

Summary Proceedings of the National Leadership Symposium on Increasing Diversity in the Health Professions. (2007) Sullivan Alliance: WW Kellogg Foundation. Available at: http://www.aacn.nche.edu/Media/pdf/SullivanJun07update.pdf

Thies KM & Harper D. (2004). Medicare funding for nursing education: Proposal for a coherent policy agenda. *Nursing Outlook*, 52: 297-303.

Washington Learns (2006). World-class, learner-focused, seamless education. Olympia, WA: Office of the Governor. Available at: http://www.washingtonlearns.wa.gov/report/FinalReport.pdf

Yordy KD. (2006) *The Nursing Faculty Shortage: A Crisis For Health Care.* Princeton NJ: The Robert Wood Johnson Foundation.

Zabalegui A, Macia L, Márquez J, Ricomá R, Nuin C, Mariscal I, Pedraz A, Germán C, & Moncho J (2006). Changes in nursing education in the European Union. *Journal of Nursing Scholarship*, 38 (2): 114-118.

Washington Center for Nursing
3307 3rd Ave W.
Suite 106
Seattle, WA 98119-1922
(206) 281-2978
tiemal@spu.edu

www.WACenterforNursing.org