



Background

Educational Advancement for the Nursing Profession

Bills # S0294 & A02480 propose to amend Education Law to permit future RN applicants who have completed an associate degree or diploma in nursing to continue to receive licensure as an RN but to require such persons to obtain a baccalaureate degree in nursing within 10 years from their initial licensure date.

Major provisions of the bill include:

- Grandparenting of all currently licensed Registered Nurses (RNs) to exempt them from ever having to meet the requirements of the bill;
- Time to permit all students enrolled in associate or diploma programs at the date of the bill's passage, to complete their studies and be grandparented and thus exempt from ever having to meet the bill's requirements;
- Provisions in regulations that would place an RN's license on "hold" if the baccalaureate degree is not obtained in 10 years. This "hold" is similar to the action taken when a licensee fails to meet continuing education requirements in those professions that mandate continuing education as a criterion for continued registration;
- The opportunity for an extension beyond 10 years, for extenuating circumstances, as determined by the New York State Education Department.

Given these provisions, if this proposal were passed by the legislature and signed by the Governor in 2007, the earliest that a licensee would be placed on "hold" would be 2019. This is truly a vision for the future—a vision that seeks to provide the highest quality of nursing care to the residents of New York State.

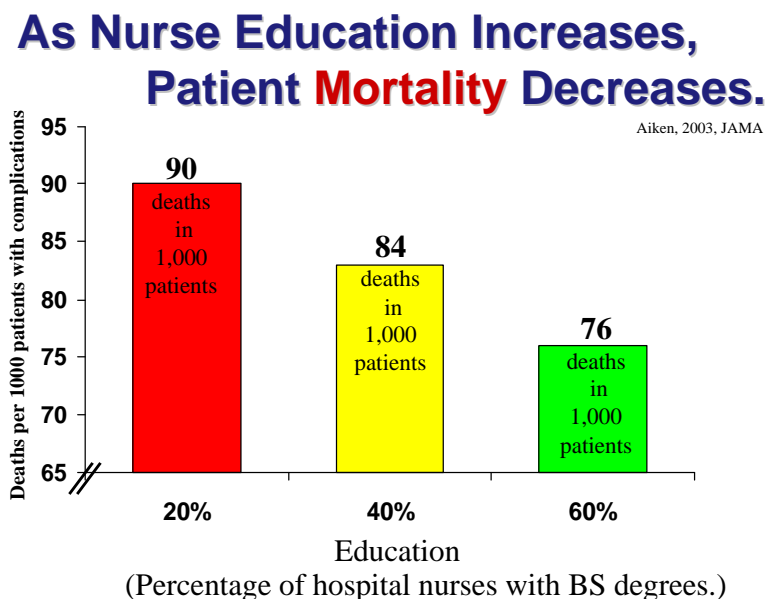
This bill recognizes the diploma and associate degree in nursing as important entry points for many into the profession; that diploma and associate degree nursing education are academically demanding and clinically challenging courses of study; and that the abilities of diploma and associate degree nursing graduates are demonstrated in high NCLEX pass rates and excellent feedback from employers. As superb as such graduates are, the bill recognizes that additional education makes a difference in the skill and competence of nurses, just as it does for other health professionals. By maintaining diploma and associate degree entry, the bill provides a reasonable compromise that precludes many of the more radical plans for educational standardization being proposed by other countries, states, and agencies. Given the enhancements to articulation between associate and baccalaureate nursing programs and the ever-increasing options for advanced placement and distance learning, these bills can be implemented without disadvantaging future new graduates. Nurses require a strong knowledge base in liberal arts and sciences as well as advanced clinical, analytical and interpersonal skills in order to practice safely in the increasingly complex, highly technological, and culturally diverse health care community. By advancing to the baccalaureate degree this bill seeks to be responsive to meet the increasingly complex health care needs of the residents of New York State. The bill is not an aggressive move to eliminate a significant portion of the nursing workforce, but a middle-of-the-road position that seeks to further expand the strengths of future associate degree and diploma prepared nurses to meet the ever increasingly complex health care needs of New York's residents in the 21st Century.

