

UNDERSTANDING CONNECTICUT'S **NURSING WORKFORCE**

Using National Best-Practice Data Sets to Uncover the Critical Elements to Inform and Direct State Workforce Planning & Policy

NURSING EDUCATION REPORT
PUBLISHED NOVEMBER 2018



Connecticut League
for Nursing

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INTRODUCTION

As nurses are the largest profession of healthcare providers within Connecticut, it is critical that our state produce a robust and sustainable pool of nursing graduates on an annual basis at all levels. A robust pipeline is needed not only fill vacancies created by retirements and those who voluntarily leave their positions each year, but to fill new positions that are being created within our communities to provide healthcare services to our residents.

This report is one of three reports to be released by the Connecticut League for Nursing (CLN) that is focused on better understanding the Nursing Workforce in Connecticut. Collaborators on this Report include The Connecticut Department of Public Health and The Connecticut Data Collaborative.

This report is dedicated to Nursing Education and provides an overview of students in the academic pipelines and the nurse faculty who teach them. The findings are meant to provide advocates, policymakers, educational institutions and healthcare employers with a robust picture of the nursing education in Connecticut.

Key data is provided on how nurses are educated, and how these graduates impact the overall supply of nurses and our workforce development planning efforts. These data provide a holistic view of our current and projected nursing workforce which can guide informed policy and programmatic decision-making.

Data sets utilized in this Report: The National Minimum Data Set for Nursing EDUCATION:

- This dataset highlights the education pipelines of our students in the pre-licensure Registered Nurse (RN) and Licensed Practical Nurse (LPN) Programs and the nursing faculty who teach them.
- Elements include: Program enrollments, race/ethnicity, graduation rates of students, numbers and ages of students in our programs, and a full set of demographic data on Connecticut's nursing faculty.

TECHNICAL NOTES:

The Nursing Education Data was sourced from the 2017 National Minimum Data Set for Nursing Education (CT Data) created by the National FORUM of State Nursing Workforce Centers and collected by the Connecticut League for Nursing.

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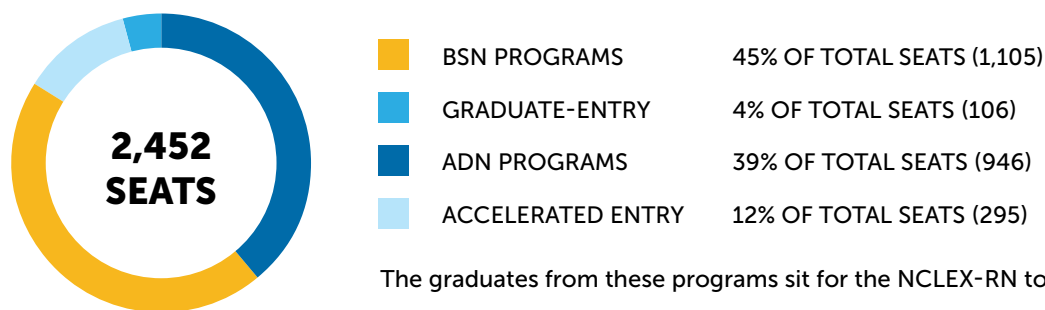
THE MINIMUM DATA SET FOR NURSING EDUCATION: The Education Pipeline

For over 10 years, the Connecticut League for Nursing (CLN) has been working with the Department of Public Health to secure, analyze and report on the state-level EDUCATION data. A survey is completed annually by schools and programs of nursing in Connecticut that offer pre-licensure nursing education highlighting student pipelines and nurse faculty demographics.

Moreover, this data set includes information on nursing faculty: the mix of full-time (classroom) and part-time (take students into the clinical settings for their direct care experiences) needed to educate the students; as well as, age, specialty and credentials. When reporting on Nursing Education in Connecticut, the nursing community had focused on providing data on all academic levels of nursing education including Graduate Education: Master’s and Doctoral Preparation.

Yet, due to minimal changes year over year of our Graduate education data, the authors decided to dedicate this Report to showcasing Pre-licensure Nursing Programs for the Registered Nurse (RN) and the Pre-licensure Nursing Programs for the Licensed Practical Nurse (LPN) – meaning that initial education which allows the graduate of these Programs to sit for the National Council Licensure Examination (NCLEX) for the designation to become a licensed RN or LPN.

