



**October
2005**

**Enhancing the
Education and
Supply of Nurses
in Connecticut:
*Report and
Recommendations***

**From the
Council of Deans & Directors
of Nursing Programs**

Sponsored by: The Connecticut League for Nursing

NLN

Overview

This report and recommendations are intended to provide information and a direction for action that will help assure that Connecticut will have a sufficient number of well-educated nurses to meet the healthcare needs of our citizens.

The deans and directors of nursing programs in Connecticut are in a unique position to assess the capacity and resources for nursing education and participate with other stakeholders (including nurse executives, healthcare administrators, payers, regulators, and legislators) in determining the workforce size and composition that is required for the future.

This report will be presented in four major sections:

- I. Introduction and Parameters of the Nursing Workforce Shortage*
- II. A Survey of Nursing Education Program Capacity and Faculty Resources that identifies an alarming gap between the number of nurses needed and the number of nurses that will be available over the next 15 years.
- III. A Call to Action that suggests strategies to address this evolving nursing workforce crisis. As was aptly stated in *A Report on Oregon's Registered Nurse Workforce* (2005), the title **WHEN, Not If...** was selected because unless we take immediate and decisive action, a critical statewide nursing shortage is inevitable – in Connecticut as in Oregon!
- IV. A Consensus Statement on Nursing Career Mobility in Connecticut dated June 2005, developed by the Connecticut League for Nursing's (CLN) Council of Deans and Directors (CDD) and endorsed by the Connecticut Hospital Association's (CHA) Nurse Executive Conference Group.

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* CLN would like to express its thanks and gratitude to Lisa Anderson, MSN, Vice President for The Center for Health Affairs in Cleveland, Ohio and her committee for sharing us the format and national statistics provided in section I of this report.

The Connecticut League for Nursing (CLN) Council of Deans & Directors is pleased to present this Statewide Nursing Report. This report highlights:

- national and statewide trending on nursing education & nursing workforce projections;
- the results of a survey of the (11) pre-licensure LPN and (18) RN programs from schools of nursing in Connecticut;
- a call to action to systematically address current and future nursing education barriers that will soon have a profound impact on healthcare delivery in our state;
- a consensus statement reflecting an action plan for Nursing Career Mobility in CT.

An initial survey was conducted in December of 2004 under the auspices of The Connecticut League for Nursing (CLN), a statewide association that supports nursing education within Connecticut and is committed to addressing the nursing workforce shortage. The survey arose from concerns expressed by the deans and directors of Connecticut schools of nursing about the growing volume of nursing program applicants who could not be accepted due to space limitations, coupled with the increasing difficulty in identifying and attracting appropriately prepared nursing faculty at current salary levels. While the phenomenal interest in nursing as a career is encouraging after years of decline, the ability of schools to quickly increase their resources to meet student demand has created significant challenges, not only in our region but across the country.

This report clearly documents the tremendous efforts of nursing programs to increase individual program capacity and outlines the unique characteristics of the nursing education process. It provides validation that Connecticut schools maintain high rates of graduation that result in nurses who choose to stay in Connecticut for employment. However, sustained and coordinated effort to address ongoing barriers is essential to educate the necessary number of nurses to meet current and projected vacancies.

Selected National and Statewide Perspectives on the Nursing Workforce:

Historically, a professional nursing career has represented, and still does to many individuals, a portable and stable profession. And though challenges still exist, great strides have been made by employers to make the nursing profession more attractive by increasing salaries, offering flexible scheduling and addressing work-life balance issues. In 2000, professional nurses represented 21 percent of the entire healthcare workforce nationally. **(1)**

The notion of a nursing workforce shortage in the United States, and even globally, is not new to the general public. As news of a nursing shortage became widespread in 2001 and the national economy faltered, many individuals took a first, or even a second, look at a nursing career. Efforts to influence individuals to go into nursing through national and statewide media and print campaigns have had a nearly tidal wave effect on schools of nursing and their resources.