The need for advanced education for registered professional nursing is based on the need to meet evolving needs associated with patient care and public protection. Shorter lengths of stays, higher patient acuity, and more sophisticated technologies and procedures are increasing the complexity of patient care—which in turn places greater demands on nursing competencies. Several research studies now demonstrate the added value of additional education in relation to patient outcomes. These studies show that increasing the number of baccalaureate nurses in an acute care hospital decreases the number of patient deaths. That effect is linear such that the more baccalaureate nurses in a particular facility the lower the number of deaths.

Antecedents for the bill emerged in 2003 as advances in the health care environment and new research findings, demonstrating a connection between nursing educational levels and safe patient care, converged to serve as an essential obligation for change.

DIFFERENTIAL PATIENT OUTCOMES

Persuasive evidence validates the strong connection between nursing education levels and safe patient care. In September 2003 a landmark study on the educational levels of hospital nurses and surgical patient mortality was published in the *Journal of the American Medical Association*. The study examined outcomes data from 232,342 general, orthopedic and vascular surgery patients discharged from 168 (80%) of the 210 non-federal adult acute care general hospitals operating in Pennsylvania in 1999. The researchers, led by Dr. Linda Aiken from the University of Pennsylvania, found that patients experienced significantly lower mortality and failure to rescue rates (deaths among patients with complications) in hospitals where more baccalaureate prepared nurses provide direct patient care. The study found that rates of surgical patient deaths within 30 days of admission were 26 percent lower in hospitals with the highest proportion of baccalaureate prepared nurses. The research shows that a 10 percent increase in the proportion of nurses holding baccalaureate degrees in hospitals is directly related to a 5 percent decrease in the risk of patient deaths and failure to rescue. For example, as detailed in the chart below, in a hospital where the proportion of nurses with a baccalaureate or higher degree is 60 percent compared with one where it is 20 percent there would be 14 fewer deaths from complications per 1,000 surgical patients. In addition, and not shown in the chart, there would be almost 4 fewer deaths per 1000 surgical patients in general.



These findings were consistent after taking into consideration patient characteristics and hospital structural characteristics (size, teaching status, level of technology) as well as nurse staffing, nurse experience and whether the patient’s surgeon was board certified.

Years of experience did not independently predict mortality or failure to rescue. This study calls to question the notion that nurses’ years of experience are more influential on patient care than educational preparation.

Other findings of the Aiken study indicate that:

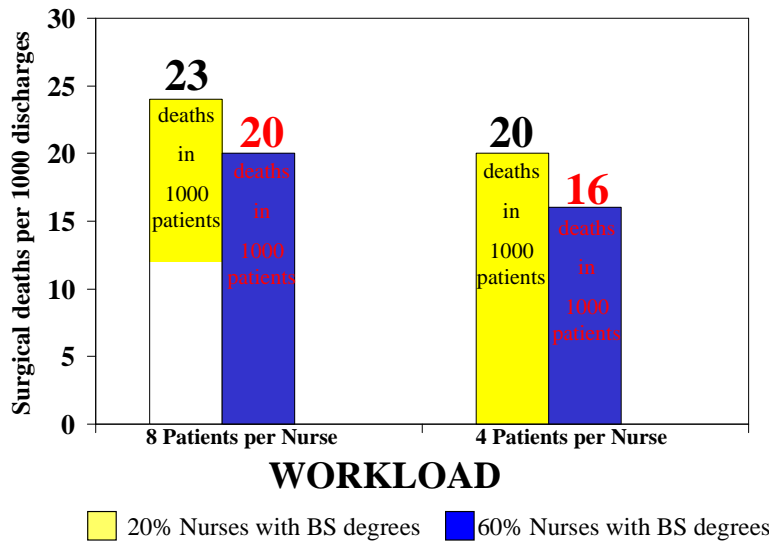
- Surgical patients cared for in hospitals with higher proportions of bedside RNs with bachelor’s degrees have a substantial survival advantage compared with those treated in hospitals with fewer staff nurses with BS degrees;
- Surgical patients with serious complications during hospitalization are significantly more likely to survive in hospitals with a higher proportion of RNs with BS degrees.

