A SCHEV Report

Strategic Plan and Recommendations to Ensure an Adequate Supply of Nurses in Virginia

PRESENTED TO
THE HONORABLE MARK R. WARNER
GOVERNOR OF VIRGINIA
AND
MEMBERS OF THE GENERAL ASSEMBLY

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PREFACE

Virginia is facing a severe nursing shortage. To address this crisis situation, House Bill (HB) 2818, adopted by the 2003 General Assembly, tasked the State Council of Higher Education for Virginia (SCHEV), in association with the Advisory Council on the Future of Nursing in Virginia, the Virginia Board of Nursing, and institutions of higher education with the development of a statewide strategic plan and recommendations to ensure an adequate supply of nurses in the Commonwealth (see Appendix A).

The following document is set forth in response to HB2818 and is intended to assist Virginia policy makers with identifying the actions necessary for increasing the size of the Commonwealth’s nursing workforce.1

This strategic plan was prepared by staff at the State Council of Higher Education for Virginia and approved by the Council on March 16, 2004. The staff member assigned to the preparation of the report was Dr. Kimberly Waid, Associate for Academic Affairs. In addition, the following individuals were members of an advisory group that assisted with the development of the document:

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1 The State Council of Higher Education’s report Condition of Nursing and Nursing Education in the Commonwealth laid a foundation for this strategic plan by presenting data regarding the supply of and demand for nurses in Virginia. The data included within the Condition report and this strategic plan focus on Registered Nurses (RN) because training programs are offered primarily for this category of nursing professionals by institutions of higher education in Virginia. However, although not as substantive, evidence also exists for a need for more Licensed Practical Nurses (LPN). Research performed in 2002 by the American Health Care Association (AHCA) noted that approximately 25,100 LPN positions are currently vacant in the United States; 428 of those vacancies are in Virginia. Thus, the recommendations for this strategic plan are intended for both RN and LPN education programs.
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EXECUTIVE SUMMARY

The shortage of nurses in Virginia is a condition that continues to threaten the stability of the Commonwealth’s healthcare system. If current trends continue, the demand for full-time-equivalent registered nurses (FTE RNs) in Virginia is projected to be 69,600 by the year 2020, while supply is anticipated to reach only 47,000 (see Appendix B). Without action, Virginia will be short 22,600 FTE RNs in sixteen years (32% shortfall).

To assist the General Assembly and the Governor in selecting a set of actions to ensure an adequate supply of nurses in the Commonwealth, the State Council of Higher Education for Virginia (SCHEV), in association with members of the healthcare community including the Advisory Council on the Future of Nursing in Virginia and the Virginia Board of Nursing, as well as institutions of higher education present Strategic Plan and Recommendations to Ensure an Adequate Supply of Nurses in Virginia. The plan includes specific strategies for achieving the following four objectives:

(1) increase the current number of nursing faculty: 15% in two years and an additional 35% within 12 years;

(2) expand institutions’ capacity to prepare students in basic (LPN & RN) nursing programs by: 15% more students in two years and an additional 35% within 12 years;

(3) increase the number of graduates from basic (LPN & RN) and advanced degree nursing programs by: 15% in five years and an additional 35% within 15 years;

(4) improve retention of Virginia nurses in the workforce.
THE CHALLENGE

The supply of full-time equivalent (FTE) registered nurses (RNs) in Virginia is anticipated to be 47,000 by 2020. However, demand is projected to reach 69,600. Therefore, if unchanged, Virginia will face a deficit of 22,600 FTE RNs by 2020. The discrepancy between the projected Virginia RN supply and demand through 2020 is shown in Appendix B. The inadequate nursing workforce is the result of both high demand for and short supply of qualified nurses. Below are some of the specific causes of the shortage in Virginia:

Supply

- **Difficulty recruiting and retaining clinical and academic faculty to teach nursing students.**
  - **Faculty Salaries.** Many nursing education programs are simply unable to compete with the higher salaries offered by healthcare providers.
  - **Faculty Retirement.** In addition, a large percentage of the current supply of nursing faculty is anticipated to be lost due to age related retirements. The average age of nursing faculty ranges for a low of 45 in Southwest Virginia to a high of 54 in Northern Virginia. Competition for nursing faculty will likely increase even more dramatically as nursing programs/schools and healthcare providers attempt to deal with increasing numbers of faculty retirees.