According to a 2003 national survey by the American Association of Colleges of Nursing (AACN), enrollments in four-year baccalaureate nursing programs rose by 16.6 percent, while 11,000 qualified applicants were turned away due to limited school capacity. The factors contributing to limited capacity included **lack** of: faculty, clinical sites for nursing student hands-on clinical experiences, and classroom space. **(2)**

Section I Introduction

Similarly, the National League for Nursing (NLN), a national organization that promotes quality nursing education, reported preliminary survey results (2003) that enrollments for all types of registered nurse programs increased by 15 percent, returning the number of admissions to associate degree and baccalaureate programs to the same levels they were a decade ago, prior to a protracted downturn in nursing enrollments during the 1990s. **(3)**

By 2012, the United States Department of Labor predicts that the demand for registered nurses (RNs) will increase by 623,000 positions, a 27 percent increase from 2002, putting nursing at the top of the list of the 10 occupations with the most projected growth. This ranking represents the first time the RN occupation eclipsed all other professions in workforce demand. Similarly, the demand for licensed practical nurses (LPNs) will increase by 142,000 positions, an increase of 20 percent. Over a 20-year period (2000-2020), total national demand will reach more than one million positions for RNs and 295,000 for LPNs comprised of needed replacements and increased demand (4).

Moreover, the following statistics were included in the recently released NLN data from the April 2005 President's Message:

- Nursing Is The Nation's Largest Health Care Profession With An Estimated 2.7 Million Active, Licensed Registered Nurses.
- On A National Basis, An Estimated 125,000 Applicants Were Turned Away From Nursing Programs At All Levels For The Academic Year 2003-04
- The Number Of Full-Time Faculty Needed May Be As High As 40,000 While Nursing Faculty Salaries Are Less Than Competitive. Currently, Fewer Than 20,000 Full-Time Faculty Are In The System.
- The Average Age Of Nursing Professors Is 52; For Associate Professors, The Average Age Is 49.
- Nearly 1,800 Full-Time Faculty Leave Their Positions Each Year.
- Fewer Than 400 Nursing Students Receive Doctoral Degrees Each Year.

The national supply and demand data from HRSA combined with the NLN data regarding national nursing schools not only paint a very disturbing picture for the nursing profession, but predict a profound impact on the provision of healthcare to individuals within our communities over the next 5-10 years.

Projected Demand for Nurses in Connecticut:

The pressure to increase enrollment capacity, to accelerate the education process between nursing levels, and to provide ready-to-work professional nurses represents a daunting challenge for nurse educators. Given the fact that the healthcare industry in Connecticut employs the largest segment of the State’s population, the importance of sustaining a strong nursing workforce is a critical issue – not only for the delivery of healthcare but as a contributor to the local economy.(5)

In addition, the Health Resources and Services Administration (HRSA) released a study in 2002 about the projected need for RNs in each of the 50 states. The initial calculation of nurse manpower estimated by HRSA for Connecticut created significant controversy since Connecticut was at one time predicted to have a surplus of nurses in coming years. In response, HRSA recalculated the data using different assumptions such as an increased aging population, a decrease in the number of new (graduating) RNs, and the likelihood that Connecticut would have to import nurses from other states to offset demand.

Table 1: Connecticut Supply and Demand for Nurses: 2000-2020*

YEAR	FTE SUPPLY	FTE DEMAND	EXCESS OR SHORTAGE () = SHORTAGE	PERCENT OVERAGE OR SHORTAGE
2000	28,000	30,200	(2,200)	-7%
2005	25,400	31,800	(6,400)	-20%
2010	22,900	34,000	(11,100)	-33%
2015	19,900	36,600	(16,700)	-46%
2020	17,200	39,600	(22,400)	-57%

*Source: HRSA Registered Nurse Supply, Demand and Shortage Projections for Connecticut, 2004

As illustrated in table 1, the growing need for nurses creates a number of issues for Connecticut healthcare employers and nurse educators.