PRE-LICENSURE REGISTERED NURSE (RN) DEGREE PROGRAMS: BY THE NUMBERS



The graduates from these programs sit for the NCLEX-RN to be licensed as a registered nurse.

2,452
budgeted seats for nursing applicants *statewide capacity*

2,368
students enrolled on day one of class

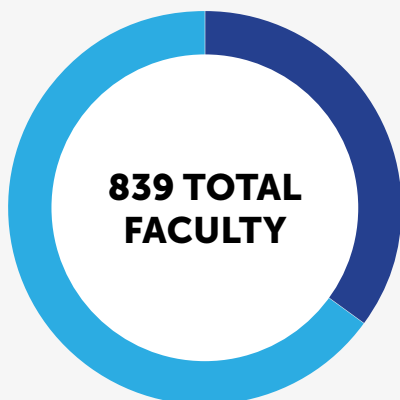
IMPLICATIONS OF CONNECTICUT’S CURRENT REGISTERED NURSE (RN) PIPELINE: Due to near capacity enrollments and limited attrition in our RN Programs, the only way that the State of Connecticut can increase annual graduation numbers for the RN would be to expand enrollments at the existing 18 Schools.

CONNECTICUT’S PRE-LICENSURE PROGRAMS TO BECOME A REGISTERED NURSE (RN):

- 8 schools offer an Associate Degree in Nursing (ADN): 2-year program
- 9 schools offer Baccalaureate Degree in Nursing (BSN): 4-year program
 - » 5 of these schools ALSO offer an **accelerated entry option** in nursing – student needs to possess a baccalaureate degree in something other than nursing to be accepted: 15-month program
- 1 school offering an RN degree via a graduate-entry nursing program: 15-month program

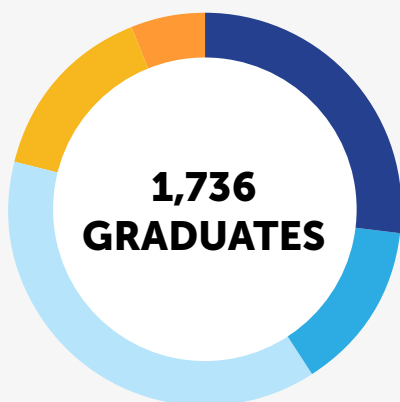
There are 18 schools that offer Pre-Licensure Registered Nurse Degree Programs. Connecticut’s Pre-Licensure RN Degree Programs operate at 97% of capacity.

CONNECTICUT'S RN PROGRAMS: 2017 QUICK FACTS



■ PART TIME FACULTY	65% OF FACULTY (546)
■ FULL TIME FACULTY	35% OF FACULTY (293)

The 18 schools teach 5,981 undergraduate students.



■ GRADUATE ENTRY NURSING	6% OF GRADS (104)
■ ACCELERATED ENTRY RN	15% OF GRADS (272)
■ COMMUNITY COLLEGE ADN	27% OF GRADS (463)
■ OTHER CT ADN PROGRAMS	14% OF GRADS (237)
■ BSN PROGRAMS	38% OF GRADS (660)

- **9,725** was the **total number of Qualified Applicants** that applied
- **2,368** was the **total number of students who were enrolled** on day one of the program (7,357 students turned away).
- Only **24% of the qualified applicants** were able to pursue a Registered Nurse Degree.
- Statewide **attrition rate** for RN programs in CT is at **7.8%**
- Of the 2,368 enrolled, **80 students** disclosed that they held an **LPN license**.

HIGHLIGHTS FROM THE 6 COMMUNITY COLLEGES THAT OFFER AN RN PROGRAM:

- **1112** was the **total number of Qualified Applicants** that applied. **65% were admitted**.
- **601** of the **Admitted Students** enrolled on day one of the program.
- Only **54% of the qualified applicants** began pursuing their **Registered Nurse Degree**.

