

New Jersey's Educational Capacity: Impact on Nursing Supply

New Jersey Collaborating Center for Nursing

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I. Introduction

Across the nation the United States is preparing for a nursing shortage quite unlike those of previous decades. With the aging of the baby boomers, nurses will be retiring in record numbers over the next 15 years, and there will not be sufficient numbers of new entrants into the profession to replace them.¹ This diminishing supply of nurses is particularly disturbing in light of a growing increase in nurse demand, due in large part to an aging population and increasingly sophisticated medical technologies.² According to the U.S. Department of Health & Human Services, the nation's demand for nurses will exceed supply by almost 1 million nurses by 2020, creating a nursing shortage greater in severity and duration than any in history. Such a phenomenon will greatly impede the safety and quality of care that patients receive in all sectors of the health care system including hospitals, nursing homes, outpatient centers, and home health care.

Consequently, the New Jersey Collaborating Center for Nursing (the Center) was created by State legislation and signed into law in 2002 to develop and disseminated objective information regarding New Jersey's nursing workforce, and to make recommendations concerning allocation of State resources toward ensuring the adequacy of the State's nursing workforce in both size and preparation.

Toward that end, one of the Center's initiatives is to conduct an annual survey of all 33 schools of nursing in the State in order to monitor and evaluate enrollment and graduation trends, as well as the capacity of the schools to recruit, admit, and educate nursing students. Conducted in the fall of academic year 2004-2005, this report summarizes findings and compares them with findings from the previous year.

II. The Nurse Supply Pipeline: Trends of Nursing Enrollments and Graduates in New Jersey

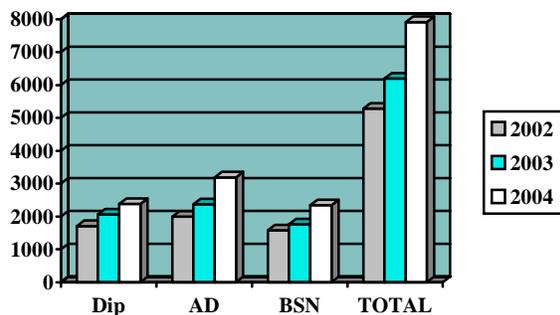
Enrollments in New Jersey's RN-producing (entry level) schools of nursing have increased moderately over the last two years, in that the total number of nursing students enrolled for academic year 2004-2005 is up by 2,637 students or 50%

¹ Buerhaus, et.al. (2000). Implications of an Aging Registered Nurse Workforce. *JAMA*, 283(22), 2948-2954.

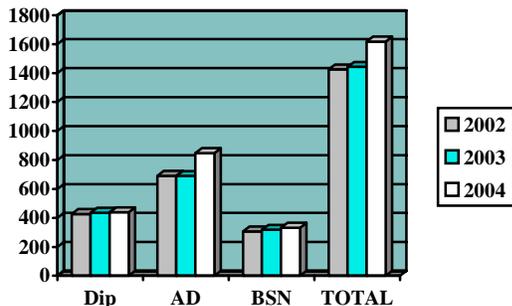
² The Robert Wood Johnson Foundation (2002). *Health Care's Human Crisis: The American Nursing Shortage*. Princeton, New Jersey.

over that enrolled two years ago (2002-2003). Although this increase is encouraging, it is estimated that the State's supply of nurses will be short 19,600 RNs by 2010, short 29,900 RNs by 2015, and short 42,400 in 2020 when compared to employer demand³. Based on nurse supply-demand model projections for the State over the next 15 years, NJ schools of nursing would need to increase the number of entry-level nurse graduates by an average of approximately 3,000 each year in order to offset this shortage. The modest upward trend in numbers of enrollments and graduates depicted in the graphs below unfortunately appear insufficient to sustain an adequate nursing workforce in New Jersey over the coming years.

Enrollments: New Jersey schools of nursing 2002-2004



Graduates: New Jersey schools of nursing 2002-2004



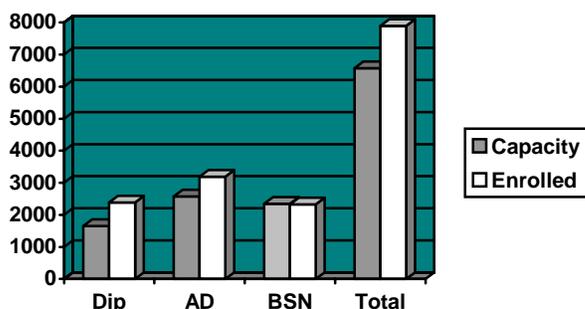
III. NJ Schools of Nursing: Current Student Capacity

The capacity of New Jersey's entry-level schools of nursing to enroll and educate students in 2004 –2005 has moderately increased over the last year. In academic year 2003-2004, NJ's RN-producing schools of nursing had enrolled students in numbers that seriously exceeded their existing resources, in that the total number of nursing students enrolled across the State exceeded the

³Projected New Jersey Shortage available at: www.njccn.org/pdf/hrsa_nj_review.pdf

statewide enrollment capacity by 42%⁴. In the ensuing year, schools' enrollment capacity increased by 50% statewide. Despite this increase, however, enrollments in almost all of NJ's schools of nursing continue to exceed capacity by an average of 20% (see Figure below). More importantly, in order for the State's schools of nursing to produce nurse graduates in the numbers needed to meet the escalating demand for RNs, the educational capacity of existing schools will need to be dramatically increased.