Some of the most basic questions arise such as,

- ***“How are nursing schools currently handling demand for nursing education using existing resources?” and,***
- ***“What resources will they need in the future to meet an ever-increasing demand for professional nurses?”***

Connecticut is projected to have the 2nd greatest decline in the supply of nurses nationally over the period from 2000-2020. In 2020 (less than 15 years), should our schools continue to produce the same number of nurses they currently produce, it is forecasted that the state of Connecticut will realize a shortage of over 22,000 nurses that would significantly impact the safety of patient care as evidenced by consequences when low nursing staff levels occur.

Section II Survey Overview

An Overview of the Survey on Nursing Education in Connecticut:

In Winter 2004, the CLN Council of Deans & Directors invited all of the (18) nursing schools and programs, as well as the State of Connecticut's (11) Practical Nurse Education Programs (PNEP) to respond to a comprehensive survey (65 questions) that examined three areas:

- **Student Capacity** (enrollment, attrition and graduation)
- **Program Issues** (program capacity, waiting list and expansion limits)
- **Faculty Resources** (faculty composition, vacancy and availability)

One hundred percent (100%) of the 18 schools of nursing and state PNEP Programs responded to the survey including: eleven Baccalaureate; seven Associate Degree; five Accelerated Baccalaureate; one diploma; and two doctoral programs in nursing.

The focus of this report is to present the findings of the 2004 Connecticut nursing school capacity survey including: The multitude of issues facing local nursing schools, insight on how nurses are educated, the rising demand among individuals to enter a nursing program, and how Connecticut nursing programs are responding to the demand for more nurses in the community. In addition, enrollment data for fall 2005 will be presented.

FINDING 1:

Connecticut Schools Of Nursing Have Far More Qualified Applicants Than They Can Admit.

The number of nursing school applicants to registered nurse programs more than doubled from fall 2003 to fall 2004, with an indication that the number is even higher for fall 2005. **Tables 2 and 3** demonstrate the information collected from the Connecticut League for Nursing Council of Deans and Directors Report of pre-licensure nursing programs (those becoming nurses) regarding applicant levels. The tables offer specific information regarding type of degree/certificate, student enrollment, available spaces, and number of qualified students turned away.

TABLE 2

Connecticut RN Nursing Program Applicants	2003	2004	2005*
Number of available program slots	2194	2986	1289
Number of filled slots	2095	2883	1317
Percentage of slots filled	95.4%	100%	102%
Number of qualified applicants denied due to lack of program slots	450	1029	1643

*As of printing, although only 12 of the 18 schools had submitted their 2005 data, the number of qualified applicants denied admission has eclipsed the 2004 data.

TABLE 3

Connecticut LPN Nursing Program Applicants	2003	2004
Number of available program slots	400	400
Number of filled slots	400	400
Percentage of slots filled	100%	100%
Number of qualified applicants denied due to lack of program slots	800	1000

According to **Tables 2 and 3**, undergraduate programs combined turned away more than 63% more students in 2004 than 2003. On the positive side, all programs combined enrollment increased 38% over the one year period. Most Connecticut nursing school deans and directors agree that the number of qualified candidates has increased in recent years and schools have increased their minimum requirements in response to the larger pool of academically qualified candidates. Therefore, it can be assumed that the overall quality of the students admitted to programs has improved, increasing the likelihood that the students will successfully complete the program and become a part of the nursing workforce.

Tables 4 and 5 show the lack of sufficient spaces for undergraduate RN and LPN Programs while demonstrating adequate spaces for the numerous graduate education opportunities.

For example, spaces for BSN students have nearly doubled, from 983 in 2003 to 1700 in 2004. While during that same time, the capacity of ADN Programs have remained the same, yet in 2003 these ADN schools turned away 172 qualified applicants, and in 2004 turned away 639 qualified applicants who wanted to become nurses.