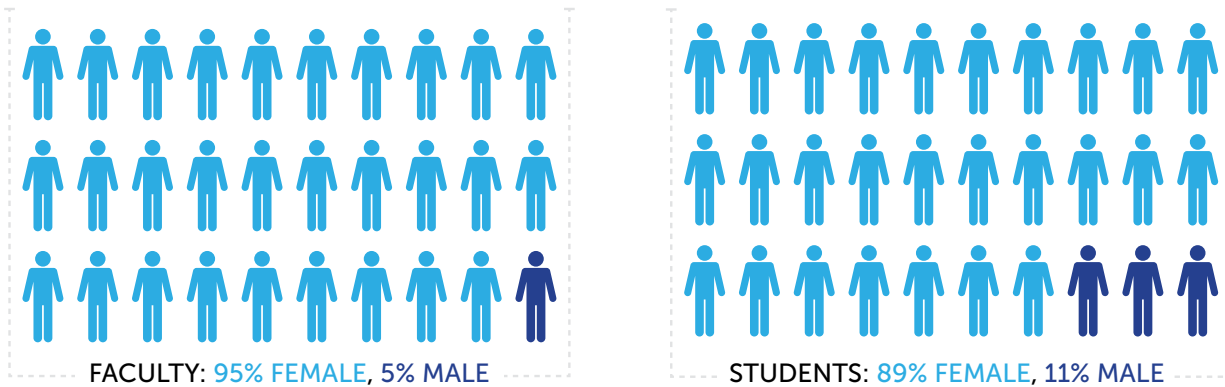
NATIONAL TRENDING IN THE AVAILABILITY OF NURSES

According to The American Nurses Association (ANA) (2018), there will be more registered nurse jobs available through 2022 than any other profession in the United States. The US Bureau of Labor Statistics (2018) projects 1.1 million additional nurses are needed to avoid a further shortage. Employment opportunities for nurses are projected to grow at a faster rate (15%) than all other occupations from 2016 through 2026 (US Bureau of Labor Statistics, 2018)

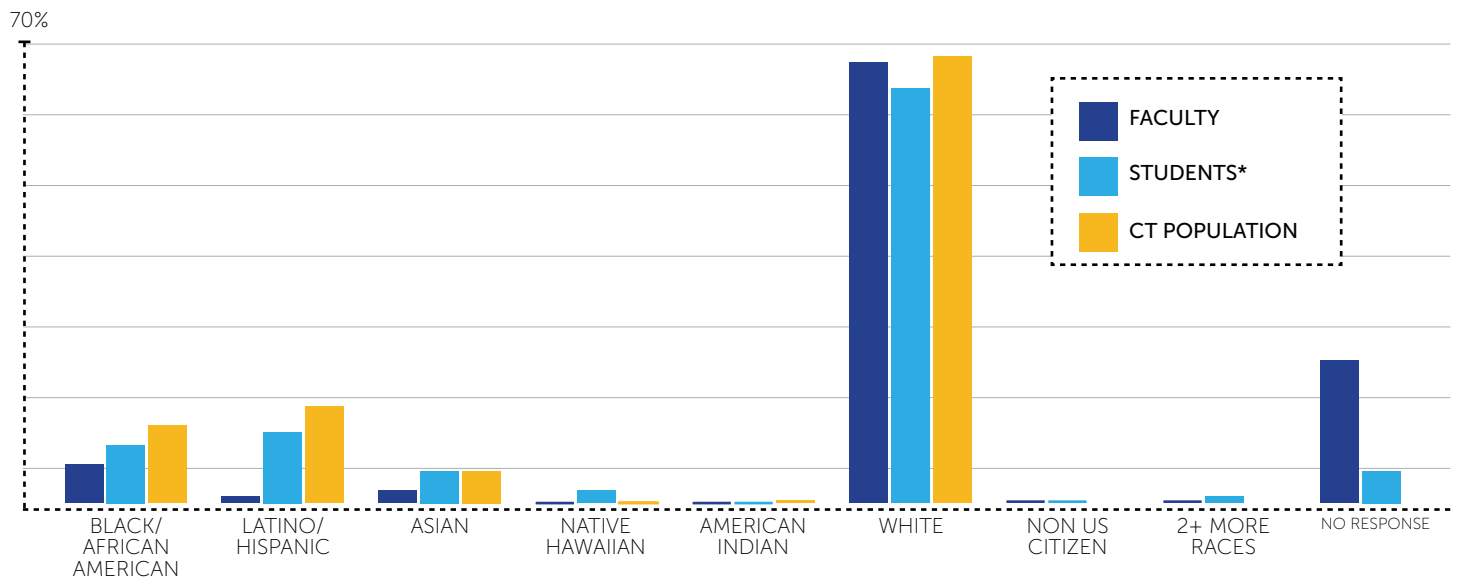
As identified by the American Association of Colleges of Nursing (AACN), the U.S. is projected to experience a shortage of Registered Nurses (RNs) that is expected to intensify as Baby Boomers age and the need for health care grows. Compounding the problem is the fact that nursing schools across the country are struggling to expand capacity to meet the rising demand for care given the national move toward healthcare reform.