Additionally, the study also included one finding of major significance during a nursing shortage:

- RN to patient ratios can be reduced in hospitals with higher proportions of nurses prepared at the BS level.

Mortality Rates in Hospitals with Differing Workloads and Percentages of BSNs

Aiken, 2003, JAMA



The chart depicts that given the same patient workloads (nurse/patient ratio), as the percentage of RNs with baccalaureate degrees increases, the number of surgical deaths decreases. The best outcomes were found in hospitals in which nurses took care of 4 or fewer patients each and 60 percent of staff nurses were educated at the baccalaureate level. The worst outcomes were in hospitals in which nurses cared for 8 or more patients and only 20 percent of nurses had baccalaureate education. Of equal note, however, is that if one examines only the two middle bars that depict identical patient outcomes, one finds that hospitals with higher proportions of BS prepared nurses can reduce their nurse/patient ratio or maintain a slightly higher workload with fewer nurses. Based on Aiken’s study, hospitals might be able to stem the increasing need to have more nurses per inpatient days by moving to a more highly educated RN workforce. (Aiken,

L.H., S.P. Clarke, R.B. Cheung, et al. 2003. Education Levels of Hospital Nurses and Patient Mortality. *Journal of the American Medical Association* 290:1617-1623)

In addition to Aiken's research, several other studies also point to differences in nurses prepared at different educational levels.

- The July/August 2002 issue of *Nurse Educator* provides data from studies conducted in Arizona, Colorado, Louisiana, Ohio, and Tennessee that show a strong connection between level of education, medication errors and practice-related violations resulting in professional discipline.
- A study published in *Medical Care* (2004) found that higher RN staffing levels were associated with lower mortality rates among patients with acute myocardial infarction while higher LPN staffing levels were associated with higher mortality rates.
- Data compiled by Drs. Marlene Kramer and Linda Aiken in their study of magnet hospitals mirror the results of Aiken's more recent research demonstrating that health care facilities with higher percentages of baccalaureate-prepared nurses have achieved better patient outcomes and significantly lower mortality rates. Magnet hospitals typically employ 59 percent baccalaureate-prepared nurses as compared to 34 percent at other hospitals.
- Chief nurse officers in university hospitals recognize distinct differences in nursing competencies based on education. In a 2001 survey published in the *Journal of Nursing Administration*, 72 percent of these nursing executives identified differences in practice between baccalaureate prepared nurses and those who have an associate degree or hospital diploma, citing stronger critical thinking and leadership skills.
- Research findings of a study conducted in Ontario, Canada, cited in a 2002 article in the *Journal of Advanced Nursing*, conclude that nurses' educational preparation has a positive effect on the quality of nurse-patient communication and the co-ordination of patient care. The authors state, "These study results underscore the importance of higher education for nurses, and provide data to inform the policy debate concerning minimum entry requirements for nurses that has been the focus of interest in Canada and other parts of the world."
- The United States Army Nurse Corps has long been a leader in the effort to promote advanced education as the standard for practice as a professional nurse. In 1976, despite considerable opposition from certain factions in the reserve component and in the office of the assistant secretary of defense for health, the Army Nurse Corps established the baccalaureate degree in nursing as the standard for entry-level full-time practice of all RNs entering active duty service. The Navy and Air Force followed with a similar requirement soon thereafter. The motivation for this requirement change was the need to establish a uniform professional standard for all RNs in order to enhance leadership, promotion and educational opportunities. In a January 22, 2004 letter, Brigadier General William T. Bester, Chief, Army Nurse Corps wrote, "...this basic educational preparation of Army Nurses gave us the credibility, creativity, and flexibility to maximize nurses' contributions to patient care."