Capacity vs. Enrollments in NJ schools of nursing: Academic year 2004 - 2005



IV. “Would-Be” Nursing Students: The Irony of Turning Away Qualified Applicants

The impact of limitations in the enrollment capacity of the State's schools of nursing is most visible when considering that 67% of NJ's RN-producing schools (entry-level) reported actually having to deny admission to qualified student applicants in academic year 2004-2005 because enrollment limits had been exceeded. This finding is similar to that of the 2003 survey in which 60% of NJ schools of nursing reported denying admission to a total of 1,621 qualified applicants across the State. Unlike last year, however, a total of 4 of the State's largest schools of nursing currently reported that they closed enrollments for Fall 2004 early in the previous Spring, and did not maintain a count of those qualified “would-be” nursing students who were turned away. Those schools that did maintain a count reported a total of 641 qualified applicants who sought admission to schools of nursing and were denied.

In their survey responses, NJ schools of nursing explained that this phenomenon of denying qualified applicants to schools of nursing was largely due a lack of resources, such as faculty and classroom space, essential for increasing enrollments beyond current levels. Although understandable, this practice, however, is most unfortunate in light of the growing gap between nurse supply and nurse demand. Moreover, having to deny qualified applicants to schools of

⁴ Dickson, G. & Flynn, L. (2004). New Jersey's Educational Capacity: RN-Producing Schools. Available: www.njccn.org

nursing would seem to undermine the potentially positive effects of public service announcements and other recruitment efforts, funded by both public and private initiatives, aimed at attracting individuals to the nursing profession. Clearly, additional resources will need to be allocated in order for schools of nursing to increase their enrollments and admit all qualified student applicants.

V. Increasing Educational Capacity: What Resources are Needed?

All 33 of NJ's RN-producing schools of nursing were asked to indicate additional resources they would need, if any, in order to increase enrollments for the next academic year (2005-2006). The table below summarizes their responses:

| | More Faculty Lines | More Faculty Applicants | More Class Room Space | More Clinical Sites ⁵ | More Equipment & Laboratory Space | More Support Staff ⁶ |
|----------------------------------|--------------------|-------------------------|-----------------------|----------------------------------|-----------------------------------|---------------------------------|
| Percent of NJ schools of nursing | 73% | 73% | 51% | 70% | 70% | 12% |

The number of full time faculty positions currently budgeted in NJ's schools of nursing totals 575 full-time equivalents. Of these, however, 6% were vacant at the time of data collection, in October 2004, shortly after the start of the academic year. Schools reported that it took, on average, 3 to 5 months to recruit new faculty members, with baccalaureate programs requiring the longest recruitment time.

VI. Financial Resources & Budget Cuts

In contrast to the 2003-2004 survey in which 42% of NJ's schools of nursing reported experiencing budget cuts for the academic year, the 2004-2005 survey found that 30% of all schools of nursing in the State received a budget increase for AY 2004-2005. A higher proportion of Baccalaureate schools, however, received budget cuts compared to other types of nursing schools in the State.

The following table summarizes percentage of schools experiencing budgetary changes for the current academic year:

⁵ Access to clinical sites such as hospitals, outpatient centers, home care agencies, and long-term care facilities

⁶ Additional support staff reported by schools included secretaries, program coordinators, and lab technicians

| Type of Program | No Change over last FY | Budget Cut | Budget Increase |
|-----------------|------------------------|------------|-----------------|
| Diploma | 54% | 9% | 27% |
| AD | 45% | 10% | 45% |
| BSN | 67% | 22% | 11% |
| TOTAL | 57% | 13% | 30% |

VII. Summary / Conclusion

As baby boomers retire and an aging population places increased demands on the health care system, New Jersey and the nation face a growing nursing shortage of potentially disastrous proportions. While there has been a moderate increase in the number of students enrolled in New Jersey schools of nursing over the last three years, this “supply side” gain is still dramatically insufficient to meet the State’s projected demand for nurses. Considering nurse in-migration and attrition projections, NJ schools of nursing will need to produce more than 42,000 additional nurses by 2020, or an average of almost 3,000 more graduates each year for the next 15 years in order to offset forecasted deficits between nurse supply and nurse demand.

Instead of significantly increasing the number of enrollments, however, schools of nursing currently find they must deny admission to qualified student applicants because they are already operating at or above their enrollment capacity. In order to increase enrollments for the academic year 2005-2006, 70% of NJ schools of nursing report they will need more faculty lines, more faculty applicants, more equipment, and more clinical sites.

Given the large body of research that has consistently associated lower nurse staffing levels with higher rates of patient complications, including mortality, it is imperative that New Jersey produces and retains an adequate nursing workforce. Consequently, the State must continue to invest in the education of nurses by ensuring that schools have the necessary resources to recruit, enroll, and educate nursing students in quantities sufficient to meet the both current and future demands.

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