2017 RN PROGRAMS DEMOGRAPHICS OF THE FACULTY & STUDENTS:

RN GENDER BREAKDOWN



2017 RN RACE/ETHNICITY: FACULTY, STUDENTS & CT POPULATION



RACE BREAKDOWN OF ASSOCIATE & BACCALAUREATE STUDENTS*



NATIONAL TRENDING FOR THE AVAILABILITY OF FACULTY

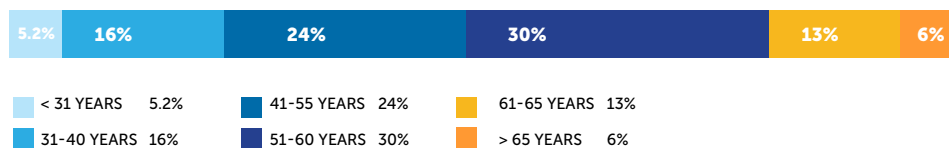
According to ReferralMD, one of the major limiting factors in nursing education is low faculty numbers – there simply aren't enough teachers to educate the would-be nurses. Not only that, but the current faculty's median age is in the 50s, meaning that many of them will be looking to retire not long from now.

It's difficult to draw more faculty to schools, as taking a teaching position requires a nurse to have a higher level of education, be an expert in their field, and often, be willing to take a pay cut. For some of the larger schools, providing enough financial incentive to leave a clinical position and move to teaching may be feasible, but for smaller, private, or rural institutions, the financial burden may be too much.

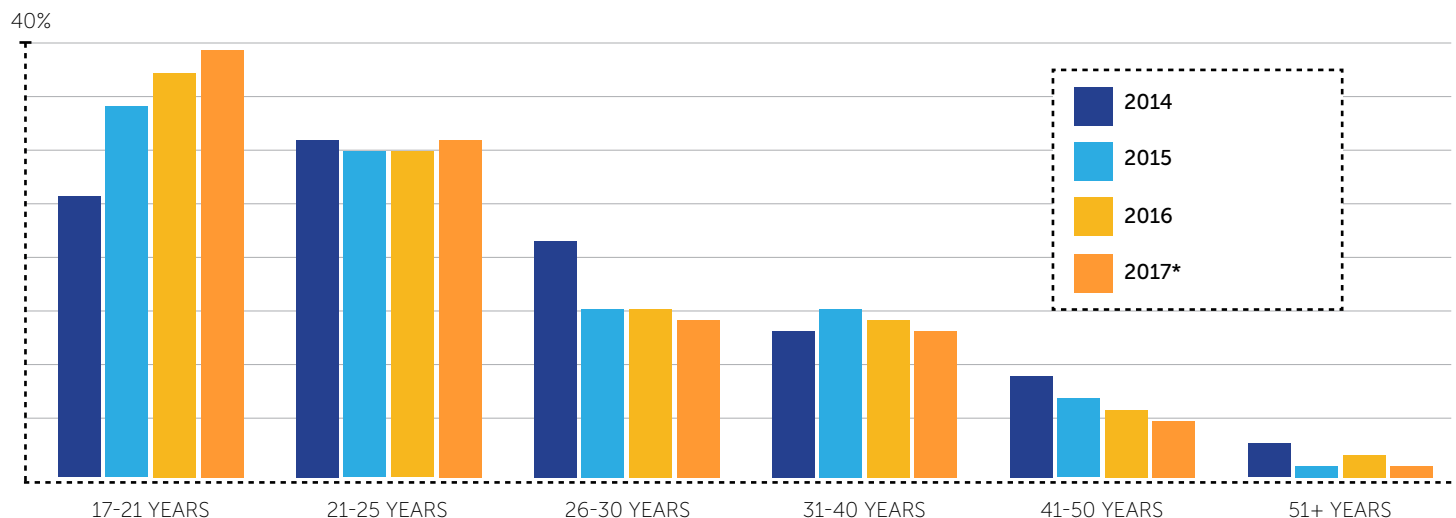
As a Masters and Doctoral Degrees are strongly preferred and many times required to teach in Connecticut's Schools and Programs of Nursing, Nursing Education is competing with other graduate nursing roles for applicants.

