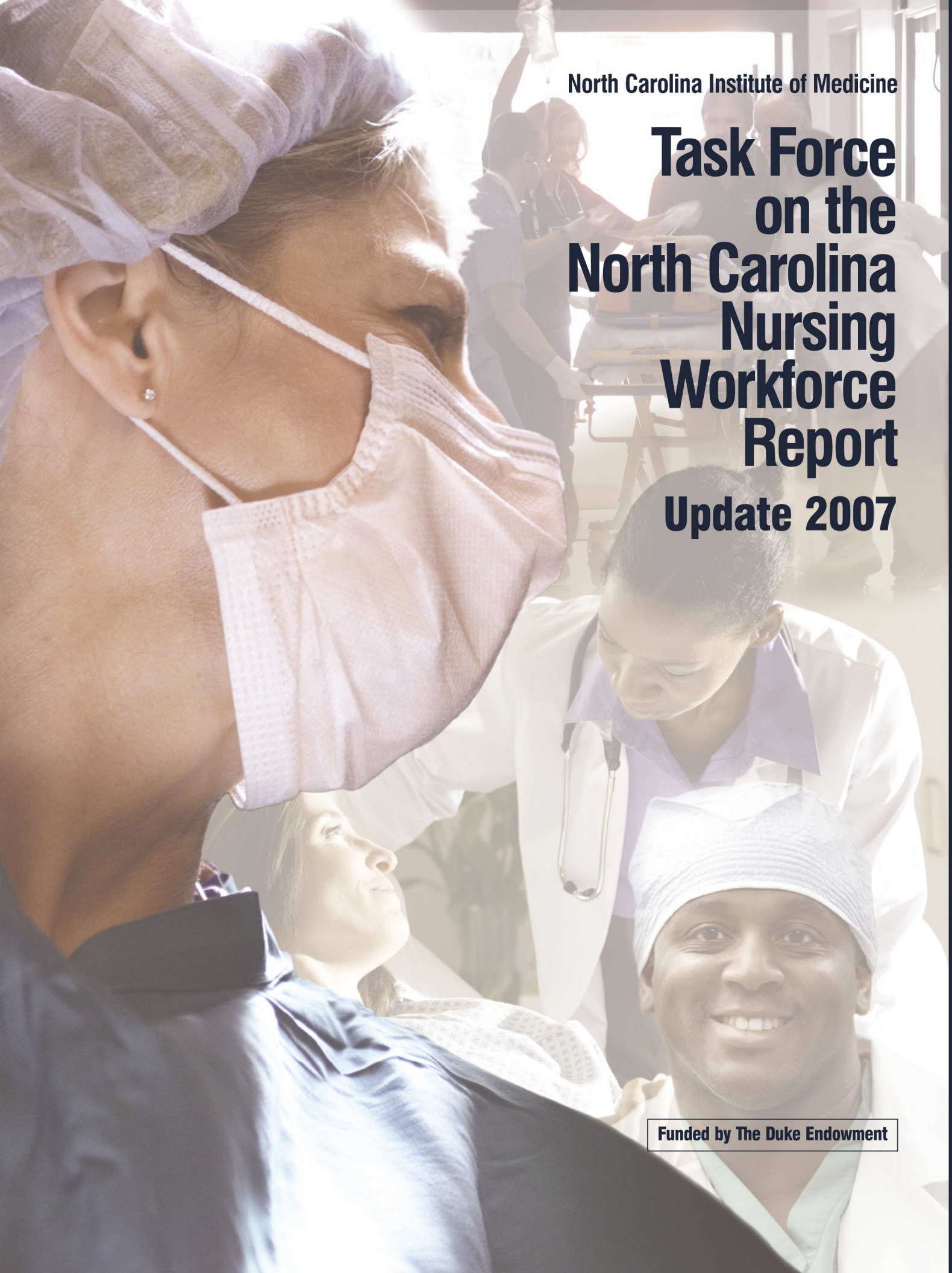

North Carolina Institute of Medicine

Task Force on the North Carolina Nursing Workforce Report

Update 2007

Funded by The Duke Endowment

North Carolina Institute of Medicine

Task Force on the North Carolina Nursing Workforce Report

Update 2007

Initial Task Force Work in Collaboration With

The North Carolina Nurses Association

The North Carolina Center for Nursing

The North Carolina Board of Nursing

The North Carolina Hospital Association

The North Carolina Area Health Education Centers Program

The 2007 Update to the 2004 North Carolina Institute of Medicine *Task Force on the North Carolina Nursing Workforce Report* shows that significant progress has been made in addressing the nursing workforce shortage, but that more work is needed. In total, progress was made in implementing almost 90% of all the recommendations. We want to thank all the people and organizations across the state that helped to implement recommendations from the 2004 Nursing Workforce report.

The Task Force on the North Carolina Nursing Workforce made recommendations in eight areas: nursing faculty recruitment and retention, RN education programs, PN education programs, nurse aide education programs, transitions from nursing school to nursing practice, nursing workforce environments, advanced practice registered nurses, and building an interest in nursing as a career. The lack of nursing faculty was identified as one of the primary barriers to the expansion of nursing programs. Progress has been made in addressing this problem with the funding of a nursing faculty scholars program and the expansion of the number of nurses trained with masters degrees in nursing education. In addition, most of the nursing schools have expanded their enrollment and new nursing programs have been established. Between 2003-2006, there was a 35.5% increase in new enrollment in PNE programs, an 11.5% increase in enrollment in ADN programs, and a 33.8% increase in prelicensure BSN programs. Interest in nursing remains high, with most programs unable to accept all qualified applicants. The number of nurses the state is producing has also increased. During the same time period, there was a 28% increase in nursing graduates from all entry-level RN programs in the state.

Progress has also been made in implementing other recommendations. For example, the Board of Nursing amended its rules to require more focused direct patient care for nursing students (to help in the transition from education to the workforce). Since the release of the report, additional North Carolina hospitals have received national Magnet recognition which is awarded for excellence in nursing services. The NC Nurses Association developed a state recognition program to acknowledge other nursing employers who provide a positive work environment for nurses.

This report highlights the progress made to implement the Task Force's recommendations, as well as the outstanding challenges which have prevented further progress. We, as a state, have made significant progress in addressing nursing workforce challenges, but more needs to be done to ensure that we have the high quality nursing workforce needed to meet the state's growing healthcare needs.

Pam Silberman, JD, DrPH
President & CEO
NC Institute of Medicine
March 2008

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NORTH CAROLINA INSTITUTE OF MEDICINE
2004 TASK FORCE ON THE NORTH CAROLINA NURSING WORKFORCE REPORT
2007 UPDATES TO RECOMMENDATIONS

There has been substantial progress in implementing the recommendations of the NC IOM Task Force on the Nursing Workforce. In total, progress has been made in implementing 89% of the recommendations, in whole or in part. In addition, many groups are continuing to work on these recommendations.

Total recommendations: 73
Fully implemented: 13 (18%)
Partially implemented: 52 (71%)
Not implemented or no progress made: 8 (11%)

NURSING FACULTY RECRUITMENT/RETENTION

Recommendation 3.25. PRIORITY RECOMMENDATION:
The Faculty Fellows Program should be enacted and funded to support the effort of BSN nurses who wish to pursue MSN degrees in preparation for nursing faculty careers.
PRIORITY
Full Implementation

The lack of nursing faculty continues to be one of the biggest challenges facing the state. Interest in nursing is high, but programs are generally able to admit fewer than 60% of their qualified applicants.[1] The NC Center for Nursing found that there were 49 full time and 25 part-time faculty positions vacant in North Carolina nursing programs in 2005. The number of vacancies increased to 61 full time and 37 part time positions in 2006. Of these, 71% of the full-time positions were in BSN programs and 25% were in ADN programs. Of the part time positions, 54% were in ADN programs, 38% were in PNE, and 5% were in BSN programs.

There has been a lot of effort to expand the number of nurse educators with masters degrees. Immediately after the Task Force released its report in 2004, the NC Department of Commerce, NC Hospital Association, NC Community College system, University of North Carolina system, NC Department of Health and Human Services, NC Area Health Education Centers, JobLink Career Center system, and local Workforce Development Boards applied for and received a grant from US Department of Labor grant which was devoted to workforce training. The NC grant, called Project Health, was used to train nurses and direct care workers. Part of these funds were allocated to train 32 nurse educators (26 of whom have graduated; the other 6 are expected to graduate in 2008 or 2009). The fellowship required that students teach in nursing programs or pay back their loans. Of the 26 who graduated, 22 of them are currently teaching in a community college or university nursing program.

The NC General Assembly appropriated $1.2 million in FY 2006-2007 to create the Nursing Faculty Fellows Program. The program supports 80 annual $15,000 scholarships for nurses to pursue a masters or

[1] Lacey LM, McNoldy TP. North Carolina Trends in Nursing Education: 2003-2006. NC Center for Nursing. August 2007.

doctoral degree.[2] Advanced degrees enable nurses to become faculty members at the community college or university level. Recipients may receive two years of funding for masters degree programs and three years of funding for doctoral programs. One year of loans is forgiven for each year taught in an approved North Carolina nursing program. The Nurse Scholars Commission determines the recipient selection criteria. The funds became available for the 2007 spring semester.

The House appropriated $1.2 million in each year of the biennium to continue this funding (HB 1473).[3] Priority will be given to Community College faculty needing an advanced degree to meet new accreditation standards for nursing programs. To date, 121 students have received nursing faculty fellowship funds.

Enrollment and graduation from MSN programs has grown over the last five years. Within the University of North Carolina system, the number of students who graduated from a MSN programs grew from 221 (2002-2003) to 294 (2006-07), or a 33% increase. Of these, the numbers of students who graduated with a masters degree in nursing education increased from 11 in 2002-2003, to 29 in 2006-07, with an additional 11 obtaining a nursing education certificate.[4] Further, the number of students who graduate with MSN degrees in nursing education continues to grow. According to The University of North Carolina system, one campus alone will produce 34 nurse educators in 2007-08. In addition, the University of North Carolina system now offers three doctoral programs in nursing.[5] The enrollment in doctoral programs has grown from 53 in 2002 to 110 in 2007. This growth in enrollment will produce approximately 15 doctoral graduates per year.

The nursing programs in the independent colleges and universities have also expanded enrollment in MSN programs in nursing education. Queens College recently began a MSN program in nursing education. Six students were enrolled in 2007, plus one post-masters student was working toward a certificate. At Duke, there were 64 students in various stages of completing a MSN in nursing education. At Gardner Webb, approximately 30 students enrolled in MSN programs have expressed interest in nursing education.

Although the Task Force focused on producing more nurses with masters degrees in nursing education, other masters trained nurses are also hired as teachers. Thus, focusing exclusively on the number of nurses with masters degrees in nursing education undercounts the workforce who can fill nurse faculty positions.

Recommendation 3.20:

The NC General Assembly should increase funding to the NC AHEC to offer off-campus RN-to-BSN and MSN nursing programs using a competitive grant approach which is available to both public and private institutions statewide. (Rec. # 3.20)

<u>Not Implemented</u>

Although the AHEC program requested new funding from the NC General Assembly to expand its nursing grants for educational mobility programs to include both public and private institutions, no additional funds were provided for 2006-2007. AHEC continued its programs at the current funding

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[2] NCGS §90-171.95.

[3] UNC#56 of the Conference Committee Report on HB 1473.

[4] Enrollment in MSN programs has grown faster than has the graduation rates. In 2002, The University of North Carolina system had 679 students enrolled in nursing masters program. This grew to 1,278 (88% increase) by 2007.

[5] The three doctoral programs in nursing are located at The University of North Carolina at Chapel Hill, East Carolina University and The University of North Carolina at Greensboro. In addition, Duke University offers a doctoral program in nursing.

levels and will continue to request additional funds in future years. For 2006-2007, AHEC funded two BSN programs and one MSN program and two planning grants for new BSN and MSN projects. For 2007-2008, AHEC provided funding for two BSN programs and one MSN program as well as two certificate programs to prepare nurse educators and psychiatric mental health nurse practitioners.