The Nursing Board believes that findings linking fewer nursing errors, lower patient mortality rates in hospitals and improved patient satisfaction with hospital stays must be considered and responded to.

CHANGES IN THE HEALTH CARE ENVIRONMENT

The National Advisory Council on Nurse Education and Practice, policy advisors to Congress and the U.S. Secretary of Health and Human Services, recommended in 2001 that at least two-thirds of the nurse workforce hold baccalaureate or higher degrees in nursing by the year 2010. Their recommendation is based on the reality of significant changes in the environment in which RNs now practice brought about by major changes in drug therapy, equipment, rapid advances in technology, complex changes in health care delivery

systems, increasing percentages of older adults with multiple chronic conditions, and expanding diversity of the country's populace. Several examples follow:

- Half a century ago, intravenous therapy using very short needles was performed primarily by interns or physicians. In 2004 nurses thread long intravenous catheters from the elbow to the large veins lying very close to the heart so that all types of medications and fluid can be administered.
- Half a century ago intensive cardiac care units were experimental. In 2004 even rural hospitals have such units where nurses take responsibility for the hour-to-hour care of cardiac patients.
- In the 1960's nurses were responsible for knowing about approximately 600 prescription and over-the-counter drugs. In 2004 there are over 13,000 such commercial items. The pharmacy profession has responded by gradually increasing educational requirements for licensure starting with a BS degree in 1938, advancing to a 5-year BS degree in 1966 and most recently, in 2001, requiring a 6-year doctorate of pharmacy degree as the entry degree for licensure. Yet nurses remain responsible for knowing all of these drugs' actions and untoward effects and teaching patients about them.
- In the 1960's computer literacy was an unknown term. In the 21st Century computer literacy will soon be an expected competence of nurses as they now begin to input notes and care plans, and monitor patients' laboratory values, through computerized agency data files.
- In 1960 patients with cataracts were immobilized with sand bags placed next to their heads for up to three days so that delicate eye stitches would not be disturbed. Such patients are now discharged on the day of surgery. A typical surgical patient would remain in the hospital for 10 days. A new mother would stay for 5 days. Nurses took advantage of a lengthy preoperative time to prepare patients and their families for what to expect after surgery, to teach them ways to decrease postoperative complications, to establish a trusting relationship, and to assess the patients' typical physical and mental state in order to be able to evaluate abnormalities and possible complications post-operatively. Today, nurses see many patients only as they exit the operating room still groggy from anesthesia. Nurses do not have baseline data about what the patient can see, hear or communicate under normal circumstances or what a patient's normal blood pressure, breathing pattern or color is. Patients often have multiple surgical sites, multiple monitors, artificial respirators and medications that knock out normal respirations leaving the patient completely dependent, with several intravenous lines of potentially lethal medications if the rate of infusion is not correct. Hospitals have turned into intensive care units with an average length of stay of 2.9 days. These workforce changes require a more educated practicing nurse with higher levels of professional knowledge and judgment and an expanded set of clinical and management skills.

Not only must today's RN have the knowledge to monitor patients' health status, perform therapeutic treatments, and provide expert care and patient teaching within a constricted time frame but today's RN must also be able to practice as a peer in interdisciplinary teams and integrate evidence-based clinical knowledge and research with knowledge of culturally diverse communities and their resources.

This is a proposal for the future nurse. The health care delivery system and the role of the nurse will be different in the future. The American Organization of Nurse Executives in envisioning the future of nursing practice, has adopted a set of guiding principles that recognize the core of nursing as knowledge and caring, sees care as user based, and knowledge as access based. The principles note the need to synthesize knowledge using critical thinking in order for the care to be coordinated across multiple level, disciplines and settings. Based on the principles, the BOD adopted a position that future preparation of the future nurse should be the baccalaureate level and calls for measures to reach that goal. This bill utilizes strategies as outlined by AONE to increase the numbers of baccalaureate nurses.