According to the American Association of Nurse Practitioners, the average salary of a nurse practitioner, across settings and specialties, is \$97,083. By contrast, AACN reported in March 2016 that the average salary for a master's-prepared Assistant Professor in schools of nursing was \$77,022.

AGE OF CONNECTICUT'S NURSING FACULTY



RN STUDENT AGE IN YEARS

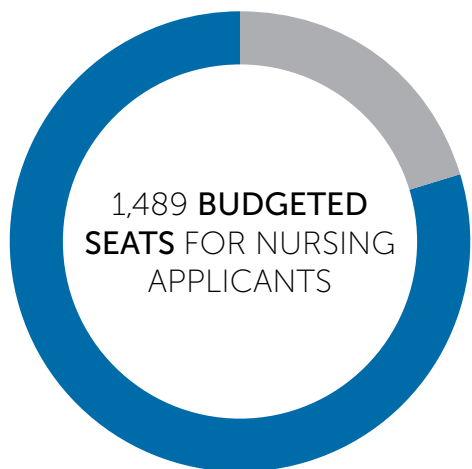


*Student age for the past 4 years is "getting younger", meaning the number of years in which the nurse will have an opportunity to practice before retirement is increasing.

MULTIPLE FACTORS NEED TO BE ADDRESSED TO EXPAND THE CAPACITY OF CONNECTICUT'S NURSING PROGRAMS: According to the American Association of Colleges of Nursing (AACN) 2016-2017 Report on the Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing, U.S. nursing schools turned away 64,067 qualified applicants from baccalaureate and graduate nursing programs in 2016 due to an insufficient number of faculty, clinical sites, classroom space, clinical preceptors, and budget constraints. Most nursing schools responding to the survey pointed to faculty shortages as a reason for not accepting all qualified applicants into baccalaureate programs.

PRE-LICENSURE LICENSED PRACTICAL NURSE (LPN) DEGREE PROGRAMS:

CONNECTICUT PRE-LICENSURE LPN PROGRAMS OPERATE AT **79% OF CAPACITY**.

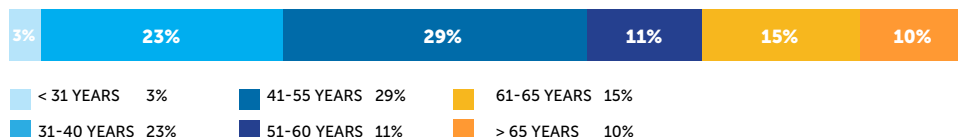


1,595 was the number of qualified applicants that applied to the LPN Programs. 1,574 was the number of students that were admitted to the LPN Programs.



All of the above graduates are able to sit for the NCLEX-PN to become a Licensed Practical Nurse. The statewide attrition rate for LPN Programs in CT is **23.2%**.