In addition to the AHEC funded initiatives, private philanthropies have also helped support these off-campus initiatives. For example, The Duke Endowment funded the Duke University School of Nursing through Southern Regional AHEC (SR-AHEC) to provide an online MSN education program to students who intend to teach in North Carolina community college ADN programs. The online program has graduated 30 MSN-prepared nurses who plan to teach nursing in community colleges. Twenty-seven MSN-prepared nurses were expected to graduate in 2007.[6]

Recommendations 3.21:

Nursing doctoral programs should be expanded. (Rec. # 3.21)

<u>Full Implementation</u>

Both the UNC System and the NC Independent Colleges and Universities have opened a new doctoral program. The University of North Carolina at Greensboro (UNC-G) opened its program in Fall 2005,[7] and Duke University opened its program in Fall 2006.[8] Four programs now offer doctorate degrees in North Carolina (Duke University, University of North Carolina at Chapel Hill, East Carolina University, and University of North Carolina at Greensboro). Total enrollment in North Carolina's doctoral programs has increased from 42 students in 2000 to 102 in 2006-2007 (UNC-Chapel Hill, 52; ECU, 24; UNC-G, 22; and Duke 4).

RN EDUCATION PROGRAMS

Recommendations 3.1. PRIORITY RECOMMENDATION:

NC Nursing Programs should increase the production of prelicensure RN and LPN nurses.

a. **Production of prelicensure RNs should be increased by 25% from the 2002-03 graduation levels by 2007-08. This is a statewide productivity goal, not necessarily a goal for individual nursing education programs.**
b. **The NC Community College System, University of North Carolina System, private colleges and universities, and hospital-based programs affected by these goals should develop a plan for how they will meet this increased production need. A representative of each system or association should jointly convene a planning group to address these issues. The plan should be reported to the NC General Assembly in the 2005 session. Each year thereafter, the nursing education programs should provide a status report to the NC General Assembly showing the extent to which they are meeting these goals and production needs should be modified based on job availability for new graduates,**

[6] The grant pays for part of the nursing directors' salaries, library resources, preceptor support for student teaching, and 33% of student tuition. The students cover 33% of their tuition, and Duke covers the remaining 33%.

[7] The nursing doctoral program at the University of North Carolina at Greensboro (UNC-G) began in Fall 2005 with 12 students and admitted 10 additional students in Fall 2006 for a total of 22 students. Two students were admitted for Spring 2007 and seven were admitted for Fall 2007. Overall, the UNC-G program plans to have sustained enrollments of 30 students, graduating 8-10 each year.

[8] In Fall 2006, Duke University School of Nursing had four enrolled students in its new doctoral program. With a goal of admitting four to six students each year, Duke plans to sustain enrollments of 20-25 students by 2010.

changes in in-migration or retention, or overall changes in the demand for nurses in North Carolina.

c. **Greater priority should be placed on increasing production of BSN-educated nurses in order to achieve the overall Task Force goal of developing a nursing workforce with a ratio of 60% BSN: 40% ADN/hospital diploma graduates.**
Partial Implementation (full implementation of production growth, no change in ratios)

Efforts have been made by the NC Community College System, UNC System, private colleges and universities, hospital-based programs, and private philanthropies to expand prelicensure nursing programs in North Carolina. Between 2003 and 2006, the *total* number of students enrolled in entry-level RN programs in North Carolina increased by 1,305 (18%). *New enrollments* increased by 10% from a total of 4,696 in 2003 to 5,149 in 2006.[9] New enrollments in prelicensure BSN programs increased 18% (from 1141 in 2003 to 1344 in 2006). New enrollment in prelicensure ADN programs increased 11.5% (from 3267 in 2003 to 3642 in 2006), while new enrollment in diploma programs declined by 43% (from 288 to 163). During this time period, Presbyterian changed from a diploma program to an ADN program, accounting for most of the decline in hospital diploma programs and approximately 43% of the growth in ADN programs.

The recommendation to increase the number of RN students graduated by 25% over 2003 levels has been met. See Table 1 below for the annual number of new RN graduates by program type. The overall increase between 2003 and 2006, statewide, was 28.6%, although there was a decline in hospital diploma nursing graduates. One of the diploma programs—Presbyterian—changed to an Associate Degree program in 2004. This increased the graduates from ADN programs but decreased the graduates from hospital diploma programs. During this four year period, the number of graduates from BSN programs increased by 41%.

Table 1. Number of graduates from all entry-level RN programs in North Carolina: 2003-2006

Program Type	**2003**	**2004**	**2005**	**2006**	**% Change 2003 - 2006**
Hospital diploma	135	139	110	101	- 25.2%
ADN	1804	1842	2359	2292	+ 27.1%
Prelicense BSN	690	855	934	973	+ 41.0%
Prelicense MSN	0	0	19	14	na
Total RN Graduates	**2629**	**2836**	**3422**	**3380**	**+ 28.6%**

Note: ADN numbers include both Generic RN students and LPN Advanced Placement Students. Prelicense BSN numbers include students graduating from both traditional and accelerated BSN programs. In 2003 there were three hospital diploma programs. One of them converted to an ADN program between 2004 and 2005.
Source: North Carolina Center for Nursing, Annual School Survey figures reported to the NC Board of Nursing.

There has been a 27% increase in the number of ADN graduates between 2003-2006. Since 2005, three community colleges have been granted Initial Approval Status by the NC Board of Nursing to add associate degree nursing programs and will graduate students beginning in 2007. The addition of these

[9] Total enrollment includes all the nursing students enrolled in a particular year. Total enrollment would include new enrollees, as well as nursing students in their second or third year of school. New enrollees are those that enrolled in a particular year. Examining new enrollees gives a better indication of the change in size of entrance class from year to year. Lacey LM, McNoldy TP. North Carolina Trends in Nursing Education: 2003-2006. NC Center for Nursing. August 2007.

programs has increased the number of available enrollment slots in the System by 190 for 2005-2007. In addition, Carolinas College of the Health Sciences has increased enrollment by 57% since 2002.[10]

The UNC System established a goal of doubling the number of nursing graduates by 2009-2010 and is on schedule to meet this goal (Table 2). Two new prelicensure programs have been established, one at the University of North Carolina at Pembroke and one at Fayetteville State University. Enrollment in undergraduate nursing programs in the UNC system has increased from 2,109 in 2000 to 2,774 in 2005 (32%). The number of RN-to-BSN students in the UNC System is also expected to double from 283 (2002-03) to 649 in 2009-2010.

Table 2. UNC Nursing Program graduates (2003-2010, actual and projected)

	2002-03	**2005-06 actual**	**2006-07 projected**	**2007-08 projected**	**2008-09 projected**	**2009-10 projected**
Prelicensure BSN	586	793	835	969	1088	1178
Accelerated BSN	36	83	121	140	223	242
RN-to-BSN	283	375	459	521	585	649
Total BSN	**905**	**1251**	**1415**	**1630**	**1896**	**2069**
Accelerated Alt. Entry MSN	0	14	30	30	30	40

Source: University of North Carolina System.

NC Independent Colleges and Universities also have made changes to increase enrollment in nursing programs. Duke University initiated a new, 16-month, accelerated BSN program and has graduated three classes since the 2002-2003 academic year. The first class (38 students) graduated in December 2003. Since that time, Duke has graduated 49-56 students each year. The most recent class (65 students) entered the program in late August 2007 and is expected to graduate in December 2008. Duke plans to admit 72 students next fall. The NC Board of Nursing has approved Duke for up to 128 accelerated BSN students. The principal barrier to program expansion at Duke is having enough clinical training sites.[11]

Recommendation 3.6. PRIORITY RECOMMENDATION:

The NC General Assembly should reclassify community college-based nursing education programs (ADN and PNE) as "high-cost" programs and provide additional funds ($1,543.39) per FTE student to cover the actual costs of operating these programs.

Partial Implementation

The request from the community colleges to reclassify nursing education programs as "high cost" was not fully implemented. However, in the 2005-2006 legislative session, the NC General Assembly provided $1 million in recurring funds to allow for weighted funding for nursing programs. Colleges may use these funds for nursing equipment and supplies or to supplement the salaries of nursing faculty.

[10] Carolinas College of Health Sciences (CCHS), a fully regionally accredited college, is a wholly owned subsidiary of Carolinas HealthCare System (CHS). CHS is a public entity, created by the NC Hospital Regulatory Act, and Carolinas College of Health Sciences is designated as a "quasi-public" institution.

[11] Although Duke was able and willing to expand their enrollment with a new building, an expansion would require the program to find additional collaborations with clinical entities that are willing to provide clinical training opportunities to Duke students.

In 2007, the NC Community College System (NCCCS) requested $14,180,000 for weighted funding for nursing programs. Bills were introduced in the 2007 General Assembly session to fund this and other allied health program needs in NCCCS. The final budget included $5.6 million in recurring funds to support allied health programs, including funds to purchase allied health equipment and supplies or to supplement the salaries of allied health faculty.[12] The $5.6 million can be used to increase funding for community college nursing programs along with other allied health programs, but this allied health funding that may be used to support nursing programs is not equivalent to the amount nursing programs would receive if they were reclassified to high cost programs.

Recommendation 3.8. PRIORITY RECOMMENDATION:

The NC General Assembly and/or private philanthropies should invest funds to enable NC community colleges to employ student support counselors specifically for nursing students and to provide emergency funds to reduce the risk of attrition for students in ADN and PNE programs.

Partial Implementation

The NC General Assembly and some of the philanthropies in North Carolina have provided funding to enable North Carolina community colleges to employ additional student support counselors or to provide mentoring or other retention programs.[13] In 2006, the NC General Assembly appropriated $3,557,430 for one additional financial aid staff member at each college. These funds are restricted to use for student services positions.

Recommendation 3.15. PRIORITY RECOMMENDATION:

The NC General Assembly should restore and increase appropriations to enable UNC System institutions to expand enrollments in their prelicensure BSN programs above current levels. These funds should be earmarked for nursing program support and funneled to university programs through the Office of the President of the UNC System. Funds should be allocated on the basis of performance standards related to graduation rates, faculty resources, and NCLEX-RN exam pass rates.

Full Implementation

As part of an Equity Study, the Board of Governors initiated a review of the UNC Funding Formula. Based on national data from the Delaware Cost Study data, the University adjusted its four levels of funding to reflect shifts in discipline costs. As a result of this analysis nursing moved from category three to category four, the highest category for funding. Nursing is now classified with engineering in terms of program cost. The NC General Assembly accepted these adjustments and now funds nursing at this higher level.

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[12] Sec. 122 of the Conference Report on the Continuation, Capital and Expansion Budget. http://www.ncleg.net/sessions/2007/budget/budgetreport7-27.pdf

[13] Foundations have provided support for support counselors, mentoring, and retention programs. For example, in 2005, the Annie Penn Community Trust gave $20,684 in operation funding to start a Nursing Coaching/Mentoring Program at Rockingham Community College (2005) and provided $20,300 for the second year of this program in 2006. The Kate B. Reynolds Charitable Trust awarded two grants for retention-type programs: $86,290 at the Health Education Foundation for Eastern North Carolina and $140,225 at Beaufort County Community College.

Recommendation 3.19. PRIORITY RECOMMENDATION:

The NC General Assembly and private foundations are encouraged to explore new scholarship support for nursing students in North Carolina's schools of nursing.

Partial Implementation

The General Assembly has not increased funding to the Nursing Scholars program since it was developed in 1990. While the NC General Assembly did not appropriate new funding for nursing scholarships (other than the funds appropriated for the Nursing Faculty Fellows Program), private foundations have provided new scholarship support for nursing students. The NC Foundation for Nursing (of the NC Nurses Association) through sales from the First in Nursing license plates and Moses Cone-Wesley Long Community Health Foundation have each awarded scholarships to nursing students.