- **Retiring nurse workforce.** At this time, the average age of RNs and LPNs in Virginia is 45. Thus, a large percentage of the nurse workforce is expected to begin to retire within the next 10 to 15 years. This will cause the number of retirees from nursing to significantly exceed the number of new graduates from nursing programs/schools.

- **Hurdles to expanding existing nursing education programs.**
  - **Program Costs.** The high cost associated with operating nursing programs has been a barrier to expansion. The 1:10 faculty-to-student ratio for clinical coursework that the Virginia Board of Nursing requires in order for programs to maintain approval, combined with the purchase and maintenance of healthcare technologies, contribute to the high cost of operating nursing programs.
  - **Scheduling.** In addition, nursing programs can be hindered by limited availability of slots at local healthcare facilities during midweek daytime hours. At the same time, funding realities often cap institutions’ off-hour instruction, clinical oversight, and academic support services and, thus, restrict institutions’ ability to use clinical facilities on weekends and off shifts.
Demand

- **Population growth.** According to the U.S. Census Bureau, the population of Virginia grew 14% between 1990 and 2000. This growth is expected to continue with an increase of 12% between 2000 and 2010. The increase in population will intensify the current demand for healthcare, particularly in areas with the greatest growth: Northern Virginia, the Richmond metro area, and the Tidewater/Hampton Roads region.

- **Aging population.** According to the U.S. Census Bureau, the average age in Virginia rose from 32 to 35 between 1990 and 2000. This trend will continue as the “baby-boom” generation continues to age. In fact, it is anticipated that between 2000 and 2010, the number of individuals aged 65 and older will grow by 30%. Currently, the 65-and-over group represents 11% of the state’s population, yet consumes approximately 35% of hospital resources. The unavoidable growth of this segment of the population will have a significant impact on demand for hospital services, particularly in areas with the largest percentage of 65-and-older citizens: the Southwest and Blue Ridge regions.

Because nurses have such a strong presence within the healthcare community, an inadequate supply of nurses puts patient safety at risk, causes access to care to become compromised, and increases the cost associated with health services. To meet the growing demand for health related services, Virginia will need to dramatically increase the number of new nursing licenses awarded each year.

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THE MISSION

To ensure an adequate supply of nurses in Virginia to meet the current and future need for essential nursing services.

The State Council of Higher Education for Virginia (SCHEV), in association with the Advisory Council on the Future of Nursing in Virginia, the Virginia Board of Nursing, and institutions of higher education, has developed a strategic plan and recommendations for the Commonwealth that supports this mission. As the shortage of nurses only worsens with time, these agencies join together in recommending that the following strategies be implemented no later than 2005-6.

THE PLAN

GOAL ONE: Increase the current number of nursing faculty: 15% in two years and an additional 35% within 12 years.

To recruit and maintain a qualified nurse faculty workforce:

1A. Develop legislation to increase nursing faculty salaries 15% above inflation over a five-year period. Estimated cost of $2.0 million per year over five years.

   o Target potential salary increases at traditional full-time academic faculty and part-time clinical practicum course faculty.

   o Include increases for instructional/lab assistants and academic administrators.

1B. Support the expansion and/or creation of:

   o Nursing Education Certificate programs, consistent with Board of Nursing regulations, that prepare clinically trained nurses to assume roles as general faculty in associate or baccalaureate degree nursing program.

   o Doctor of Philosophy degree programs in nursing.

1C. Investigate:

   o The potential benefit of a retirement policy that would allow faculty to collect their full retirement while being paid for additional faculty service.
Barriers to retirement-aged faculty continuing to work while collecting retirement benefits at either the state or federal level.

1D. Provide nursing faculty with the incentive of collecting two years of retirement for every one year of employment.

1E. Provide grant funds to hire retirement-aged faculty to provide tutoring and lab assistance to prospective nursing students, thus enabling a prepared workforce to work shorter hours but still contribute to the field.