AGES OF LPN FACULTY



CONNECTICUT'S LPN PROGRAMS: 2017 QUICK FACTS

Three (3) schools offer education/certificate to become an LPN

1. Lincoln Technical Institute
2. Porter and Chester Institute
3. Stone Academy



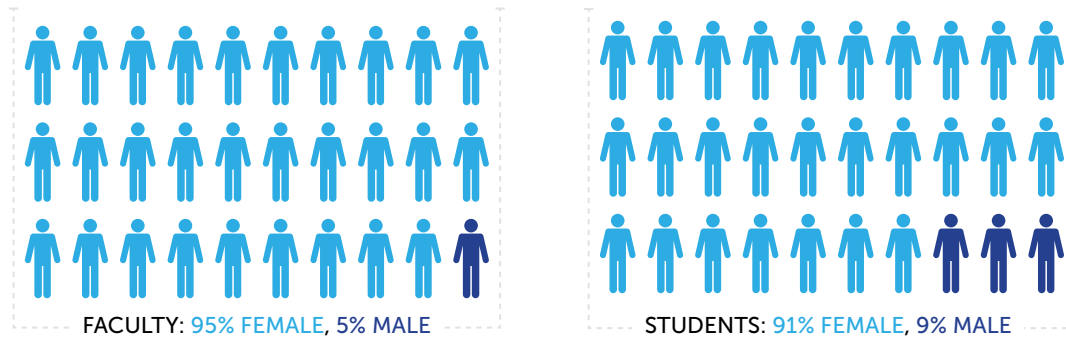
PART TIME FACULTY 71% OF FACULTY
FULL TIME FACULTY 29% OF FACULTY

The 3 schools teach **1,957** undergraduate students.