TABLE 4- 2003 DATA

Fall 2003 CT Nursing Program Applicants	Doctorate	Graduate Entry (non-nurse college graduate)	MSN	RN- MSN	RN- BSN	Acceler- ated BSN	BSN	ADN	Diploma
No. of available prgm slots	67	101	565	36	310	95	983	857	258
No. of filled slots	67	101	529	31	230	74	923	857	241
% of prgms filled	100%	100%	93.6%	86%	74.2%	77.8%	93.3%	100%	93.4%
No. of qualified applicants denied due to lack of prgm slots	7	62	10	0	0	0	0	172	278

Section II Survey Overview

TABLE 5 - 2004 DATA

Fall 2004 CT Nursing Program Applicants	Doctorate	Graduate Entry (non-nurse college graduate)	MSN	RN- MSN	RN- BSN	Acceler- ated BSN	BSN	ADN	Diploma
No. of filled slots	58	103	707	41	425	69	1700	855	259
No. of qualified applicants denied due to lack of prgm slots	4	68	12	0	0	0	40	639	350

Table 6 illustrates that the application rate for both the RN and LPN Programs (Undergraduate Programs) have had significant increases on just one year. The number of individuals who have graduated during this same period has increased; yet in the undergraduate RN and LPN programs, the percentage of qualified applicant refused by these programs is growing at a higher rate. This is due to the lack of available nurse faculty and resources to accept more students.

TABLE 6- ADMISSION STATISTICS

	Fall 2003	Fall 2003	Fall 2003	Fall 2004	Fall 2004	Fall 2004
	Under- graduate Programs	Graduate Programs	LPN	Under- graduate Programs	Graduate Programs	LPN
No. of Applicants	2775	807	1200	4337	993	1400
% of applicants accepted	84%	90%	33%	76%	91%	29%
% of accepted applicants who enrolled (in coursework)	92.9%	94.7%	100%	100%	100%	100%
% of qualified applicants refused by program	17.9%	10.3%	200%	24%	9%	250%

FINDING 2:

There Is A Continuing Need For Nursing Program Expansion In Connecticut

In the 2003 academic year, over 500 qualified nursing school applicants were denied admission due to a lack of available student slots. This represents 17 percent of all the students who applied and were qualified, meaning they had met the appropriate pre-requisites. In comparison, in the 2004 academic year, there were 1,100 denied which represents over 25% of applicants who were qualified and were turned away. A faculty increase of greater than 20% is needed immediately to accommodate the number of qualified students who, in the meantime, were most likely placed on program admission waiting lists.

Approximately two-thirds of the programs have indicated that they have received approval to add full-time faculty lines for 2005-2006, totaling 25 full-time faculty or a 10% increase over current levels. Yet with projected retirements over the next three years totaling 33 full-time faculty, the overall capacity of our programs will actually decline unless there is a significant investment of expanding the number of faculty lines in our schools at competitive salaries, and proactive initiatives to foster nurses to become prepared at the masters and doctoral levels to assume these positions.

FINDING 3:

The Lack of Nursing Faculty is A Significant Barrier Affecting Program Expansion

Average salaries for Ph.D. (\$60,000) and Master of Science in Nursing (M.S. /M.S.N.) (\$49,000) faculty are well below market when compared to nursing salaries in the service sector (hospitals, home health care agencies, long-term care organizations and other health-related businesses). This comparison is based on positions with equivalent education and experience requirements. (See appendix highlighting nursing salaries in CT).

It is clear that the Connecticut programs are not large enough to accept and educate all who apply. One reason for the inability of programs to meet the demand is lack of faculty. There were currently 26 vacant full and part time faculty positions reported by Connecticut nursing programs for the 2004-2005 academic year.

Eight (8) of 19 registered nurse education programs reported full-time faculty vacancies for 2004-2005, with 2 programs reporting 4 vacancies each. In addition, anecdotal information suggests that there are more vacancies for 2005-2006 and that it is taking longer to recruit and hire qualified faculty.