In addition, diploma and associate degree nursing programs generally focus, as they should, on the care of acute hospitalized patients. The curricula of RN to BS programs focus on community and public health,

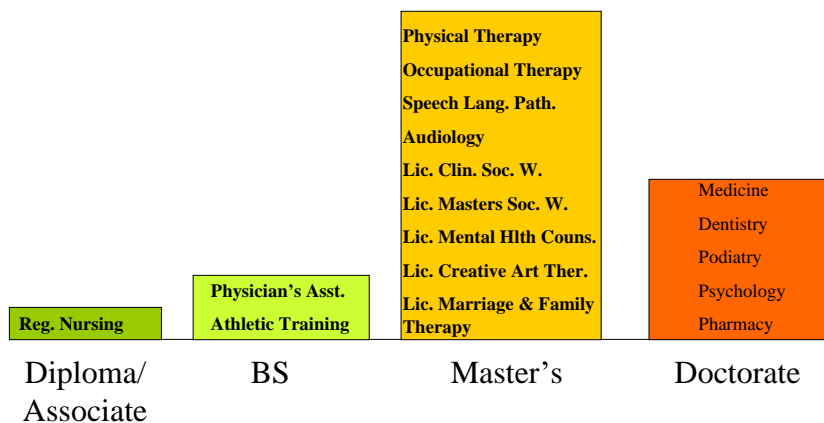
where, increasingly, health care needs are rising as patients are rapidly discharged from hospitals to receive continuing nursing care within their home communities.

Evolution of the health care environment is recognized by other health care providers as evidenced by the following:

- In the 1950s, both occupational therapists (OTs) and physical therapists (PTs) could be certified without a college degree. As of 2002 the accrediting organization for physical therapy programs only recognizes master’s degree programs and by 2020 a requirement for a doctoral degree is expected. Similarly, only post-baccalaureate occupational therapy programs will be accredited beginning in 2007.
- Since their recognition as regulated professions in the early 1980s, practitioners of speech-language pathology and audiology have needed a master’s degree for licensure.
- As of 2004, students graduating from pharmacy programs must meet the requirements for a doctorate in pharmacy degree to become licensed in New York State and throughout the United States.
- As of September 2004, a master’s degree is required for new licensure as a Licensed Master Social Worker or Licensed Clinical Social Worker.
- A baccalaureate degree or higher is required for licensure as an athletic trainer.
- Lastly, the profession of physician’s assistant, which began at the associate degree American nurses of different racial and ethnic backgrounds have demonstrated the value of the baccalaureate degree for their professional growth. Their remarkable successes in achieving this degree during an era when it is not mandated for practice is a tribute to their spirit and endurance. level has similarly advanced to require a baccalaureate education or higher.

A comparison of select professions regulated by the Office of the Professions is presented in the chart below.

Minimum Entry-Level Education Requirements for Select Licensed Health Professions



THE ROLE OF THE HEALTH CARE TEAM IN PATIENT CARE

In 2001, the Institute of Medicine (IOM) report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, provided numerous study findings documenting estimates as high as 98,000 hospitalized Americans dying each year as a result of errors in their care—more than those who die from motor vehicle accidents, breast cancer or AIDS. The report recommended follow-up by an interdisciplinary summit that would develop next steps for reform of health professions education. The Institute of Medicine's 2003 report on *Health Professions Education: A Bridge to Quality* is one response to that recommendation. The report identified the need for all health related educational programs and institutions to share a vision to educate health professionals to deliver patient-centered care as members of an interdisciplinary team emphasizing evidence-based practice, quality improvement approaches, and informatics. Physicians in the American College of Critical Care Medicine are on record as stating that, "Critical care nurses do the majority of patient assessment, evaluation and care in the intensive care unit," while a study of medication errors in two hospitals over a 6-month time frame found that nurses were responsible for preventing 86 percent of all medication errors made by physicians, pharmacists and others involved in providing medications for patients before the error reached the patient. Because nurses are the health care providers whom patients are most likely to encounter and with whom patients spend the greatest amount of time, nurses are uniquely positioned to rescue patients from impending or actual complications and to prevent fragmentation of care. To accomplish this goal however, advanced education is needed in order for nurses to have similar skills in negotiation, systems theory, change theory, and research as their partners from other disciplines within such an interdisciplinary team.