In addition, the NC Department of Commerce was able to secure federal funding to support scholarships for masters training for nurses who will teach in community colleges (See Recommendation 3.25 on page 1).

Recommendation 3.24. PRIORITY RECOMMENDATION:

The NC General Assembly should increase funding to the Nurse Scholars Program to expand the number and types of awards and amount of support given. Specifically:

a. Increase the award amount for each bachelor's degree category to $6,500, which is equal to the award amount for the Teaching Fellows Program, and increase each half-time slot from $2,500 to $3,250. ($6,500 would cover approximately 47% of the $13,815 estimated cost of education for an undergraduate nursing student in a public university in North Carolina).

b. Increase the award amount for associate degree and hospital diploma categories from $3,000 to $5,600 per award to cover approximately 47% of the $11,986 cost of education.

c. Increase the maximum full-time award amount for each masters level slot from $6,000 to $6,300 to cover approximately 47% of the total $13,481 estimated annual cost of these programs and increase each half-time slot from $3,000 to $3,150.

d. If items a-c above are rejected, it is recommended that all bachelor's level awards be made equal in value. Presently, depending upon the specific bachelor's funding category, the maximum award may be either $3,000 or $5,000. To make all of the full-time bachelor's level awards equal would cost roughly an additional $450,000 per year or would necessitate reducing the number served by approximately 100 participants.

e. Funding categories of the Nurse Scholars Program should be expanded to include students enrolled at least half-time in study leading to an RN-to-MSN degree and to recipients enrolled at least half-time in study leading to a diploma, ADN, or BSN degree.

f. The Nurse Scholars Program needs to be expanded to grant support to both full- and part-time students in nursing doctoral programs.

Partial Implementation

In 2006, the NC General Assembly authorized the State Education Assistance Authority (SEAA) to increase the award for Nurse Scholars up to $6,500/year.[14] Prior legislation had specified the amount of funding that specific categories of nursing students could receive. This prior law authorized SEAA to pay community college transfer students and RN-to-BSN students enrolled at four year institutions $3,000 per year, which was less than the $5,000 SEAA could pay nursing students who enrolled as freshman in these same institutions. These students could be sitting in the same classroom seeking the same degree but were

[14] Section 9.9(a) of Session Law 2006-66. Codified in NCGS §90-171.61.

funded differently. The Commission used the new legislation to address the funding inequity for students seeking BSNs, funding them all at $5,000. In addition, the Commission increased the award for MSN students up to $6,500 (an increase of $500/year). These changes will not significantly impact the number of students funded. Currently, SEAA provides $3,000 in support for ADN students, $5,000 for BSN students, and $6,500 for MSN students.

SEAA requested an increase of $2.75 million for the Nurse Scholars program which was not funded. The SEAA will likely seek an increase in the SFY 2009-2011 budget as the total funding for this program has not increased in 15 years.

Recommendation 3.17. PRIORITY RECOMMENDATION:
Private institutions offering the BSN degree should be encouraged to expand their enrollments.
Partial Implementation

Some of the NC Independent Colleges and Universities (NCICU) have expanded their enrollment in BSN programs, while others have reduced enrollment (Table 3).[15] The net effect was a very small decrease in the numbers of new enrollees between 2003 and 2006.

Table 3. Enrollment in BSN programs

	2003				**2006**				
	Prelicense BSN	RN-BSN students	Accel. BSN	Total	Prelicense BSN	RN-BSN students	Accel. BSN	Total	% change 2003-06
Queens College/ Presby-terian [1]	25	9		34	41	3		44	-100%
Barton College	32	13		45	48	5		53	17.8%
Lenoir Rhyne	99	3		102	35			35	-65.7%
Gardner Webb		23		23		61		61	165.2%
Lees McCrae College		24		24		17		17	-29.2%
Duke RN			50	50			58	58	16%
Total	**156**	**72**	**50**	**278**	**124**	**86**	**58**	**268**	**-3.6%**

Note: Presbyterian was a hospital diploma program in 2003. In 2004 the program changed to an ADN degree program with a special dispensation from the legislature that allowed them to grant degrees. In 2006 the Presbyterian ADN program entered into a partnership with Queens College. There are now two types of degrees

[15] The seven members of the NCICU who have nursing programs have formed a focus group for planning. These institutions are geographically scattered, and are diverse as to mission, structure, and relative wealth. Most of the growth in nursing education for these schools has been at BSN and MSN and higher levels. The NCICU nursing deans are planning to reconvene within the next calendar year to assess developments since the last report and to have dialogues about future plans for growth.

granted through the "Presbyterian School for Nursing at Queens College," an ADN degree and a BSN degree. The Table only includes the BSN students.

Recommendation 3.18. PRIORITY RECOMMENDATION:

North Carolina residents with a baccalaureate degree who enroll in an accelerated BSN or MSN program at a North Carolina private college of nursing should be eligible for state tuition support equivalent to students in these institutions pursuing the initial undergraduate degree.

Full Implementation

The recommendation was implemented. North Carolina residents both with and without a baccalaureate degree may be eligible for state tuition support at private colleges and universities if they are three-quarter time or full-time students and are taking coursework to become a licensed nurse. Financial Aid Offices will work with students to determine eligibility.[16]

Recommendation 3.28. PRIORITY RECOMMENDATION:

The Comprehensive Articulation Agreement between the NC Community College System and the UNC System campuses (Associate in Arts degree) and the bilateral articulation agreements for students with an Associate in Applied Science degree (AAS) in Nursing and the UNC System, should be carefully evaluated and improved by the Transfer Advisory Committee (TAC) so that students wishing to advance from one level of nursing education to another will experience these transitions without course duplication.

a. Associate Degree nursing curricula should include non-nursing courses that are part of the Comprehensive Articulation Agreement (CAA) between the NC Community College System and the UNC System.

b. The UNC System and NC Independent Colleges and Universities offering the BSN degree should establish (and accept for admission purposes, UNC System-wide) General Education and Nursing Education Core Requirements for the RN-to-BSN students who completed their nursing education in a North Carolina community college or hospital-based program after 1999.

Partial Implementation

The Comprehensive Articulation Agreement between the NC Community College System and the UNC System includes the general education courses included in the NC Community College System Associate Degree Nursing programs. There is a template for pre-major articulation which permits universities to admit AAS nursing students as juniors. However, individual nursing programs have additional professional admission requirements and these requirements vary across programs. This continues to be a difficulty for ADNs who wish to pursue their BSN degrees.

At least one hospital-based program has attempted to streamline its coursework with a school in the UNC System. Carolinas College of Health Sciences has been proactive in encouraging its alumni and other Carolinas Healthcare System ADN and diploma graduates to pursue a BSN or MSN. To that end, Carolinas College of the Health Sciences has partnered with UNC-Charlotte to make RN-to-BSN and RN-to-MSN education more accessible to ADN and diploma nurses. Classes are now offered on the Carolinas College of the Health Sciences campus once a week, with UNC-Charlotte providing the faculty and Carolinas College of the Health Sciences helping with recruitment and classroom space. With the

[16] Accelerated BSN (ABSN) students who are seeking a second undergraduate degree are eligible for only $10,000 of federally subsidized low interest loans. Because ABSN programs require intense scheduling, students cannot hold part-time jobs and often must borrow funds on which to live (in addition to paying tuition).

recent merger of NorthEast Medical Center and Carolinas HealthCare System, Carolinas College and Cabarrus College of Health Sciences (owned by NorthEast, now CMC-NorthEast) are seeking additional articulation avenues for graduates of both colleges, since Cabarrus offers a BSN completion program.

Recommendation 3.2:

The NC General Assembly, NC Board of Nursing, and other relevant educational authorities limit approval for (and funding to support) enrollment growth to those nursing education programs where attrition (failure to complete) rates are lower than the three-year average attrition rate for that category of education program (BSN, ADN, or PNE) and the pass rates on the NCLEX-RN or NCLEXPN examination exceed 80%.

Full Implementation

The NC Board of Nursing amended Education rules .0321 and .0320, which became effective December 1, 2005.[17] With these new rules, enrollment growth is limited to nursing programs that have a three-year average student retention rate equal to or higher than the state average for the program type and that also maintain a three-year average passing rate at or above 95% of the national pass rate for NCLEX.

Recommendation 3.3:

In order to accurately reflect nursing education program capacity, nursing education programs, in consultation with the NC BON, should realign the number of enrollment slots approved for each nursing education program. Nursing programs that are unable to fill their approved enrollment slots within a range of 85% to 115% (100 +/- 15%) for a period of three consecutive years should eliminate these slots from the total number of approved slots by December 31, 2006. The NC BON should mandate that all nursing education programs submit updated information by January 2006 verifying support for their approved slots after elimination of those slots unfilled for three years (since December 31, 2001). These adjustments will be reviewed by the NC BON in 2007.

Full Implementation

The North Carolina Board of Nursing reported that the approved numbers for all nursing education programs were realigned in January 2005 to reflect actual capacity. The NC Board of Nursing also amended Education rule .0321, effective December 1, 2005, to require programs to report planned decreases in "approved student enrollment number" to reflect program capacity.[18]

Recommendation 3.4:

Clinical facilities (hospitals and nursing homes, particularly), through their statewide trade associations, and in collaboration with all nursing education programs in their respective geographic areas/regions, should undertake to foster a more transparent and equitable system for the allocation of clinical training sites among nursing education programs on a sub-state regional basis.

Partial Implementation

In response to the nursing shortage and the report of the NC IOM Task Force on the Nursing Workforce, the UNC Board of Governors also asked AHEC to work with university and community college nursing programs to develop the additional clinical training capacity needed to support enrollment growth

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[17] North Carolina Administrative Code. Title 21 Occupational Licensing Boards. Chapter 36: The North Carolina Board of Nursing. Available at: http://www.ncbon.com/forms/NCAdminCode.pdf

[18] North Carolina Administrative Code. Title 21 Occupational Licensing Boards. Chapter 36: The North Carolina Board of Nursing. Available at: http://www.ncbon.com/WorkArea/showcontent.aspx?id=1288.

throughout the state. AHEC is hosting a summit of nursing educators and the practice community on October 31, 2007. The summit, "Expanding Clinical Capacity through Innovation and Collaboration: A North Carolina Nursing Summit," will explore issues needed to expand clinical training capacity, including the use of technology, deployment of additional faculty in key clinical teaching sites, and other barriers that nursing leaders identify related to expansion of clinical training experiences for students.

Recommendation 3.5:

Nursing education programs and clinical agencies should work together to develop creative partnerships to enhance/expand nursing education programs and help ensure the availability and accessibility of sufficient clinical sites:

a. AHEC should convene regional meetings of nursing educational programs and clinical agencies to develop creative educational opportunities for *clinical* nursing experiences.

b. Nursing education programs of all types at every level should work together to develop creative educational collaborations that promote *educational* quality, efficiency, and effectiveness.

<u>Partial Implementation</u>

Some action has been taken to make more clinical training sites available. The North Carolina Center for Nursing assisted AHEC in identifying potential new or expanded clinical sites for nursing students by adding a post-card response to their employer survey. Through this effort, 61 agencies indicated an ability to take additional students. Thirty-eight agencies that do not currently serve as clinical sites indicated an interest in having nursing students. Regional AHECs shared the agency names and contact people gathered from the survey with schools of nursing. In addition, AHEC funded 20 proposals for clinical nursing site development (FY 2007-2008). Twelve of the nursing programs that received grants were in the Community College System and eight programs were in the University System. The number of proposals, funded projects, and partners increased significantly over past years. In addition, AHEC is convening a summit of nursing educators and the practice community to explore the critical issues involved in expanding clinical training capacity (See Rec. 3.4 above).

