

Plans to Increase Mid-Level Primary Health Care Providers Including Nurse Practitioners, Nurse Midwives, and Physician Assistants

April 2004
Fifth Report

Submitted by the Board of Governors of The University of North Carolina in response to General Statute 143-613 as amended by Chapter 507 of the 1995 Session Laws (House Bill 230) of the North Carolina General Assembly.

This report includes reports from
Nurse Practitioner, Nurse Midwifery and Physician Assistant Programs

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Part I. Executive Summary:

The Legislative Mandate, Progress toward Enrollment Goals, And Statewide Goals

The Legislative Mandate

During the 1995 session of the North Carolina General Assembly, the legislature passed General Statute 143-613, House Bill 230, Section 23A.5, “Primary Care Providers,” which required several activities designed to increase the number of primary care physicians and the number of mid-level primary care providers in the state. The legislature asked the Board of Governors to:

. . . set goals for state-operated health professional schools that offer training programs for licensure or certification of physician assistants, nurse practitioners, and nurse midwives for increasing the percentage of graduates of these programs who enter clinical programs and careers in primary care (a copy of the bill is in the appendix).

The Board of Governors has complied with this request and it approved the seventh enrollment report, “Monitoring the Progress of North Carolina Graduates Entering Primary Care Careers,” at its November 2003 meeting. The legislature also required the Board to approve actual plans and strategies for increasing enrollment in each primary care program. The Board is required to submit these planning reports biennially. This fifth biennial report focuses on plans to increase the enrollment in the nurse practitioner, nurse midwifery, and physician assistant programs.

Enrollments in the UNC primary care nursing programs have increased since the Board of Governors and administrators started monitoring trends in 1995. For example, **the enrollment of students in the nurse practitioner programs has increased from 182 students in 1995 to 367 students in fall semester 2003. Moreover, according to data from the Cecil G. Sheps Center, the number of mid-level providers who are employed as nurse practitioners in the state has doubled from 803 in 1995 to 1,992 in 2002.**

The nursing deans and the director of the physician assistant program conscientiously used a variety of strategies and interventions to accomplish these results. As discussed in their updated plans in Part II, the results were accomplished by curricular changes to emphasize primary care rather than clinical specialties, by an internal reallocation of resources to train or hire more primary care faculty, through AHEC support for clinical placement and preceptor training and by commendable efforts to secure external funds to support primary care education from the Duke Endowment, the Kellogg Foundation, the Robert Wood Johnson

Foundation, the Kate B. Reynolds Foundation and federal grants. This report on mid-level providers complements reports to increase the number of primary care physicians.

The overriding objective of the activities and plans approved by the Board of Governors remains clear: to improve health care delivery in the state by increasing the number of primary care providers with a special emphasis on meeting the needs of the underserved areas. We are pleased to report progress toward this objective.

Progress Toward Enrollment Goals

The University of North Carolina has eight academic programs that prepare mid-level health providers. Six master's programs prepare nurse practitioners and these are located at East Carolina, The University of North Carolina at Chapel Hill, The University of North Carolina at Charlotte, The University of North Carolina at Greensboro, The University of North Carolina at Wilmington and Western Carolina University. Several of these programs also offer post-master's certificates and distance learning options. The University of North Carolina has one nurse midwifery program at East Carolina University and, one baccalaureate physician assistant program at East Carolina. Duke University also offers a master's nurse practitioner program with several program options. Approximately 170 students are enrolled in Duke's program. Duke and East Carolina University have combined resources to offer distance learning nurse practitioner and physician assistant programs to students in a 32 county region in eastern North Carolina.

When the 1995-96 baseline was established, UNC institutions enrolled 182 nurse practitioner students. The total enrollment increased to 256 students in 1996-97 and in 1997-98, the enrollment dropped slightly to 247 students. In 1998-99, enrollment soared to 339 students. During the fall 2001 semester, there were 368 students enrolled in nurse practitioner programs. UNC institutions have exceeded the projected enrollment goal of 209 students by the year 1999-2000. For fall 2003, there were 367 nurse practitioners enrolled in UNC institutions. The state total, including Duke, is 539 students for fall 2003.

Since many primary care nursing students are part-time graduate students, increases in graduation rates are reflected after three or four years of study. In 1995-96, the deans projected that the number of students graduating from these nurse practitioner programs would increase from 47 students to 106 graduates by 1999-2000. In 2000-2001, 139 students graduated from UNC nurse practitioner programs and this result exceeded the target. In 2003-03 a total of 132 students graduated from UNC institutions.

East Carolina University offers the only UNC program in nurse midwifery and it was started with an enrollment of 16 students. Enrollments in this program have fluctuated from a high enrollment of 25 students in 1997-1998 and declined to 14 students in fall 2001. Nursing administrators plan to develop an electronic option to increase enrollment in this program. Working nurses would have access to the program throughout the state. The program is also on the authorized inventory of UNC Academic Common Market

programs, which opens enrollment to students from southern states. In 2003-04 17 students were enrolled in the program. According to the Cecil G. Sheps Center, the number of Certified Nurse Midwives practicing in the North Carolina has increased from 93 in 1995 to 193 in 2002.