Registered nurses are primarily responsible for direct patient care and on-going care coordination. To be effective members of the interdisciplinary health care team advocated by the Institute of Medicine it is important that nurses complete the necessary education to prepare them to fulfill their pivotal professional roles.

NURSING EDUCATION IN OTHER COUNTRIES

According to a 2002 book published by the World Bank titled, *Constructing Knowledge Societies: New Challenges for Tertiary Education*, **knowledge** has become the single most important factor in economic development and global competitiveness. Thus, it is no small surprise that other nations have responded to the demand for nurses with greater knowledge by requiring a baccalaureate degree for any individual seeking licensure as an RN. In several countries education obtained in a diploma or associate degree nursing program is no longer accepted for professional nursing licensure as multiple educational pathways into nursing have been eliminated in preference for the baccalaureate degree. Such countries include Australia, New Zealand, Philippines, Ireland, Iceland and Cuba. The Royal College of Nursing in the United Kingdom voted unanimously in early 2004 to support a move toward the baccalaureate degree as the point of entry for future registered nurses but has not yet completed the full transition to that goal. Similarly, in Canada, most provinces limit licensure as an RN to individuals prepared at the baccalaureate level. January 1, 2005 marked the date when the province of Ontario began to limit registered nurse licensure to baccalaureate prepared individuals despite a nursing shortage greater than that experienced in the United States. The Canadian Nurses Association persuaded Canadian governmental agencies, health care facilities, nurses, and the general public to demand the broad-based bachelor's degree as a requirement for nursing licensure based on new RN practice competencies for today's health care system.

STRATEGIES TO FACILITATE NURSES' SECURING HIGHER EDUCATION

Based on meetings with deans and faculty of New York State nursing programs and information from nursing programs throughout the country, the State Board for Nursing has opined that sufficient nursing programs exist to provide the education needed by future associate degree or diploma prepared nurses to

obtain a baccalaureate degree within ten years of initial licensure. At a December 2004 meeting of the *Council of Deans of Nursing, Senior Colleges and Universities of New York State*, deans and faculty members unanimously agreed that their capacity to educate RNs seeking baccalaureate degrees was significant and that their programs could accept the increases proposed by legislative action.

Each of the 43 New York State institutions providing State Education Department registered nursing programs leading to the baccalaureate degree, offer programs that make special accommodations for associate degree or diploma prepared RNs seeking to advance their education. Twenty-nine (29) institutions offer 32 registered nursing programs specifically structured for RNs seeking to complete the baccalaureate degree.

Several examples follow that demonstrate efforts by programs to encourage RN students to pursue baccalaureate degree study.