All AHECs offer basic and advanced preceptor development workshops to promote quality and effectiveness of RN preceptors in clinical sites. In addition, many AHECs are working collaboratively with schools of nursing and clinical agencies to expand on the Northwest AHEC and Eastern AHEC models of Clinical Teaching Associates (CTAs). AHEC has provided funding in 2007-2008 for the planning and development of a CTA initiative in the Mountain AHEC Region. These RNs serve as clinical adjunct faculty for schools of nursing and accept responsibilities for groups of students at a clinical site. CTA courses, which are only open to nurses who have a BSN or higher education, meet the NC Board of Nursing requirements and offer students in-depth curriculum to prepare them for preceptor roles.

For 2007-2008 AHEC requested proposals from nursing programs that had human patient simulators and were willing to share them with nursing programs that had no access or limited access to simulation experiences for their students. Eleven nursing programs submitted proposals. Due to limited available funding, AHEC was able to provide only one grant this year. The funded grant was at East Carolina School of Nursing and its partner Pitt Community College.

In addition to AHEC, some of the individual nursing programs have developed strategies to increase clinical capacity. For example, Duke University has accelerated its approach to joint appointments (education/clinical) and has a three-year HRSA grant, which has helped increase the number of clinical instructors and preceptors. The Carolinas College of Health Sciences and UNC-Charlotte has created partnerships that enhance/expand nursing education programs. The UNC-Charlotte BSN program is

offered on the Carolinas Medical Center/Carolinas College of Health Sciences, and the MSN in Nurse Anesthesia is offered jointly by Carolinas Medical Center and UNC-Charlotte.

The NC Center for Nursing (NCCN) grant program funded two proposals in the last two cycles that address the nursing faculty shortage. A grant funded in 2005 to AB Technical Community College and partners developed alternative pathways for practicing nurses to meet the proposed requirements for nursing faculty. The program developed into a continuing education program offered by Western Carolina University. In the 2005 grant cycle, NCCN also awarded a grant to ECU School of Nursing to investigate the prospect of encouraging men with health care experience being discharged from the military (in eastern North Carolina) to consider attending a nursing program in North Carolina. A grant funded in 2006 to Wake Forrest University Baptist Medical Center extended a pilot program that prepared male and minority nurses at WFUBMC to extend the faculty at local nursing programs through a mentoring program that prepared practicing nurses to become clinical instructors.

Recommendation 3.7:

Recognizing the current retrospective way in which the community college programs develop and fund new initiatives, the NC General Assembly should give consideration to an alternative method of funding prospective program expansions within the NC Community College System that will allow these institutions to add students to existing programs or add new programs where needed (and where past program performance, quality, and efficiencies meet minimum standards for expansion and approval of the NC BON) without the necessity of securing outside (private or local) funding for program initiation.

Partial Implementation

No action taken by the NC General Assembly.

While the funding methodology was not changed at the community college level, some of the North Carolina foundations provided funding to community colleges to help create or expand nursing programs. For example, Kate B. Reynolds Trust awarded approximately $2.2 million to nursing programs in North Carolina schools from 2003-2008, of which approximately $1.7 million was used to support or expand community college nursing programs.[19] The Duke Endowment awarded approximately $7.2 million to support nursing education programs in North Carolina from 2003-2008, of which $390,633 was directed to community college programs.[20] In addition, several hospitals have contributed to the up-front costs of

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[19] Kate B. Reynolds awarded the following: $230,000 to Brunswick Community College's new ADN program (2005-2007); $126,961 to Caldwell Community College for paramedic-to-RN programs (2005-2008); $250,769 to Fayetteville State University to expand nursing education programs (2005-2008); $188,030 to the South Piedmont Community College nursing program (2006-2007); $95,000 to the Carteret Community College new ADN program (2005-2007); $130,630 to the Asheville-Buncombe Technical Community College for an expanded nursing assistant program (2004-2005); $151,806 to the James Sprunt Community College LPN-to-RN program (2004-2006); $126,440 to McDowell Technical Community College for the PN-to-LPN program (2004-2006); $95,890 to the UNC Chapel Hill School for a nursing summer externship (2004-2007); $430,816 to Bladen Community College to begin a new ADN program (2004); $229,270 to Fayetteville Technical Community College to expand its ADN program (2003-2005); and $111,500 to Vance-Granville Community College to expand the ADN program (2003-2005).

[20] Between 2003-2008, The Duke Endowment awarded nursing education grants to three community colleges, including a $140,255 grant to Beaufort County Hospital (to expand the nursing education program at Beaufort Community College), $165,000 to Carteret General Hospital (to expand the ADN program at Carteret Community College), and $85,408 to Rutherford Hospital (to expand the Community College nursing program). In addition, The Duke Endowment gave grants to the following organizations to support nursing education: $150,000 to Blue Ridge Healthcare System (BSN program), $200,000 to Cabarrus Memorial Hospital to construct a new building for the Cabarrus College of Health Sciences Education, $146,998 to Charlotte Mecklenburg Hospital to expand the nursing

expansions, including First Health (Sandhills Community College), Southeastern Regional Medical Center (UNC-Pembroke, Robeson ADN program), Johnston Memorial (Johnston Community College ADN program), Pitt County Memorial (Beaufort County Community College ADN program), Wayne Memorial (Wayne Community College). Most of these funds were for program expansion.

Recommendation 3.9:

North Carolina should create incentives and provide the necessary infrastructural supports to enable any non-accredited nursing education programs operating within the NC Community College System to pursue and attain national accreditation by 2015.

Partial Implementation

In the 2007 legislative session, the NC Community College System requested $1,157,267 in recurring funds and $6,061,500 in non-recurring funds to provide for the salary differentials, cost of degree completion, and actual accreditation expenses to move all associate and practical nursing programs to full accreditation status by the National League for Nursing Accreditation Commission (NLNAC) by 2015 as required by the NC Board of Nursing and to provide annual expenses for those programs already accredited. The NC Board of Nursing established the requirement for all nursing education programs leading to initial licensure to be accredited by a national nursing accrediting body by December 31, 2015. This includes ADN programs.[21] Although funding was not allocated specifically for this purpose, some of the new funding for allied health can be used to support faculty salaries (See Recs. 3.6, 3.9). Even absent full funding to support the costs of accreditation, some of the North Carolina community colleges have decided to seek accreditation.

Recommendation 3.10:

The NC Community College System should include in the comprehensive data and information system currently under development data on nursing student applications, admissions, retention, and graduation for use by the NC Community College System and the NC Board of Nursing.

Partial Implementation.

The NC Community College system has not changed its data collection system. However, data on admissions, graduation, and retention must be reported from the nursing programs to the NC Board of Nursing in a consistent format.

The NC Center for Nursing publishes a report each year that summarizes the information reported to the NC Board of Nursing. That report details the number of total applicants to nursing education programs, the number of new students admitted each year, and the number of total student enrollments, broken down by student and program type. In addition, trends over time in the number of qualified applicants, admissions, and enrollments for each type of nursing education program in the state also are reported. This report summarizes all Associate Degree Nursing programs together, including those outside of the Community College System.

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school, $318,160 to Charlotte Mecklenburg Hospital Authority to support Carolina College of Health Sciences, $3 million to Duke University Medical Center to expand the School of Nursing, $904,928 to Fayetteville AHEC to support internet based MSN, $395,750 to Mission Health to support a technology laboratory for nursing education, $205,315 to New Hanover Regional Medical Center to expand nursing faculty and MSN educators, $878,565 to Novant to address workforce shortages, $349,484 to Presbyterian Hospital for a patient simulation laboratory, and $220,000 to Scotland Memorial Hospital to support new graduate internships in nursing.

[21] North Carolina Administrative Code. Title 21. Occupational Licensing Boards. Chapter 36: The North Carolina Board of Nursing. Available at http://www.ncbon.com/WorkArea/showcontent.aspx?id=1288.

Recommendation 3.11:

A consistent definition of "retention" (or "attrition") should be developed by the NC Community College System and used in every community college.

Full Implementation

For data collection purposes, the NC Board of Nursing's annual report was revised to collect data by cohorts which creates a consistent standard to measure retention. Data are available for 2003-2006. Likewise, the NC Board of Nursing now examines *on-time* program completions, with *on-time* being defined as graduating within the prescribed semester sequence required by the nursing education program in which the student is enrolled. In a program requiring a five semester sequence, on-time completion is achieved by maintaining consistent enrollment and graduating at the end of the fifth semester. The NC Center for Nursing uses the Board's data to analyze enrollment, graduation, and on-time completion rates for each nursing education program in the state. These statistics are published annually (See Table 4).

Table 4. Enrollment, graduation, and on-time completion rates for nursing education programs

Nursing Program	2004-2006 Total New Enrollees	2004-2006 Total Graduates over 3 years	Aggregate 3 year on-time completion rate (%)	Range • Low (school) • High (school)
PNE	3347	2156	64.4%	• Low: 43.4% (Lenoir Community College) • High: 93.3% (Southwestern Community College)
Hospital Based Diploma	477	257	53.9%	• Low: 51.5% (Mercy School of Nursing) • High: 57.5% (Watts School of Nursing)
ADN Programs	9754	5442	55.8%	• Low: 17.8% Central Carolina Community College • High: 85.7% (Foothills Nursing Consortium)
BSN Programs	3181	2432	76.5%	• Low: 35.2% (Lenoir Rhyne) • High: 96.6% (Duke University)

Source: Lacey L, McNoldy TP. North Carolina Trends in Nursing Education: 2003-2006. NC Center for Nursing. August 2007. Available at: http://www.ga.unc.edu/NCCN/research/Trends2007/final%20report%20schools%202007.pdf.

It should be noted that this definition of on-time completion (the inverse of this measure is attrition) is a very strict measure of program success, especially for a curriculum like nursing in which classes build upon each other in a linear fashion and a critical class may be offered only once per year. Nursing students who need to repeat classes often are required to temporarily leave the program until that class requirement can be fulfilled. The result is that it is not unusual for a program to have students who do not graduate on schedule but do graduate at a later time. The on-time completion rate does not reflect these off-schedule graduates.[22]

[22] As a note of comparison, the National Center for Public Policy and Higher Education reported that less than half (48%) of all first year students in North Carolina community college programs returned for their second year. This compares to 62% in the top states. North Carolina ranks about average in the number of freshman at four-year colleges and universities who return for their sophomore year (80%) but less well in the percentage of full-time

Recommendation 3.12:

A consistent standard should be developed for the evaluation of retention-specific data statewide across all community college-sponsored nursing programs. It is proposed that retention data be analyzed and reported as three-year averages and that all community college nursing programs be expected to attain a standard retention rate for all Associate Degree programs within the state (this standard rate to be set by the NC Community College System in consultation with the NC Board of Nursing).

Partial Implementation

The Board of Nursing has developed a consistent standard, and implemented rules to limit expansion to those nursing programs with full approval that also have at least a three-year student retention rate equal to or higher than the state average retention rate for program type. (NCAC Education Rule .0321).[23]

Recommendation 3.13:

The NC General Assembly or private philanthropies should fund the NC Community College System to undertake a systematic institutional evaluative study of the relationship between competitive, merit-based admission policies and graduation/attrition rates in its nursing education programs.

Not Implemented

No action has been taken (See Rec. 3.14).

Recommendation 3.14:

To reduce the likelihood of attrition from community college nursing programs due to academic performance or ability, admission criteria should be coupled with "competitive, merit-based" admission procedures in all community college-based nursing education programs.

Not implemented

This recommendation has not been accomplished. However, at the direction of the NC Center for Nursing (NCCN) Board of Directors, NCCN has convened a small think tank group consisting of representatives of the NC Community College System, leaders of ADN nursing programs, health care industry leaders, and the NC Board of Nursing to look at three year average attrition rates in community college ADN programs. The group will be comparing programs with the highest on-time completion rates against programs with the lowest on-time completion rates and is currently looking at the possibility of using matched pairs to make the comparisons. Merit-based admission will be one of the primary variables. The group is currently looking at school and student specific data to attempt to identify predictors of success. A preliminary report will be issued in December 2007 that includes a time line for completion of the project.