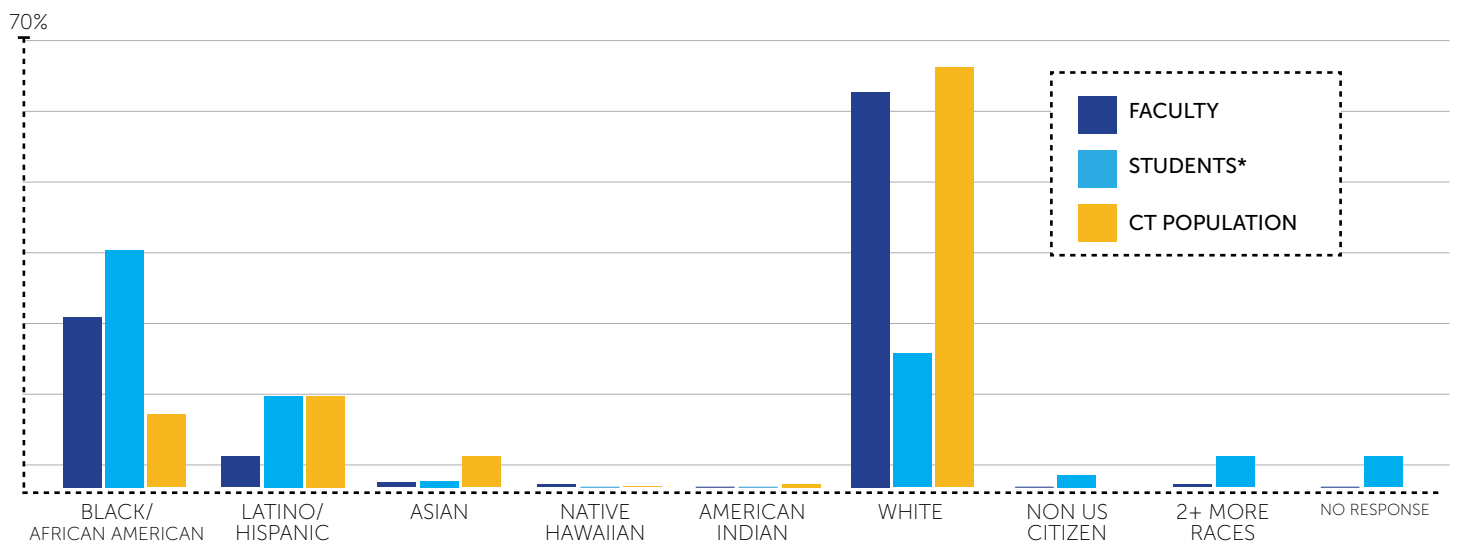
395 students graduated in 2017

2017 LPN PROGRAMS DEMOGRAPHICS OF THE FACULTY & STUDENTS:

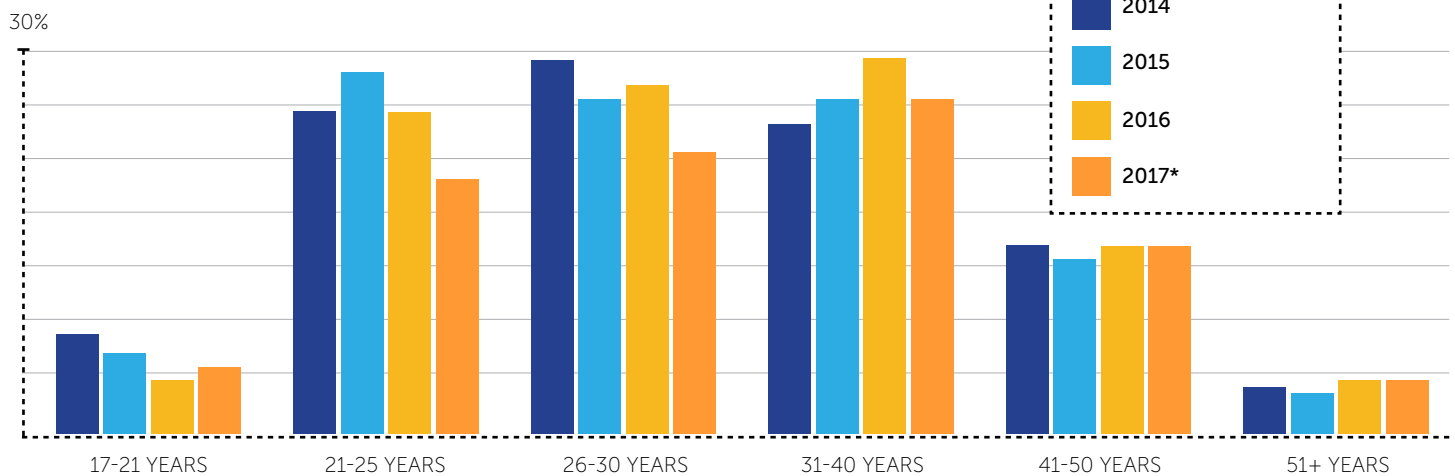
LPN GENDER BREAKDOWN



2017 LPN RACE/ETHNICITY: FACULTY, STUDENTS & CT POPULATION



LPN STUDENT AGE IN YEARS



IMPLICATIONS OF CONNECTICUT'S CURRENT LICENSED PRACTICAL NURSE (LPN) PIPELINE:

Based on the existing capacity in our LPN Programs, and that ONLY 21 individuals who wished to enroll in an LPN Program were turned away; the State of Connecticut does NOT need to address any issues regarding increasing the capacity of our LPN Programs.

CONSTRAINTS TO EXPANDING NURSING EDUCATION CAPACITY

Faculty salaries are not competitive with those salaries offered to nurses in clinical practice.

- Noncompetitive salaries lead to an inadequate number of filled nurse faculty positions which is cited as a major reason for denying admission to qualified students (AACN, 2017).
- The higher compensation in clinical and private-sector settings is luring current and potential nurse educators away from teaching (AACN, 2017). Joynt and Kimball (2008), authors of a white paper entitled *Blowing Open the Bottleneck: Designing New Approaches to Increase Nurse Education Capacity* stated, "While nursing faculty compensation adjustments alone will not solve the nursing education capacity problem, the value of the educators must be acknowledged and rewarded in order to move forward".

Limited classroom space and clinical placement opportunities to manage increased student numbers.

- U.S. nursing schools turned away 64,067 qualified applicants from baccalaureate and graduate nursing programs in 2016 due to an insufficient number of faculty, clinical sites, classroom space, clinical preceptors, and budget constraints- The American Association of Colleges of Nursing's (AACN, 2017) report on 2016-2017 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing,
- In order to meet the projected shortages for registered nurses, nursing education programs must increase their capacity by approximately 90% – The Carnegie Study (Benner, Sutphen, Leonard and Day, 2010)

The educational preparation of nursing faculty is Specialized.