Connecticut Nursing programs have been able to develop “patchwork” short-term actions to creatively fill faculty positions to expand enrollment, yet these strategies are NOT self-sustaining nor systemic. These quick fixes will “unravel” shortly due to the excessive strain it is currently placing on the entire statewide nursing education system.

Section II Survey Overview

FINDING 4: Utilization of Clinical Education Sites for Students Should be Better Coordinated on a Statewide Basis

Ninety percent (90%) of nurse educators reported that additional clinical training sites for students (patient care delivery sites) were needed in all practice areas. However, there was heavier demand on certain days and time periods that might be alleviated if Mondays, weekends, and evening and night rotations were considered. With the exception of Monday, the other times may represent more of a challenge since they are considered non-traditional working hours for nursing faculty. In addition, the ability to accommodate students during times when regular staffing on some patient units may be reduced (evening shift) or the opportunity to provide direct patient care is limited (night shift) may be equally as difficult for the clinical institutions.

Clinical agencies also face other issues as they strive to provide support and a positive environment for the clinical education of student nurses. The workload of staff nurses who work directly with students has grown significantly over time. Two major factors in the increased nursing workload are the complexity of healthcare systems and patient acuity, which also create challenges for students and nursing faculty. Finally, the process for reviewing and approving clinical agreements/contracts between schools of nursing and clinical practice sites consumes inordinate amounts of administrative time for both organizations.

Nursing education administrators and nursing practice executives are working collaboratively to develop methods to expand clinical training capacity; however the most effective strategies require human and/or other resources to develop and sustain them.

FINDING 5: Connecticut Nursing Programs Produce High Quality Nurses Who Work in Connecticut and Sustain the required Workforce

Eighty-percent (80%) of students who enroll in Connecticut nursing programs graduate with nursing degrees. Students who do not complete a nursing program generally fail to meet program standards. One of the primary goals of any nursing education program is to prepare students to take the NCLEX® (National Council Licensure Examination) for registered nurse or licensed practical nurse. Each state's board of nursing requires a passing score on the NCLEX® in order to process that individual for state licensure.

The first-time passage rate for Connecticut students is between 82 and 100 percent for the NCLEX®-RN and LPN tests, which is comparable to national pass rates. This reflects well on the quality of Connecticut nursing education programs. Schools report that, on average, **8 out of 10** nursing school graduates obtain employment and remain in Connecticut.

As A Result Of The Findings Presented Above, The CLN Council Of Deans And Directors Issues A Call To Action As Follows:

Connecticut has an outstanding reputation for high-quality nursing education and a wide array of excellent nursing schools. However, it is critical to the future of the healthcare industry that solutions to the challenges nursing schools face are addressed and achieved, not only for the industry's benefit, but for the benefit of our community and the healthcare consumer.

The information from the Connecticut Nursing School Capacity Survey should be widely disseminated and viewed in terms of achievement and alarm. While there is much for local schools to take pride in –quality programming that produces a large number of registered and licensed practical nurses and their perseverance to expand programs at a time of shrinking state and private education funds – challenges remain. Beyond the overall higher education funding issue, nursing schools are facing competition for clinical sites, burgeoning student demand, and a lack of nursing faculty. Therefore we propose:

- 1. Issues and opportunities related to the nursing workforce in Connecticut be identified as a high priority area for investment over the coming years**
- 2. A detailed, urgent assessment and analysis of the nursing workforce (present capacity and future needs) be commissioned and FUNDED by an appropriate entity within the state that is committed to working with all relevant stakeholders to obtain accurate and unbiased information.**
- 3. The results of this assessment be used to rapidly propose and design systemic, coordinated, evidence-based interventions to alleviate the current and projected shortage of nurses and nurse faculty.**

It is noteworthy that numerous other states have invested in extensive and expensive nursing workforce studies that address in much more breadth and depth the topics and issues that have been presented in this report that was conducted and written by volunteer members of the Connecticut League for Nursing Council of Deans and Directors along with the CLN Executive Director. It is sincerely hoped that this beginning effort will serve to focus attention and mobilize action to sustain a high quality nursing education infrastructure that will serve the needs of the State of Connecticut.