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students completing a bachelor's degree within 6 years of college entrance (57% compared to 64% in the top states). Measuring Up 2006: The State Report Care on Higher Education – North Carolina. Sept. 2006. Access at: http://measuringup.highereducation.org/.

[23] North Carolina Administrative Code. Title 21 Occupational Licensing Boards. Chapter 36: The North Carolina Board of Nursing. Available at: http://www.ncbon.com/WorkArea/showcontent.aspx?id=1288.

Recommendation 3.16:

The UNC Office of the President, utilizing data provided by the NC Board of Nursing, should examine the percentage of first-time takers of the NCLEX-RN exam who are BSN, ADN, and hospital-based school of nursing graduates. If necessary, the UNC Office of the President should convene the UNC System deans/directors of nursing for baccalaureate and higher degree programs to plan for increases in funding to support enrollment that will assure, at a minimum, a 40% or greater ratio of BSN prelicensure graduates (in relation to ADN and hospital graduates) and, where possible, a gradual increase in the BSN ratio over the next decade. These ratio increases should take into consideration increases in prelicensure BSN program enrollment, as well as ADN-to-BSN and accelerated BSN program productivity.

Partial Implementation

The UNC System plans to double the number of prelicensure nursing graduates along with doubling the number of RN-to-BSN graduates will move substantially toward the goal of reaching a 60-40 BSN-to-ADN ratio within five years in annual graduates(See Rec. 3.1).

Recommendation 3.27:

Hospitals and other nursing employers are encouraged to consider tuition remission programs to encourage their nursing employees to pursue LPN-RN, RN-BSN, MSN, or PhD degrees.

Full Implementation

Some employers offer tuition remission programs, loans, or scholarships to encourage their employees to further their nursing education. All of the magnet hospitals provide financial assistance to encourage their employees to further their nursing education (See Rec. 4.1).

Recommendation 3.29:

An RN-to-BSN statewide consortium should be established to promote accessibility, cost-effectiveness, and consistency for RN-to-BSN education in North Carolina.

Partial Implementation

AHEC convenes an annual networking meeting of RN-BSN coordinators across the state. Almost every region has a consortium of RN-to-BSN programs. These regional consortiums are trying to address accessibility, cost-effectiveness, and consistency across programs; however, there is currently no attempt to standardize the RN-to-BSN education throughout the state. Access to RN-to-BSN programs is abundant and few programs are at full enrollment. An important goal of AHECs working with schools of nursing is increased enrollment and graduations from the RN-to-BSN programs.

PN EDUCATION PROGRAMS

Recommendation 3.1. PRIORITY RECOMMENDATION:

North Carolina nursing programs should increase the production of prelicensure RN and LPN nurses:

a. Production of prelicensure LPNs should be increased by 8% from the 2002-2003 graduation levels by 2007-08. This is a statewide productivity goal, not necessarily a goal for individual nursing education programs.

b. The NC Community College System and private institutions affected by this goal should develop a plan for how they will meet these increases. The NC Community College System should convene this planning group, including representatives of private

institutions offering these nursing programs, and a plan should be reported to the NC General Assembly in the 2005 session. Each year thereafter, the PNE programs should provide a status report to the NC General Assembly showing the extent to which they are meeting these goals and whether production needs should be modified based on job availability for new graduates, changes in in-migration or retention, or overall changes in demand for nurses in North Carolina.
Full Implementation

The total number of Practical Nurse Education programs (PNEs) in North Carolina has increased since 2003, as have the total number of new students being enrolled and graduated each year. New student enrollments have increased by 31.1%,[24] and total graduates from PNE programs have increased by 30.1% over 2003 levels. This rate of increase far exceeds the recommended levels. Note that all but two of the PNE programs operating in 2006 were located in community colleges.

Recommendation 3.30:
North Carolina nursing education programs should encourage LPN-to-ADN pathways (within community college nursing education programs) and LPN-to-BSN cooperative arrangements between community colleges and campuses of the UNC System to facilitate career advancement and to avoid unnecessary duplication of content in these curricula.
Partial Implementation

The NC Community College System and UNC System are exploring this option on some of their campuses. All 55 of the NC Community Colleges with approved ADN programs have the option of offering a LPN-to-ADN pathway to interested and qualified students. For the 2004-2005 academic year, community colleges graduated 248 LPN-RN students enrolled in ADN programs. ADN programs outside of the community college system graduated an additional 6 LPN-RN students that year. The total number of LPN-RN graduates declined from the 254 graduated in 2005 to the 207 graduated in 2006.

In addition to standard accelerated programs, UNC campuses are developing unique programs to respond to needs and provide multiple pathways to becoming a nurse. Winston-Salem State University, for example, offers an LPN-to-BSN option and a Paramedic-to-BSN program. East Carolina University offers an accelerated program to the BSN and MSN in combination. Furthermore, the NC Board of Nursing has provided consultation and support for the ADN Directors trying to develop a standardized curriculum for ADN programs, which would help to facilitate student transfers and articulation for LPN-to-ADN.

In contrast, Carolinas College of Health Sciences decided to provide fewer transfer credits to LPNs. Carolinas College of Health Sciences has an LPN-to-ADN program. In the ten years that the program has existed, they have experienced less positive outcomes with LPN-to-ADN students than with ADN students. For that reason, they now give less transfer credit to LPNs than previously. Additionally, LPNs must meet all standard admission criteria. Though contrary to the spirit of this recommendation, Carolinas College of Health Sciences believes this step is necessary to increase the likelihood of success for the LPNs admitted to the RN program.

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[24] Lacey L, McNoldy T. North Carolina Trends in Nursing Education: 2003-2006. NC Center for Nursing. August 2007.

Recommendation 3.31:

The State Board of Education and the NC Community College System should promote dual enrollment programs for Practical Nursing Education Programs and the NC General Assembly should appropriate funds to support these programs in an effort to enable high school students to advance to LPN, ADN, and BSN programs in pursuit of a nursing career.
Not Implemented

Students without a high school diploma or GED are not allowed admission into nursing programs (21 NCAC 36.032 in the NC Board of Nursing Administrative Code). Absent a change in these regulations, the NC Community College Systems cannot offer PNE programs to high school students.

Recommendation 3.32:

All PNE programs in NC should seek and attain national accreditation by 2015 with adequate funding provided for faculty resources, student support services, and National League for Nursing accreditation application fees.
Partial Implementation

In the 2007 legislative session, the NC Community College System requested $1,157,267 in recurring funds and $6,061,500 in non-recurring funds to provide for the salary differentials, cost of degree completion, and actual accreditation expenses to move all associate and practical nursing programs to full accreditation status by the NLNAC by 2015 as required by the NC Board of Nursing and to provide annual expenses for those programs already accredited. The NC Board of Nursing established the requirement for all nursing education programs leading to initial licensure to be accredited by a national nursing accrediting body by December 31, 2015. This includes PNE programs.[25] Although funding was not allocated specifically for this purpose, some of the new funding for allied health can be used to support faculty salaries (See Recs. 3.6, 3.9). Even absent full funding to support the costs of accreditation, some of the North Carolina community colleges are already pursuing National League for Nursing accreditation.

NURSING ASSISTANT (NURSE AIDE) EDUCATION PROGRAMS

Recommendation 4.5:

The Nursing Workforce Task Force supports the efforts of the NC Department of Health and Human Services to:

a. Create a special designation for licensed health care organizations that provide long-term care services (including nursing facilities, home health and home care, and assisted living) that voluntarily choose to meet/enhance workplace and quality assurance standards.

b. Continue the Win-A-Step Up program which provides additional training to nurse aides.
Full Implementation

In July 2006, the NC General Assembly created the first-in-the-nation voluntary state licensure program that rewards long-term care providers who invest in building a high quality workforce. The license, called the NC New Organizational Vision Award (NC NOVA), was developed by the partner team of the Better

[25] North Carolina Administrative Code. Title 21. Occupational Licensing Boards. Chapter 36: The North Carolina Board of Nursing. Available at http://www.ncbon.com/WorkArea/showcontent.aspx?id=1288.

Jobs Better Care North Carolina project. The NC Division of Facilities Services will award the license to nursing homes, assisted living facilities, adult care homes, and home care agencies that meet new higher standards for workplace culture. The standards fall under four major areas: supportive workplaces, training, career development, and balanced workloads. The Carolinas Center for Medical Excellence, North Carolina's Quality Improvement Organization, serves as the independent reviewer, deciding whether the rigorous, comprehensive standards have been met. North Carolina was one of five states awarded the Better Jobs Better Care (BJBC) Demonstration Grant used to develop this program, which was funded by the Johnson Foundation and the Atlantic Philanthropies. Since the inception of the program, two nursing homes and one home health agency have received the NC NOVA special licensure status.

Recommendation 4.9:

The NC General Assembly should appropriate funds as a wage pass-through to enhance nurse aide salaries and/or increase the number of staff in nursing facilities and other organizations heavily reliant on Medicaid. The funds should be targeted to institutions that have voluntarily achieved the special designation for LTC organizations that meet enhanced workplace and quality assurance standards.

Not Implemented

The NC General Assembly has not appropriated funds to increase wages or benefits paid to direct care workers. However, once the special licensure through the NC New Organizational Vision Award is operational (See Rec. 4.5), the goal is to tie future wage enhancement or reimbursement differentials to the special licensure designation.

Recommendation 3.33:

The Nursing Workforce Task Force supports the efforts of the NC Department of Health and Human Services, the NC Board of Nursing, the NC Community College System, and applicable private and hospital-based programs to create "medication aide" and "geriatric aide" classifications in North Carolina.

Partial Implementation

The NC General Assembly enacted legislation in 2005 that permits the use of Medication Aides in skilled nursing homes. The NC Board of Nursing approved the medication aide training program in January 2006 for both the registered nurse faculty and the medication aide trainee.[26] Training classes for medication aide faculty are to be taught by certified Master Teachers. The medication aide training program has been developed, and to date more than 50 instructors have been certified by the NC Board of Nursing. In addition, a medication aide curriculum course (NAS 107) was approved by the NC Community College System Curriculum Review Committee for inclusion in the Common Course Library on March 22, 2006. Statewide competency testing and listing on the Medication Aide Registry was implemented by the NC Division of Health Service Regulation in November 2006.

The Geriatric Aide Specialist curriculum is currently undergoing further development and refinement by the NC Division of Health Service Regulation and is scheduled to be completed by Fall 2007. It will be offered through the community college system and other institutions accredited by the Southern Association of Colleges and Schools.

Recommendation 3.34:

NC Division of Health Service Regulation in conjunction with the NC Board of Nursing

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[26] Available at: http://facility-services.state.nc.us/NAICurricula2006.pdf.

should develop a standardized Nurse Aide I competency evaluation program including a standardized exam and skills demonstration process.
Full Implementation

The Standardized Nurse Aide I competency evaluation began in July 2006. The NC DHHS Division of Facility Service awarded a contract to Promissor, a national testing company, to develop the standardized exam and administer competency evaluation to individuals seeking a listing on the NC Nurse Aide I Registry. Initially, there were some delays in developing the testing sites and offering the tests; however, over the past few months, there have been increases in both test sites and testing dates.

TRANSITIONS FROM NURSING SCHOOL TO NURSING PRACTICE

Recommendation 4.3. PRIORITY RECOMMENDATION:
The NC Board of Nursing should convene a work group to study options to improve school-to-work transitions. The work group should include, but not be limited to, representatives of: nursing education programs (e.g., North Carolina community colleges, public and private university nursing programs, and hospital diploma programs), nursing employers (e.g., NC Hospital Association, NC Health Care Facilities Association, NC Association of Nonprofit Homes for the Aged), NC Center for Nursing, AHEC, NC Nurses Association, and the NC Organization of Nursing Leaders. The work group shall explore and recommend options to ensure that newly licensed nurses are adequately prepared to assume independent clinical responsibilities. These options to consider shall include, but not be limited to, methods to:

a. Ensure that nursing students have a concentrated/intensive clinical experience of direct patient care in the final semester; and
b. Provide a supervised clinical internship experience in which new nursing graduates are assessed to determine clinical competence and opportunities provided to address areas of identified weaknesses.
Full Implementation

The NC Board of Nursing amended its rules to require a minimum of 120-hours of focused direct patient care experience in the final year of RN programs and 90 hours in the final semester for LPN students beginning January 1, 2008.