- Pace University's Lienhard School of Nursing has 12 articulation agreements with associate degree nursing programs to facilitate entry, progression and graduation from their RN to BS program.
- Mercy College's Nursing Program has developed numerous articulation agreements with associate degree nursing programs and offers a high quality baccalaureate degree that grants appropriate credit and builds on past learning.
- D'Youville College added a "completion" program for graduates of nursing diploma programs in 1957. A more flexible program is currently in place to provide a high quality completion program for associate degree nursing graduates with several articulation agreements to facilitate ease of transferring credits.
- Hartwick College began offering a Registered Nurse Mobility program in the mid 1980s. In 2001 the College began a partnership program with Bassett Healthcare, SUNY Delhi and other two year colleges to provide RNs a baccalaureate degree in nursing that includes a discounted tuition rate, recognizes all of the lower division nursing work for study at the associate degree level and is offered in a two-day format allowing nurses to continue to work full-time while completing all required course work.
- The University of Rochester School of Nursing has articulation agreements with several nearby community colleges in an effort to provide a seamless curriculum for students interested in pursuing the baccalaureate degree in nursing. More recently the School offers 32 nursing credits for RNs of any accredited non-baccalaureate nursing program wishing to advance to the BS degree.
- SUNY Plattsburgh has developed a state-of-the-art delivery system that offers a distance learning baccalaureate completion program for associate degree and diploma prepared RNs. Classes are offered on site at the Adirondack, Jefferson, Cayuga and Fulton-Montgomery community colleges and at the Alice Hyde Medical Center in Malone.
- Nursing faculty at Keuka College, Long Island University-Brooklyn Campus and others have contracted with health care facilities, some local, some at considerable distance from the college/university, to provide nursing course work at hospitals to groups of RN employees seeking to advance to the baccalaureate degree.
- SUNY Stony Brook offers a totally on-line RN to BS completion program, which requires no commuting, or career interruption.
- The Dean of Excelsior College's School of Nursing stated in a March 2004 letter that "We have enhanced the articulation between diploma and associate degree programs with our baccalaureate program and have unlimited capacity to respond to student demand."

Accelerated baccalaureate programs for students with baccalaureate degrees in other disciplines are a rather new movement, which has potential for adding new individuals to the nursing workforce. These programs allow students with a baccalaureate degree but without nursing experience to earn a nursing degree in less

time (between 11 months to 2 years for most programs). Such programs enable nursing schools to produce more baccalaureate degree-nursing graduates over a shorter period of time while attracting new talent that might not otherwise have considered nursing as a career. Of the 53 accelerated baccalaureate-nursing programs that exist nation-wide, 9 are located in New York State.

Distance education, which is made possible by new technologies not available in the 1960s, is another promising means of educating RNs who seek to obtain their baccalaureate degree. Internet-based nursing programs have grown rapidly in recent years and New York students and nursing programs are taking advantage of these new technologies.

- In 2004, SUNY at Stony Brook began their completely on-line RN to BS nursing program.
- Maria College in Albany has established an articulation agreement with Drexel University in Philadelphia for acceptance of their associate degree prepared students into Drexel's on-line RN-BS completion program.
- Seton Hall University in New Jersey offers an on-line RN to BS program with only three weekends required on site to meet the residency requirement.
- As of 2003, on-line enrollment at the University of Phoenix (the largest provider of Internet-based nursing education) had reached about 3,000--almost double the number of campus-based students. An estimated 11,000 students have received nursing degrees through the university's on-line programs.

Nursing education leaders throughout New York have joined to develop a unified articulation plan that would ease the transition from associate degree to baccalaureate degree education. The plan would guarantee 30 nursing credits to graduates of New York State associated degree programs seeking to continue their education at the baccalaureate level. In addition to advanced placement for nursing courses completed at the associate degree level, students would also receive credit for successfully completed liberal arts, science, and humanities courses. Administrators and faculty from the Associate Degree Nursing Council and the Council of Deans of Nursing, Senior Colleges and Universities of New York State have collaborated regionally to assure the adoption of this plan.

CONCLUSION

In the past, many initiatives for solving the diversity of educational levels in nursing have been proposed. Each of these proposals either eliminated diploma and associate degree programs or reduced them to a lower level of practice. All of the proposals met with substantial resistance from a variety of factions in nursing. This bill is uniquely different in that it does not malign or require the end of diploma or associate degree education. Nurses require a strong knowledge base in liberal arts and sciences as well as advanced clinical, analytical and interpersonal skills in order to practice safely in the increasingly complex, highly technological, and culturally diverse health care community. By advancing nursing education to the baccalaureate degree, this bill seeks to responsively meet the increasingly complex health care needs of the residents of New York State.