The Board of Governors authorized East Carolina University to offer a physician assistant program in February 1996. Administrators admitted the first class of 19 students in May 1997. The University has expanded to include a distance learning option for place-bound students in rural counties in eastern North Carolina. East Carolina received approval to move their program to the master's level, which was accomplished in 2003. The plan is to admit a class of 30 students each fall so the annual enrollment will be approximately 90 students. The enrollment for 2003-04 is 94 students. There are three physician assistant programs located at private universities in North Carolina and all are master's level programs

Statewide Goals

University administrators from the mid-level primary care programs, staff from AHEC, and the Office of the President will continue to monitor enrollment trends and the supply of mid-level primary care providers. We will also monitor: the statewide demand or need for mid-level primary care practitioners; assess the need for additional faculty; monitor access to clinical training; assess the need for trained clinical preceptors; and, assess the need for additional funding in order to expand on-campus or off-campus programs. With the annual enrollment report to the Board of Governors each fall, we will also monitor the placement of primary care practitioners five years after graduation. Even with tremendous progress, nursing administrators will continue to work to make certain that the shift of faculty and resources to mid-level primary care education does not create shortages in other areas of nursing.

ACTUAL & PROJECTED <i>ENROLLMENTS</i> IN ON-CAMPUS NURSE PRACTITIONER PROGRAMS																		
	Baseline Actual 95-96	Actual 96-97	%chg	Actual 97-98	%chg	Actual 98-99	%chg	Actual 99-00	%chg	Actual 00-01	%chg	Actual 01-02	%chg	Actual 02-03	%chg	Actual 03-04	%chg	Projected 04-05
ECU	12	31	158.3%	32	3.2%	56	75.0%	42	-25.0%	31	-26.2%	37	+19.4%	23	-37.8%	35	52.2%	55
UNC-C	16	30	87.5%	48	60.0%	60	25.0%	60	0.0%	64	6.7%	74	15.6%	79	7.4%	89	12.7%	95
UNC-CH	115	121	5.2%	107	-11.6%	129	20.6%	118	-8.5%	95	-19.5%	145	52.6%	152	4.8%	141	-7.2%	150
UNC-G	39	74	89.7%	60	-18.9%	74	23.3%	75	1.4%	77	2.7%	43	-44.2%	37	-13.4%	50	35.1%	55
UNC-W	N/A	N/A	N/A	N/A	N/A	20	N/A	29	45.0%	29	0.0%	27	-6.9%	30	12.7%	23	-23.3%	19
WCU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	34	N/A	29	-14.7%	42	44.8%	48	15.1%	29	-39.6%	75
Totals:	182	256	40.7%	247	-3.5%	339	37.2%	358	5.6%	325	-9.2%	368	13.2%	385	4.7%	367	-4.7%	449

Note: Several of the nurse practitioner programs have been established since the baseline was set in 1995-96; projections are not applicable (N/A) to these programs.

**The five-year goal set in 1995 was to enroll 209 Nurse Practitioner students annually by 2000.
This goal has been met and exceeded.**

**ACTUAL AND DEGREES CONFERRED
IN ON-CAMPUS DISTANCE LEARNING NURSE PRACTITIONER PROGRAMS**

	Baseline Actual 95-96	Actual 96-97	%chg	Actual 97-98	%chg	Actual 98-99	%chg	Actual 99-00	%chg	Actual 00-01	%chg	Actual 01-02	%chg	Actual 02-03	%chg	Projected 03-04
ECU	6	N/A	N/A	12	N/A	18	50.0%	11	-38.9%	21	90.9%	7	-66.6%	19	171.4%	3
UNC-C	N/A	N/A	N/A	12	N/A	22	83.3%	19	-13.6%	16	-15.8%	17	6.25%	18	5.9%	27
UNC-CH	26	60	130.8%	55	-8.3%	64	16.4%	41	-35.9%	54	31.7%	56	3.7%	60	7.1%	50
UNC-G	15	24	60.0%	20	-16.7%	24	20.0%	0	-100.0%	36	N/A	22	-38.9%	5	-77.2%	10
UNC-W	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9	N/A	12	33.3%	9	-25.0%	7	-22.2	6
WCU	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2	N/A	23	1050%	13
Totals:	47	84	78.7%	99	17.9%	128	29.3%	80	-37.5%	139	73.8%	113	-18.7%	132	16.8%	109

**The five-year goal set in 1995 was to confer 106 Nurse Practitioner degrees annually by 2000.
This goal has been met and exceeded.**

	Baseline																							
	Actual	Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual	Actual	Actual	Actual	Actual	Actual	Actual
	95-96	96-97		%chg		97-98		%chg		98-99		%chg		99-00		%chg		00-01	%chg	01-02	%chg	02-03	%chg	03-04
ECU	20	24	20.0%	25	4.2%	19	-24.0%	10	-47.4%	16	60.0%	14	-12.5%	15	+7.1%	17	+13.3%	15						

ACTUAL & PROJECTED <i>DEGREES CONFERRED</i> in the NURSE MIDWIFERY PROGRAM																		
	Baseline																	
	Actual	Actual		Actual		Actual		Actual		Actual		Actual		Actual				
	95-96	96-97		%chg		97-98		%chg		98-99		%chg		99-00		%chg		00-01
ECU	10	11	10.0%	12	9.1%	9	-25.0%	8	-11.1%	5	-37.5%	8	+37.5%	2	-75%	5	+150%	10

ACTUAL & PROJECTED <i>ENROLLMENT</i> in the PHYSICIAN ASSISTANT PROGRAM															
		Baseline													
		Actual	Actual		Actual		Actual		Actual		Actual	% chg	Actual	%chg	Projected
		97-98	98-99	%chg	99-00	%chg	00-01	%chg	01-02	%chg	02-03	% chg	03-04	%chg	04-05
ECU		19	49	157.9%	54	10.2%	78	44.4%	71	-9.0%	71	0.0	94	32.4%	87

ACTUAL <i>DEGREES CONFERRED</i> in the PHYSICIAN ASSISTANT PROGRAM									
			Actual	Actual		Actual		Actual	
			99-00	00-01	%chg	01-02	%chg	02-03	%chg
ECU			18	23	27.8%	29	26.1%	41	41.4%

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