In addition, the NC Board of Nursing, through its Foundation for Nursing Excellence (FNE), has taken the lead in an evidence-based transition to practice project. FNE is collaborating with the NC Center for Nursing and the NC AHECs in this initiative. With grant support from the Agency for Healthcare Research and Quality (AHRQ), these three organizations held an invitational conference September 20, 2005 to consider evidence-based transition models for enhancing competencies of new graduates, to identify and prioritize core competencies, and to identify evaluation techniques and tools to measure competency.

The Foundation for Nursing Excellence held a stakeholder meeting in January 2006 to review the vision and seek feedback on planning for a future research/demonstration project for a "Residency-type Program." Based on very positive support to continue this project, a Leadership Resource Team (LRT) and Advisory Group were subsequently appointed to support the planning phase of the pilot. In June 2006, the Foundation for Nursing Excellence received a $293,000 two-year planning grant from the Blue Cross and Blue Shield of North Carolina Foundation for this transition to practice project.

Based on further exploration of various transition models, a plan for Phase I of the Pilot was presented to the stakeholder group in January 2007. This phase will gather data from newly licensed nurses and their preceptors over a six-month period in three comparison groups of North Carolina hospitals beginning August 2007. Further information about the current status of this project is available at www.ffne.org. It also should be noted that the long-term goal of this project is to create a formal statewide transition to practice program for all new nurse graduates by 2015.

NURSING WORK ENVIRONMENTS

Recommendation 4.1. PRIORITY RECOMMENDATION:

Health care employers (including but not limited to hospitals, nursing facilities, home health and hospice, state institutions, assisted living, public health, mental health, schools, and private practitioners) must:

a. Create a job environment that promotes positive team relationships, including physician-nurse relationships, nurse-nurse aide relationships, and other relationships among health care professionals in general;
b. Create orientation, mentoring and peer support programs that help orient and support new and existing staff;
c. Ensure a reasonable workload that is tied to ensuring positive patient outcomes;
d. Develop policies to prevent nurses who provide direct patient care from working longer than 12 hours in a 24-hour period or 60 hours in a 7-day period, under normal working conditions;
e. Offer competitive salary and benefits;
f. Develop clear job expectations, communications, and process standards and hold all staff accountable for these standards;
g. Involve nurses and nurse aides in policy making and governance decisions and ensure that nursing is represented at the highest level of institutional decision making;
h. Ensure a safe working environment to protect staff from threats of violence;
i.Provide career and clinical ladders and opportunities for advancement; and
j. Utilize ergonomics, information technology, and other technologies to reduce paperwork, improve the workflow, and reduce the risk of injury to patients and workers.

Full Implementation

There are a number of workforce initiatives that have been developed or expanded since the release of the NC IOM Task Force on Nursing Workforce report. For example:

- *Hallmarks for Healthy Workplaces*: The North Carolina Nurses Association (NCNA) has developed the Hallmarks for Healthy Workplaces initiative, which is designed to acknowledge employers that provide a positive work environment for their registered nurses. Any workplace where three or more nurses are employed are eligible for this recognition, including hospitals, nursing facilities, home care, long-term care, physicians' offices, schools of nursing, state correctional institutions, industry, and other community agencies. Seven workplaces have been recognized since the first ceremony in October 2006. full time director was hired in August 2007, through a Duke Endowment grant to develop the program, educate North Carolina health care facilities about healthy workplaces, and encourage applications for recognition to the Hallmarks. The director works closely with a cadre of dedicated registered nurse volunteers to implement these goals. The intent is to blanket North Carolina with workplaces that value their nurses, thereby contributing to recruitment and retention of these nurses in the workforce. An important next phase of this plan is to collect appropriate data about the results of healthy workplaces on the status of the nursing workforce.

- *Magnet Status*: As of May 2007, there were 238 health care organizations in 44 states that received Magnet status, which is national recognition for excellence in nursing services. Of these, 17 are in North Carolina. The North Carolina hospitals that have been recognized as Magnet hospitals include: Duke University Hospital (2006), FirstHealth Moore Regional Hospital (2006), Forsyth Medical Center (2004), Gaston Memorial Hospital (2007), Lake Norman Regional Medical Center (2007), High Point Regional Health System (2001, 2005), Catawba Valley Medical Center (2001, 2005), Moses Cone Health System – Annie Penn Hospital (2005), Moses Cone Health System – The Behavioral Health Center (2005), Moses Cone Health System – The Moses H. Cone Memorial Hospital (2005), Moses Cone Health System – The Woman's Hospital of Greensboro (2005), Moses Cone Health System – Wesley Long Community Hospital (2005), New Hanover Regional Medical Center (2003), North Carolina Baptist Hospital of Wake Forest University Baptist Medical Center (1999, 2003), NorthEast Medical Center (2002), Pitt County Memorial Hospital (2004), Rex Hospital (2006). Hospitals that receive Magnet status must be resurveyed every four years in order to maintain their magnet status. In addition to these hospitals, other North Carolina hospitals are in the early stages of the application process.

  In December 2006, the NC Center for Nursing began hosting a coalition of the growing number of Magnet hospitals in the state. The four-fold purpose of the NC Magnet Coalition is to:
  - Offer a collegial forum for information exchange (including best practices for healthy workplaces) and networking.
  - Provide Magnet hospitals in North Carolina a collective voice in communicating with the American Nurses Credentialing Center.
  - Create opportunities for collaborative projects that support and enhance a Magnet culture.
  - Ensure an organized approach for mentoring aspiring Magnet organizations.

  The Coalition did a poster presentation at the National Magnet Conference in October 2007 and is developing on-line discussion forum capabilities, with the support of NCCN. The Coalition will also present an informational session on Magnet criteria at the Fall meeting of the NC Organization of Nurse Leaders.

- *Patient and Nurse Safety Initiative*: The NCNA House of Delegates addressed safe patient handling via a reference proposal in October 2006. The report called for collaboration among the NC Nurses Association, NC Hospital Association, NC Division of Health Services Regulation, and NC Health Care Facilities Association. The intent is to improve patient and nurse safety through the appropriate use of patient handling and movement equipment.

  The NC Hospital Association worked with the NC Nurses Association to conduct an informal survey of fifteen small hospitals to determine attitudes towards and the use of lifting equipment and body mechanics training. The informal survey indicated that despite hospitals providing both mandatory body mechanics training and lifting equipment, workplace back injuries continue to rise. Most nurse injury cases seem to occur because the nurse reacts to a patient's movement. Therefore, additional equipment and training may not have the desired impact on preventing workplace back injuries. New solutions may be needed to address worker's comp claims for back injuries. The groups continue to collaborate to explore and develop new solutions and to expand the appropriate culture of safety.

- *NC Healthcare Facilities Association*: The NC Health Care Facilities Association's Peer Review Meritorious Performer program focuses on positive work environments and employee support. The purpose of the Peer Review Meritorious Performer Program is to recognize facilities that excel in management practices surrounding six performance foci: Customer Relations; Staff

Orientation and Development; Risk Management; Staff Empowerment; Community Relations and Quality of Life.[27] In addition, statewide discussions have been held among long-term care facilities about using Ruth Anderson's research on Nurse/Nurse Aide relationships. The NC Health Care Facilities also participates in the NC New Organizational Vision Award program (See Rec. 4.5). The NC Health Care Facilities Association also is in the beginning stage of a new initiative, called the Journey to National Best, to change the way that care is delivered in skilled nursing facilities. The focus is on innovation in every aspect of operations and structure, based on resident and family choices and preferences. The Journal to National Best also focuses on enhancing career development opportunities for nursing home employees, by helping them obtain enhanced and new skills, providing them with career mobility options, and helping them master developing technologies.

Recommendation 4.2. PRIORITY RECOMMENDATION:

AHEC, medical, nursing, and other health professional schools, trade associations (including, but not limited to, the NC Hospital Association, NC Health Care Facilities Association, NC Association of Nonprofit Homes for the Aged, Association for Home and Hospice Care of North Carolina), professional associations (including, but not limited to, the NC Nurses Association, NC LPN Association, NC Organization of Nurse Leaders, NC Medical Society, and NC Direct Care Workers Association), and other organizations should help develop educational opportunities for management, nurses, nurse aides, and other health care professionals. The educational opportunities should focus on:

a. Leadership development and management training
b. Conflict resolution and communication skills
c. Interdisciplinary team building
d. Health care informatics
e. Preceptor training

Partial Implementation

AHEC's Nursing Management Institute is an on-line continuing education program offered through the Northwest AHEC/NC AHEC that provides a full range of leadership and management topics to nurses across the state.[28] Additionally, the NC AHEC program through its contract with the UNC-Chapel Hill School of Nursing provides continuing education throughout the AHECs in leadership development, legal aspects of conflict resolution, interdisciplinary team building, and preceptor/mentoring training.[29]

Some professional nursing schools also offer educational opportunities for leadership development. For example, the Carolina College of Health Sciences includes leadership development, conflict resolution and communication skills training, and interdisciplinary team building as part of the ADN program.

In addition, the UNC-Chapel Hill School of Nursing Continuing Education program, in conjunction with the NC Healthcare Facilities Association, awards a Certification in Nursing Leadership in Long Term Care. To earn the certification, nurses must complete four continuing education components, two taught by the NC Healthcare Facilities Association, one by the NC Board of Nursing, and one by the UNC School of Nursing.[30]

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[27] Information about the Peer Meritorious Performer program may be obtained by accessing the following link: http://www.NC Health Care Facilities Association.org/members/meritoriousperformer2006.asp.
[28] The AHEC nursing leadership offerings are fully described at http://www.aheconnect.com/nmi/.
[29] The UNC continuing nursing education courses are available at http://cf.unc.edu/ahec.
[30] More information about the Certificate in Nursing Leadership in Long Term Care is available at http://nursing.ce.unc.edu/certificates.html.

Recommendation 4.10. PRIORITY RECOMMENDATION:

The NC Board of Nursing and the NC Division of Health Service Regulation within the NC Department of Human Services should implement regulations to prohibit nursing staff from providing patient care in any combination of scheduled shifts, in mandatory or voluntary overtime in excess of 12 hours in any given 24-hour period, or in excess of 60 hours per 7-day period under normal working conditions. Special allowances should be made for emergency situations.

Partial Implementation

North Carolina does not have legislation or other regulations that limit the provision of direct patient care to no more than 12 hours in a 24-hour time period or 60 hours in a 7-day time period. The Deputy Director of the NC Division of Health Service Regulation and the Executive Director of the NC Board of Nursing convened a group of stakeholders in October 2004. A subgroup further evaluated available data and submitted recommendations back to the think tank conveners stating that no changes in regulation are currently needed.

In response, the NC Board of Nursing posted a statement, *Extended Work Hours and Patient Safety in the Practice*, on its website in January 2006 that says,

> "Some states have passed legislation that bans or limits mandatory overtime, except in cases of emergencies. North Carolina has no such legislation. However, it is imperative that nurses and nurse managers give thoughtful consideration to the implication that extended work hours may adversely impact patient safety." [31]

Also, in 2007 the NC Division of Health Service Regulation and the NC Board of Nursing adopted a *Joint Position Statement on Nursing Work Environments*. This statement is posted on the NC Board of Nursing's website at www.ncbon.org. This statement calls for individual registered nurses and nurse managers to take responsibility for limiting the number of hours that registered nurses work to avoid fatigue and jeopardizing patient safety.