- In order to properly educate the next generation of RNs, nurse faculty must be prepared to teach nursing students how to care for clients with complex diagnoses and treatment plans; be familiar with essential principles of teaching and learning; be able to appropriately use the newest teaching learning healthcare technology; and have the ability to engage nursing students in the teaching-learning process. – The Carnegie Study (Benner, Sutphen, Leonard and Day, 2010)

RECOMMENDATIONS FOR THE STATE OF CONNECTICUT:

Insuring robust and sustainable nursing education pipelines are critical to having enough nurses to care for the residents of Connecticut. The following are recommendations realize this statewide goal:

1

Provide Scholarships to nurses that wish to pursue graduate nursing education. This will foster a seamless pathway from graduate degree to a faculty role.

2

Engage in Strategic Planning dialogue between the leadership of Connecticut's schools and programs of nursing and the leadership of all practices setting to better understand:

- » Need for nurses in both the short term and long term;
- » Capacity for clinical practice opportunities within each healthcare facility; and
- » How to best redesign the clinical practice opportunities with comprehensive experiences to minimize the "learning gap" between graduation and employment.

3

Increase the number of Clinical Practice opportunities available at non-acute practice settings. Increasing these opportunities will allow schools and programs of nursing to graduate more nursing students to meet the projected demand for new nurses who will provide care to Connecticut residents in the home, community and long-term care settings.

4

Create an RN Residency Program for non-acute care practice settings for easier transition as well as support retention of the nurse within these care settings.

WHAT CLN HAS LEARNED ABOUT THE COLLECTION, ANALYSIS & REPORTING OF NURSING DATA IN CT:

For over 15 years, the CLN in collaboration with the CT Department of Public Health and the State Board of Nursing Examiners has been collecting EDUCATION data from the Schools and Programs of Nursing and loosely monitors the education pipelines across all nursing educational levels.

For over 10 years, CLN has been monitoring, assessing and reporting the availability of Nursing Faculty, Nursing Faculty preparation requirements, and the new criteria for the role of full time faculty to possess a doctoral degree. Without an adequate pipeline nursing faculty, CT will NOT have the capacity to educate nursing students.

For over 5 years, CLN in collaboration with the CT Nursing Collaborative Action Collation (CNC-AC) had been receiving "sample" nursing SUPPLY data- due to CLN's membership in the national FORUM – to assess the supply of nurses in Connecticut and trending the age of our nursing workforce and areas in which they practice.

In 2017, it became evident that when combining the information from the education and supply databases that the age of Connecticut **nurses over 50 comprise 57% of the nursing workforce** and that the number of nurses under 50 may not be able to meet employer demand.

Other states around the nation are experiencing **nursing shortages** and are beginning to put strategies in place to mitigate impact on patient care and financial impact.

BOTTOM LINE: It is critical to make sure we are producing the right number of nurses with the **right credentials & experiences at all levels** to meet the nursing workforce needs in CT.

CLN STATEWIDE REPORTS CAN BE VIEWED AT <https://www.ctleaguefornursing.org/workforce-reports>

A SPECIAL THANK YOU to all the Members of the CLN Council of Deans & Directors for completing the National Minimum Data Set for Nursing EDUCATION Survey Tool so that this Report could be created to showcase the 2017 demographics of their RN and LPN student and faculty populations.

Moreover, thank you to:

Lisa Sundean, PhD, MHA, RN
Assistant Professor, College of Nursing and Health Sciences
University of Massachusetts Boston
Jonas Leadership Scholar and Associate Member New York Academy of Medicine

and

Linda Perfetto PhD, RN, FAADN, CNE, CNOR
Director, System Nursing Curricular Operations
CT Community College Nursing Program (CT-CCNP), and
Director, Charter Oak State College (COSC) ADN to BSN Program
Connecticut State Colleges & Universities (CSCU)

For their time and expertise for collaborating with CLN to develop the overall strategy for implementation of the National Minimum Data Set for Nursing EDUCATION Survey as well as spearheading the data collection and data analysis of the statewide feedback.