Section IV Highlights

This section highlights a consensus statement developed by the Council of Deans and Directors in the summer of 2005 as it relates to the future of nursing education in the state of Connecticut.

CLN Council of Deans and Directors- June 2, 2005 Consensus Statement on Nursing Career Mobility in Connecticut

Purpose:

The purpose of this statement is to express the consensus of the Connecticut League for Nursing Council of Deans and Directors on the issue, and to foster dialogue with key stakeholders regarding nursing roles needed to ensure quality and improve access to care, and to demonstrate commitment to the ongoing professional development of nurses in support of their practice in such roles.

Whereas:

- The Council of Deans and Directors views preparation for nursing on a continuum that extends from licensed practical nursing through advancing levels of education for registered nursing, culminating in doctoral preparation, with opportunity to exit into practice at several points along the continuum;
- The practice of licensed practical nursing is supported primarily by vocational education, and involves the performance of selected tasks in implementing the total health regimen under the direction of a registered nurse or an advanced practice registered nurse;
- The practice of nursing by a registered nurse is supported by multiple educational pathways to registered nurse licensure, and involves the diagnosis of human responses to actual or potential health problems, planning and implementing nursing interventions, and collaboration in the implementation of the total health care regimen;
- Connecticut has a state-wide articulation system in place to facilitate the advancement of nurses from one educational level to another in support of their preparation for leadership and other advanced practice roles; however, our current system is not producing enough registered nurses with bachelor's, master's, and doctoral degrees to meet today's and tomorrow's needs for nursing faculty, nursing leadership, and nursing research positions;
- The Institute of Medicine, in a series of Reports (*To Err is Human, Quality Chasm and Keeping Patients Safe*), described care needs and practice environments as complex and ever-changing, and called for advancing education and interdisciplinary practice integration for all healthcare professionals as essential to address these complexities;

- Several health professions (e.g., physical therapy, occupational therapy, pharmacy) are advancing their education levels to address the above complexities and practice role requirements; and
- Education level is related to quality of care provided, and provides direct support to practitioners across practice settings who assume leadership roles in direct care, operations, education and training, and care outcomes monitoring and management. All healthcare practitioners, including nurses at all levels of practice, must engage in lifelong learning to assure currency and competency across their careers.

Be It Resolved That:

The Council of Deans and Directors supports a nursing education system through which men and women of varied ages and backgrounds may pursue a nursing career through multiple pathways that take advantage of their unique backgrounds, skills, and goals, while aggressively promoting an increasing level of education across the nursing profession to enhance the quality of healthcare to Connecticut citizens, and to assure a sufficient supply of nurses with graduate degrees for advanced practice, leadership, faculty and research roles.

To Achieve This Vision, the Council of Deans and Directors recommends:

1. Strengthening articulation pathways among all levels of nursing education;
2. Exploring college credit for practical nursing education;
3. Establishing goals for promoting an increasing level of education for nurses; (such as a target % of RNs who go on to bachelor's, master's, and doctoral degrees);
4. Encouraging nurses to move on to higher levels of education sooner in their careers; and
5. Establishing a timely, systematic, and accurate nursing workforce data management system to support strategic planning and action in this critical area for the State of Connecticut.

As Oregon so aptly noted, it is not IF, but WHEN the shortage of nurses will severely impact the health and well being of the citizens of Connecticut.

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Enhancing the Education and Supply of Nurses in Connecticut: A Report and Recommendations

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Created by Marcia B. Proto, Executive Director, Connecticut League for Nursing to Illustrate the Nursing Shortage and Highlight the Barriers to Nurse Faculty Development