The NC Nurses Association has been monitoring legislation and regulations in other states that address the number of hours a nurse may spend providing direct patient care in a week. In October 2006, the NC Nurses Association House of Delegates passed a reference report supporting the collaboration of the NC Hospital Association and the NC Organization of Nurse Leaders to protect registered nurses from mandatory overtime. These discussions will begin in the near future with the intent to work together to determine where mandatory overtime may currently exist in North Carolina nursing workplaces and to identify and implement strategies to eliminate mandatory overtime. The goal is to enhance nurse and consumer protection without new legislation. The NC Nurses Association anticipates that its Commission on Standards and Professional Practice will develop informational resources for internet use and a position paper on work-related fatigue in 2008.

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[31] NC Board of Nursing. Extended Work Hours And Patient Safety. Raleigh, NC. January 2006. Available at: http://www.ncbon.com/prac-rnfaq.asp#EXTENDED%20WORK%20HOURS. Accessed November 29, 2006.

Recommendation 4.4:

The NC Organization of Nursing Leaders, NCNA, NCHA, NCHCFA and other trade associations should help develop model programs for shared governance, growth, and development of nurse managers, respectful communication, conflict resolution, and other key workplace policies among all levels of staff, drawing from magnet principles. The CEOs and CNOs of magnet hospitals and other model health care organizations should be integrally involved in this effort. Model strategies should be tied to the differences in various work settings.

Partial Implementation

This recommendation relates to the NC Nurse's Association (NCNA) Hallmarks of Healthy Workplaces initiative (See Rec. 4.1). The widely distributed criteria for the program has been well received in health care institutions and other employers of nurses and provides a check list for providing a positive work environment. In addition, the NCNA Professional Practice Advocacy Coalition has created a workplace advocacy grid that identifies problem areas and issues within a facility and provides solutions for both the nurse and the broader system. NCNA encourages North Carolina hospitals to pursue Magnet recognition, which is awarded by the American Nurses Credentialing Center. Magnet certification requires hospitals to focus on the work environment for nurses and other health care workers and their patients (See Rec. 4.1.). The NCNA routinely publishes articles on workforce issues (both at the state and national level) in the *Tar Heel Nurse* and on the NCNA website.

The NC Healthcare Facilities Association has a Peer Review Meritorious Performer Program and participates in the American Health Care Association's Quality Awards.[32] In addition, all the NC long-term care associations participate in the NC New Organizational Vision Award (See Rec. 4.5.)

Recommendation 4.6:

Trade and professional organizations, AHEC, and private philanthropies should take the lead in disseminating best practices and encourage board members, CEOs, nurse executives, management staff, physicians, and other nursing leaders to invest in strategies to help create a positive workplace culture.

Partial Implementation

See Recs. 4.1, 4.4. In addition, AHECs provide educational programs on healthy workplaces, support magnet hospital growth, offer training for nursing mentors, and make resources available for clinical practice.

Recommendation 4.7:

Support consumer advocacy effort to promote institutional change involving a well-educated, adequately staffed health care system in the interest of higher quality of care.

Partial Implementation

The NC Nurses Association has nurse liaisons with nineteen consumer organizations, such as the American Cancer Society, AARP, and National Alliance on Mental Illness. The nurse liaisons help support the policy initiatives of these consumer groups (when consistent with the positions of the NC

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[32] The AHCA/NCAL Quality Award is a distinction given to AHCA/NCAL-member facilities for continuously applying quality improvement principles. By following the series of developmental steps that make up the award process, facilities gain knowledge and skills to help them better serve their customers and, in doing so, position themselves in an increasingly competitive environment. For more information visit http://www.ahca.org/quality/awardapps.htm.

Nurses Association). At the same time, the nurse liaisons help the consumer organizations stress the importance of having an adequately staffed health care system.

Recommendation 4.8:

Philanthropic organizations should support the provision of technical assistance to health care organizations as they attempt to make the changes necessary to improve the nursing workforce environment and enhance the quality of patient care. Financial assistance should be targeted to those facilities that would be unable to make these changes without financial assistance.

Partial Implementation

In the summer of 2007, The Duke Endowment approved a three year grant to develop the Hallmarks of Healthy Workplaces through the NC Nurses Association. The Hallmarks program is designed to develop and recognize healthy workplaces for nurses in North Carolina, contributing to improved recruitment and retention. Hallmarks, conceived in 2004 with initial funding from the Center for American Nurses, NC Organization of Nurse Leaders, NC Foundation for Nursing, and High Point Regional Health System, could not grow without support from The Duke Endowment. The NC Nurses Association anticipates that the Hallmarks program will be self-sustaining within three years.

ADVANCED PRACTICE REGISTERED NURSES

Recommendation 5.1:

The NC Institute of Medicine should convene a workgroup comprised of representatives of the NC Board of Nursing, NC Medical Board, Midwifery Joint Committee, Joint Sub-committee of the Board of Nursing and Medical Board, and nursing and physician professional associations to study the issues facing APRN practice. Specifically, this work group should examine:

- **a. How current systems of regulation of APRN practice do and do not allow full utilization of this part of the nursing workforce, including but not limited to:**
  - **i. Physician supervision requirements for NP and CNM practice.**
  - **ii. Regulation of NP and CNM practice by two separate bodies versus sole regulation by the NC Board of Nursing.**
  - **iii. Authorizing APRN practice to the full extent of educational preparation and national certification.**
  - **iv. CNM supervision requirements as a barrier to home births.**
  - **v. Title protection for all APRNs.**
- **b. Model APRN Compact Act, including minimum uniform education/certification requirements.**

Partial Implementation

In August 2004, the NC Institute of Medicine convened a Task Force to discuss the practice of APRNs in North Carolina. The Task Force met from August 2004 to April 2005 with a focus on the practice, regulation, supervision, and professional accountability of Nurse Practitioners, Certified Nurse Midwives, and Physician Assistants. The group met four times and dissolved in February 2005. The NC Institute of Medicine APRN Task Force was not successful in reaching a consensus around these issues.

In the 2005-2006 legislative session, legislation was introduced to more closely supervise certified registered nurse anesthetists and to discipline nurse practitioners under the NC Medical Board rather than under the NC Board of Nursing. Although neither initiative passed, the NC Medical Board is still trying to establish a definition for supervision through rules. At the national level, the American Medical

Association has convened a task force that would develop plans for physician oversight of all health care professionals who are not Doctors of Medicine or Doctors of Osteopathic Medicine.

Recommendation 5.2:

Trade and professional associations in North Carolina should initiate an aggressive statewide effort to affect changes in federal and state legislation and regulations that affect Medicare, Medicaid, and commercial managed care reimbursement in order to promote the full utilization of APRNs in long-term care and in other health care arenas.

Partial Implementation

The NC Health Care Facilities Association and the NC Nurses Association are both making efforts to remove barriers to the utilization of APRNs in long-term care settings. The NC Health Care Facilities Association is currently working with the NC Division of Medical Assistance, Office of Rural Health and Community Care to establish a pilot project where nurse practitioners are utilized in the care management of skilled nursing facility residents. Based on national research, the pilot project has been developed to test measures associated with service utilization, health outcomes, and perception of care. The two-year project will provide the data necessary to submit a proposal to the NC Division of Medical Assistance about allowing more flexibility in Medicaid reimbursement for nurse practitioners employed in nursing facilities.

Federal Medicare restrictions make it difficult for long-term care facilities to employ APRNs. Under federal Medicare laws, the Centers for Medicare and Medicaid Services (CMS) will not pay for the services of a nurse practitioner who is *employed by* a nursing facility. However, CMS will pay for these services if the nurse practitioner is employed by an independent physician's office. This makes it difficult for nursing facilities to hire nurse practitioners directly to provide services to the frail elderly and people with disabilities.

The NC Nurses Association works with the appropriate agencies and departments to assure the broadest possible reimbursement for advanced practice registered nurses, with the intent of expanding access to health care for North Carolinians. In 2001, the NC General Assembly passed legislation to require insurers to reimburse advanced practice registered nurses for the work performed, if it is part of the APRNs scope of services and is an otherwise covered service. The NC Nurses Association continues to have discussions with APRNs, managed care organizations, the NC Division of Medical Assistance, CIGNA (Medicare Part D intermediary), and the NC Department of Insurance to ensure that the legislation is implemented fully.

BUILDING AN INTEREST IN NURSING AS A CAREER

Recommendation 3.22. PRIORITY RECOMMENDATION:

Existing programs via AHEC, the health science programs in community colleges, universities, and colleges, the NC Center for Nursing, and employers that target a diverse mix of middle and high school students to encourage them to consider health careers and prepare them for entry into programs of higher learning need to be strengthened and expanded. Specifically:

a. The NC General Assembly should appropriate funds to create a new grant program administered jointly by the NC AHEC Program and the NCCN to foster innovative efforts in community colleges and universities to recruit a more diverse set of students into nursing education programs. Grants would be made through an application process on an annual basis to support programs to recruit more underrepresented minorities and men into nursing careers.

b. **Private foundations should continue funding for innovative community-based programs to recruit more young people into nursing and other health careers. These include programs such as "Code Blue," health academies, and efforts to work with faith-based groups to strengthen entry into health careers for a more diverse group of students.**
c. **The NC General Assembly should increase funding to NC AHEC to add one additional health careers recruitment coordinator at each of the nine regional AHECs in order to expand activities in middle and high schools through summer enrichment programs, weekend activities, and other educational and mentoring efforts targeted at recruiting young people into nursing and other health careers. This effort should be developed in tandem with the "virtual advising center" being developed by the NCCN (in partnership with the College Foundation of North Carolina).**
d. **The NC General Assembly should increase funding to the NC Center for Nursing to further develop and distribute recruitment materials aimed at racial minorities and men with a target goal of doubling the 2003 levels of minority and male RNs entering the workforce by 2010.**

Partial Implementation

AHEC continues to produce the NC Health Careers Manual, both in print and online, to provide young people with current information on health career salary levels, educational programs in North Carolina, scholarship availability, and other relevant information. AHEC also offers programs during the summer and throughout the year that target middle and high school students to expose them to health careers, connect them to mentors, and prepare them for careers in nursing and other health fields.

The NC Center for Nursing also has sustained its efforts to recruit young people as well as second degree students into nursing, with an emphasis on minorities and men. However, the NC Center for Nursing's priorities have shifted to place more emphasis on growing nursing faculty. Interest in nursing as a career is at an all time high, but North Carolina programs recently (2006) turned away more than half of all qualified applicants to pre-licensure nursing programs. Inadequate educational capacity, especially related to faculty resources, is the more critical issue for our state.

In addition, the NC Hospital Foundation has developed a Minority Health Career Initiative (MHCI) with the Center for Health and Healing of the General Baptist State Convention (GBSC) focusing on increasing the number of African-Americans choosing health care careers in North Carolina. The Center for Health and Healing of GBSC has helped develop the curriculum and has trained volunteers in eastern North Carolina for career clubs. MHCI has helped create health career clubs in 92 churches or faith-based organizations. The clubs help educate participants about health care opportunities in relation to education requirements and occupations. The curriculum provides a comprehensive approach, including enhancement of life skills such as resume building, interview tips, and dressing for success.

Other organizations also are involved with recruiting middle and high school students into the health professions. For example, Cabarrus College houses the local school systems Health Academy Program and participates in presentations about career and education programs–"What it Takes." NC Healthcare Facilities Association skilled nursing facilities participate in local high school and college job fairs as well as host students and job shadowing programs.

Recommendation 3.23:

High school, community college, and university guidance counselors should receive additional training in the requirements of North Carolina's nursing educational programs. North Carolina should provide resources for counselors designated to provide student support for nursing and allied health students.

Not Implemented

This remains a long term goal for the NC Center for Nursing.

ADDITIONAL CROSS-CUTTING RECOMMENDATIONS

Recommendation 2.1:

Employers of nurses (RN and LPN) who hold licenses in compact states other than North Carolina should be required to report annually to the NC Board of Nursing the names, states in which licensed, license numbers, and period of employment of the nurses working in their facilities and programs.