GOAL TWO: Expand institutions’ capacity to prepare students in basic (LPN and RN) nursing programs by: 15% more students in two years and an additional 35% within 12 years.

To increase access to nursing education programs:

2A. Request that nursing education programs submit information regarding enrollment capabilities to the Board of Nursing on an annual basis so that this information may be provided to SCHEV for the purpose of its regular enrollment projection process.

2B. Include a line item into Virginia’s budget to be used as grant money to support enrollment expansion of basic (LPN and RN) nursing programs leading to eligibility for initial nursing licensure. Many institutions in Virginia are committed to increasing enrollment and/or establishing new nursing education programs (see Appendix C and D). In fact, despite internal funding woes, most nursing education programs have been able to increase/sustain their enrollment through external funds from the private sector (i.e. area hospitals and health systems). However, expansions based on non-state funds are temporary and inadequate to meet the rising demand. Without additional state funds for new faculty, classroom space, etc., many of these institutions will be unable to establish and/or sustain any enrollment growth. Estimated cost of $16.0 million per year over six years.

2C. Support partnerships between public programs/schools of nursing and private distance education providers to include the leasing of simulation technology and the granting of access to existing distance education coursework and resources at in-state tuition rates to nursing students.

2D. Support the development and implementation of distance education programs through institutional investment in equipment, infrastructure, and faculty development.

2E. Remove current limits on tuition and fees in colleges and universities (any increases should not exceed the actual cost of training an individual to become an LPN/RN). Additional revenue would enable program expansion in nursing and other areas of
shortage. (Contingent upon offering additional need-based and non-need based student financial assistance.)

2F. Investigate current practices regarding the use of clinical sites by nursing education programs. Identify existing limitations to access within the system and formulate a coordinated action plan among Virginia’s nursing education programs and clinical sites to alleviate these bottlenecks.

GOAL THREE: Improve the number of graduates from basic (LPN and RN) and advanced degree nursing programs by: 15% in five years and an additional 35% within 15 years.

To recruit and retain high quality students:

3A. Increase funding for nursing school students.

   - Allocate funding for a loan forgiveness program providing loans to students who seek a basic (LPN and RN) nursing degree/certification and who agree to practice in an underserved area of the Commonwealth after graduation. Estimated cost of $1.0 million per year over five years. Proposed payback of one year of tuition for one year of employment.

   - Implement a state-supported loan forgiveness program for students who seek an advanced degree in nursing. Estimated cost of $250,000 per year over the course of five years. Proposed payback of one year of tuition for one year of employment as faculty in a nursing education program.

   - Create a state-supported life emergency loan fund for students already enrolled in a nursing education program in order to minimize student attrition due to unforeseen financial problems and to preserve the state’s investment in preparing individuals to serve within a high demand field. Estimated onetime investment of $150,000.

GOAL FOUR: Improve retention of Virginia nurses in the workforce.

To keep nurses in the workforce and to attract others to return:

4A. Encourage healthcare facilities to upgrade information systems and patient care systems to reduce the documentation load and physical work of providing bedside care.

4B. Create education and practice partnerships to reduce stress of moving from
classroom to initial job for new graduates.

4C. Develop mentoring curricula through public-private partnerships (i.e. nursing programs/schools and healthcare systems) to prepare practicing nurses to support new graduates.

4D. Encourage collaboration among nursing leaders and professional nursing organizations to share successful approaches to nurse retention in Virginia.

4E. Investigate opportunities with regional and local medical centers and health systems to offer reduced work opportunities to retirement-aged practicing nurses and faculty.
APPENDIX A

HB 2818 Supply and Demand for Nurses in Virginia

Adds to the duties of the State Council of Higher Education the responsibility for developing, in cooperation with institutions of higher education, the Board of Nursing, and the Advisory Council on the Future of Nursing in Virginia, a strategic statewide plan to ensure an adequate supply of nurses in Virginia. The Council is also directed to recommend to the Governor and the General Assembly such changes in public policy as may be necessary to meet the state's current and future need for essential nursing services. The Advisory Council's statute is amended to require it to develop recommendations to resolve issues pertaining to nurse education, recruitment, and retention and to report its recommendations to and cooperate with the State Council of Higher Education and the Board of Nursing in the development of a strategic statewide plan to ensure an adequate supply of nurses.
APPENDIX B