Not Implemented

No action taken.

Recommendation 3.26:

Any North Carolina resident enrolled in a North Carolina public or private nursing education program should receive a state income tax credit to offset educational expenses.

Not Implemented

No action taken.

APPENDICES

Total New Enrollees in Diploma Programs (2003, 2006)

Total New Enrollees in PNE Programs (2003, 2006)

Total New Enrollees in ADN Programs (2003, 2006)

Total New Enrollees in BSN Programs (2003, 2006)

Total New Enrollees in Diploma Programs (2003, 2006)

School	2003 Prelicensure	2006 Prelicensure	% Change
MERCY SCH OF NSG [1]	86	101	17.4%
PRESBYTERIAN HOSP [2]	138		-100.0%
WATTS SCH OF NSG	64	62	-3.1%
TOTAL	**288**	**163**	**-43.4%**

[1] Mercy School of Nursing started an accelerated Diploma program in 2006. Five people were enrolled in 2006.

[2] Presbyterian Hospital program converted to a ADN program in 2005.

Total New Enrollees in PNE Programs (2003, 2006)

School	2003 Prelicensure	2006 Prelicensure	% Change
ISOTHERMAL COMM	30	35	16.7%
LENOIR COMM COLLEGE	20	20	0.0%
VANCE GRANVILLE	34	40	17.6%
ROCKINGHAM COMM	25	32	28.0%
SANDHILLS COMM COLL	30	30	0.0%
GASTON COLLEGE	40	49	22.5%
BEAUFORT COMM COLL	20	19	-5.0%
SURRY COMM COLLEGE	29	22	-24.1%
JAMES SPRUNT COMM	20	20	0.0%
SAMPSON COMM COLL	32	44	37.5%
BLADEN COMM COLLEGE	39	31	-20.5%
BRUNSWICK COMM COLL	27	27	0.0%
NEWH NSG CONSORTIUM	96	96	0.0%
MCDOWELL TECH COMM	24	40	66.7%
WAYNE COMM COLLEGE	20	20	0.0%
DURHAM TECH COMM	65	30	-53.8%
MONTGOMERY COMM	30	30	0.0%
SOUTH PIEDMONT COMM	20	20	0.0%
SOUTHWESTERN COMM COLLEGE	10		-100.0%
SOUTHEASTERN COMM	26	39	50.0%
CARTERET COMM COLL	24	24	0.0%
COASTAL CAROLINA	20	18	-10.0%
ROWAN CABARRUS COMM	30	29	-3.3%
CRAVEN COMM COLLEGE	18	18	0.0%
CAPE FEAR COMM COLL	25	26	4.0%
CENTRAL CAROLINA	53	59	11.3%
FAYETTEVILLE TECH	36	83	130.6%
CLEVELAND COMM COLL	25	30	20.0%
COLL OF ALBEMARLE	24	24	0.0%
FORSYTH TECH COMM	63	72	14.3%

Total New Enrollees in PNE Programs (2003, 2006)

School	2003 Prelicensure	2006 Prelicensure	% Change
ASHEVILLE BUNCOMBE	41	44	7.3%
SOUTHWESTERN COMM COLLEGE		10	NA
SAMPSON COMM COLL		44	NA
ECPI RALEIGH		90	NA
RICHMOND CC LPN		20	NA
MAYLAND PN SPRUCE PINES		20	NA
ECPI CHARLOTTE		65	NA
GUILFORD TECH COMM		30	NA
TOTAL	**996**	**1350**	**35.5%**

Total New Enrollees in ADN Programs (2003, 2006)

School	2003			2006			% Change
	Prelicensure ADN students	Prelicensure LPN-ADN students	Total	Prelicensure ADN students	Prelicensure LPN-ADN students	Total	
SANDHILLS COMM COLL	80	3	83	61	9	70	-15.7%
ROBESON COMM COLL	46	6	52	51	1	52	0.0%
FAYETTEVILLE TECH	86	11	97	117	0	117	20.6%
WESTERN PIEDMONT	64	0	64	55	0	55	-14.1%
ROCKINGHAM COMM	35	0	35	34	0	34	-2.9%
GARDNER WEBB UNIV	87	0	87	100	0	100	14.9%
SOUTHEASTERN COMM	64	2	66	68	5	73	10.6%
STANLY COMM COLLEGE	60	14	74	60	4	64	-13.5%
BLUE RIDGE COMM COL	30	0	30	30	0	30	0.0%
DURHAM TECH COMM [1]	66	15	81	79	33	112	38.3%
LENOIR COMM COLLEGE	30	7	37	40	7	47	27.0%
PIEDMONT COMM COLL	27	0	27	33	0	33	22.2%
CAPE FEAR COMM COLL	80	11	91	80	9	89	-2.2%
VANCE GRANVILLE	46	0	46	34	6	40	-13.0%
CAR COLL HEALTH SCI	142	0	142	135	2	137	-3.5%
FOOTHILLS NSG CONS [2]	42	10	52	71	26	97	86.5%
RANDOLPH COMM COLL	40	2	42	47	5	52	23.8%
CATAWBA VALLEY COMM	77	0	77	79	1	80	3.9%
REGION A NRSG CONS [3]	64	6	70	77	8	85	21.4%
MITCHELL COMM COLL	49	0	49	57	0	57	16.3%
CENTRAL CAROLINA	51	10	61	48	1	49	-19.7%
WILKES COMM COLLEGE	46	0	46	38	2	40	-13.0%
CALDWELL COMM COLL	46	1	47	52	0	52	10.6%
JOHNSTON COMM COLL [4]	55	0	55	58	12	70	27.3%
ALAMANCE COMM COLL [5]	49	0	49	44	2	46	-6.1%
RICHMOND COMM COLL	64	0	64	75	8	83	29.7%
PITT COMM COLLEGE	72	2	74	76	3	79	6.8%
COASTAL CAROLINA	30	1	31	33	0	33	6.5%

Total New Enrollees in ADN Programs (2003, 2006)

School	2003			2006			% Change
	Prelicensure ADN students	Prelicensure LPN-ADN students	Total	Prelicensure ADN students	Prelicensure LPN-ADN students	Total	
NEWH NSG CONSORTIUM	189	0	189	156	33	189	0.0%
FORSYTH TECH COMM	145	10	155	130	0	130	-16.1%
CRAVEN COMM COLLEGE	70	10	80	64	7	71	-11.3%
WAKE TECH COMM COLL	141	1	142	136	3	139	-2.1%
SAMPSON COMM COLL	49	10	59	39	10	49	-16.9%
GASTON COLLEGE	69	0	69	68	19	87	26.1%
BEAUFORT COMM COLL	41	1	42	38	5	43	2.4%
WAYNE COMM COLLEGE	40	5	45	40	1	41	-8.9%
ROWAN CABARRUS COMM	58	2	60	60	3	63	5.0%
JAMES SPRUNT COMM	40	15	55	33	10	43	-21.8%
COLL OF ALBEMARLE	32	6	38	34	10	44	15.8%
ROANOKE CHOWAN COMM	29	1	30	31	1	32	6.7%
GUILFORD TECH COMM [6]	116	15	131	126	7	133	1.5%
SURRY COMM COLLEGE	81	16	97	89	11	100	3.1%
DAVIDSON CO COMM	56	2	58	48	10	58	0.0%
ASHEVILLE BUNCOMBE [7]	89	14	103	88	9	97	-5.8%
MAYLAND COMM COLL	26	0	26	23	0	23	-11.5%
CABARRUS COL HLTH	73	1	74	81	0	81	9.5%
CENTRAL PIEDMONT	85	0	85	61	0	61	-28.2%
New Programs							
BLADEN COMM COLLEGE				24	5	29	NA
PRESBYTERIAN SCHOOL OF NURS				163	0	163	NA
BRUNSWICK COMM COLL				47	0	47	NA
SOUTH PIEDMONT				20	0	20	NA
CARTERET COMM COLL				23	0	23	NA

Total New Enrollees in ADN Programs (2003, 2006)

School	2003			2006			% Change
	Prelicensure ADN students	Prelicensure LPN-ADN students	Total	Prelicensure ADN students	Prelicensure LPN-ADN students	Total	
TOTAL	**3057**	**210**	**3267**	**3354**	**288**	**3642**	**11.5%**

[1] In 2006, 33 of the Durham Technical College ADN students were enrolled in an evening/weekend program.

[2] In 2006, 31 of the A students and 14 of the B students at Foothills NSG Consortium were enrolled in an evening/weekend program.

[3] In 2006, 29 of the A students and 1 of the B students at Region A Nursing Consortium were enrolled in an evening/weekend program.

[4] In 2006, 2 of the B students at Johnston Comm College were enrolled in an evening/weekend program.

[5] In 2006, 15 of the A students at Alamance Comm College were enrolled in an evening/weekend program.

[6] In 2006, 41 of the A students at Guilford Tech College were enrolled in an evening/weekend program.

[7] In 2006, 24 of the A students and 1 of the B students at Asheville Buncombe were enrolled in an evening/weekend program.

Total New Enrollees in BSN Programs (2003, 2006)

School	2003				2006				% Change
	Pre-license	RN-BSN Students	Accel. BSN Pre-licensure	Total	Pre-license	RN-BSN Students	Accel. BSN Pre-licensure	Total	
NC CENTRAL UNIV	43	18		61	41	7		48	-21.3%
UNC WILMINGTON	60	18		78	120	10		130	66.7%
UNC CHARLOTTE	94	26		120	98	91		189	57.5%
WESTERN CAROLINA	50	31		81	60	30		90	11.1%
QUEENS COLLEGE [1]	25	9		34	41	3		44	29.4%
WINSTON SALEM STATE [2]	62	95	40	197	0	247	45	292	48.2%
EAST CAROLINA UNIV	208	104		312	236	50		286	-8.3%
UNC GREENSBORO	93	70		163	90	95		185	13.5%
NC A&T STATE UNIV	94	3		97	84	1		85	-12.4%
UNC CHAPEL HILL [3]	120	26	41	187	130	26	43	199	6.4%
BARTON COLLEGE	32	13		45	48	5		53	17.8%
LENOIR RHYNE COLL	99	3		102	35	0		35	-65.7%
WINSTON SALEM STATE	30	0		30	93	247		340	1033.3%
RN-BSN Only									
CABARRUS COLLEGE OF HEALTH SCIENCES	0	10		10	0	16		16	60.0%
GARDNER WEBB	0	23		23	0	61		61	165.2%
LEES MCCRAE COLLEGE	0	24		24	0	17		17	-29.2%
SOUTHEASTERN CONSORTIUM	0	119		119				0	-100.0%
DUKE UNIVERSITY			50	50			58	58	16.0%
New Schools									
UNC-Fayetteville State University					59	10		69	NA
UNC-PEMBROKE BSN					63	21		84	NA
APPALACHIAN STATE UNIV.						19		19	NA

Total New Enrollees in BSN Programs (2003, 2006)

School	2003				2006				% Change
	Pre-license	RN-BSN Students	Accel. BSN Pre-licensure	Total	Pre-license	RN-BSN Students	Accel. BSN Pre-licensure	Total	
Subtotal Prelicensure				*1141*				*1344*	
TOTAL	**1010**	**592**	**131**	**1733**	**1198**	**956**	**146**	**2319**	**33.8%**

[1] Presbyterian was a hospital diploma program in 2003. In 2004 the program changed to an ADN degree program with a special dispensation from the legislature that allowed them to grant degrees. In 2006 the Presbyterian ADN program entered into a partnership with Queens College. There are now two types of degrees granted through the “Presbyterian School for Nursing at Queens College," an ADN degree and a BSN degree. The chart shows the BSN students.

[2] Winston-Salem state RN-BSN students are in a part-time program.

[3] UNC-Chapel Hill students RN-BSN students are in a part-time program.