Current Projections for Supply and Demand of RNs in Virginia

2000
Total number of practicing nurses: 45,300
Total Demand: 49,200
Shortfall: 3,900
Percentage Shortfall: 8%

2005
Projected number of practicing nurses: 47,200
Total Demand: 54,700
Shortfall: 7,500
Percentage Shortfall: 14%

2010
Projected number of practicing nurses: 48,100
Total Demand: 59,900
Shortfall: 11,800
Percentage Shortfall: 20%

2015
Projected number of practicing nurses: 48,000
Total Demand: 64,800
Shortfall: 16,800
Percentage Shortfall: 26%

2020
Projected number of practicing nurses: 47,000
Total Demand: 69,600
Shortfall: 22,600
Percentage Shortfall: 32%
Toward determining the potential for enrollment growth in Virginia’s nursing degree programs, the staff of the State Council of Higher Education for Virginia (SCHEV) conducted an informal Internet survey in Winter 2004. Four-year and two-year (both public and private) institutions (including all 23 community colleges) were included in the poll. The provosts/academic vice presidents of these institutions were contacted via electronic mail and asked to identify current and future efforts to address the Commonwealth’s growing shortage of nurses. Specifically, institutions were asked to provide data for the following items: current enrollment by degree, strategy for enrollment expansion, year of initiation of strategy, yearly increase in enrollment by degree, and additional resources needed for implementation of their strategy.

A total of 27 institutional responses were received. Of the 35 institutions of higher education in Virginia with nursing education programs, 24 responded. In addition, two institutions that maintain partnerships with established nursing education programs replied, as did one institution without a nursing program or partnership. Plans to increase enrollment within their nursing program(s) or plans to create a new nursing program were cited by ALL 27 respondents.

Overall, the projections for new enrollment growth ranged from 10 to 150 students, with estimated costs of implementation ranging from $5,000 to $1.5 million. Despite current funding exigencies, over half of the nursing programs that responded indicated that they are already in the process of expanding and/or have recently expanded their enrollment. However, the majority of respondents also stated that additional resources would be necessary for future enrollment growth and/or to sustain any growth that has already been obtained.

The most commonly cited resource needs included funds for additional faculty. In addition, many institutions indicated a need for additional physical space and greater access to clinical sites. Similar appeals were made in a 2002 survey conducted by the Virginia Board of Nursing (BON) (see Appendix D). In the BON survey, programs reported needs for larger classrooms, more clinical laboratory space and equipment, and more qualified part- and full-time faculty.
APPENDIX D

Summary of 2002 Board of Nursing Survey of Nursing Programs

A survey was sent in November 2002 to all thirty eight (38) program heads in Virginia who’s schools offer a nursing program preparing students for registered nurse licensure. The response rate was as follows:

- Of the 18 Associate Degree programs, 17 program heads responded (94% response rate)
- Of the 13 Baccalaureate programs, 7 program heads responded (54% response rate)
- Of the 7 Diploma programs, 6 program heads responded (86% response rate)

The survey consisted of three questions requesting information related to increasing student enrollment; 1) identify plans for increasing student enrollment; 2) identify specific resources needed to respond to the demand of increased enrollment; and 3) an open-ended question that was directed toward other plans to alleviate the nursing shortage.

Responses to these questions ranged from no increase in enrollment, to an increase of 15 to 50 students per year, and hopes to increase enrollment by 30%, depending on financial support. Some programs reported offering an evening and weekend class to respond to increased enrollment. The consistent theme for resources needed were threefold: faculty, funding and space. Programs report needing larger classrooms, more clinical laboratory space and equipment, more qualified full-time and part-time faculty. Some programs are working with local hospitals and nursing homes to help pay for the student’s education. Funding is also needed for “state of the art” technology simulation equipment for the skills lab. Recruitment efforts center around targeting middle school groups, high school groups, school guidance counselors, as well as recruiting technical education students from the practical nursing programs.