Pathways to BSN: A look at Virginia’s Registered Nurse Workforce

Healthcare Workforce Data Center

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Introduction

The nursing profession is uniquely positioned to encourage education progression among its members. This stands in clear contrast to many other regulated health professions. Most regulated professions have a rigid entry structure, with only one or two educational paths to entry. Physicians are a prime example. Physicians, with few exceptions, must attend a traditional medical school and complete a residency. Physician assistants (PAs) are in an entirely separate profession, with their own educational and regulatory structures. Until recently there were few PA-to-physician educational bridges that would allow PAs to transfer their skills or work while growing in their profession. Many other regulated professions follow this model, both in and out of the health industry.

These limited-pathway-to-progress models contrast highly with the multiple entry pathways and opportunities to advance in nursing. Virginia alone regulates no fewer than four levels of nursing professions: licensed practical nurses (LPN), registered nurses (RN), clinical nurse specialists (CNS) and nurse practitioners (NP). And this list is exclusive of the Certified Nurse Aide (CNA). There are several pathways to connect from one level of nursing to a higher level. The availability of bridge, online and part-time programs help ease transition up the nursing career ladder.

Registered nurses, who are the mainstay of the nursing profession, can enter the profession at four educational levels: Diploma, Associate (ASN), Baccalaureate (BSN), and Master’s (MSN) levels. In addition, RN to BSN programs are available to help RNs progress to BSN status and, if desired, into master-level CNS and NP professions. Accountability and standards of care are maintained with a uniquely flexible scope of practice. Before performing any activity, RNs are required to ask themselves if they have the knowledge and clinical skill needed to perform the activity and whether they are willing to take professional responsibility for it. If any of these are lacking, the activity is considered out of the individual nurse’s scope of practice.

In Virginia, an individual hoping to become a nurse can begin a nursing career with a GED and 120 hours of training as a CNA. It is not unreasonable for this CNA to imagine reaching the top of the nursing profession. Indeed, the data in this report demonstrates that they can and, moreover, that they do. In Virginia, 2,415 Registered Nurses holding a master’s or doctoral degree began their nursing careers as a diploma trained RN.

In addition to providing a flexible and highly adaptable workforce, this structure provides a social and economic ladder to disadvantaged groups. This is why, historically, the nursing profession has been accessible to women and minorities. It also offers advancement opportunities to persons with low-income or low-educational backgrounds. LPNs and RNs can earn good incomes while advancing in their careers. In Virginia, the median income for LPNs is $30,000-$40,000, while the median income for RNs is $60,000-$70,000.

This paper provides a look at how RNs in Virginia advanced through their careers using data from the Healthcare Workforce Data Center Nursing Workforce Survey. It examines how the educational attainment of nurses has advanced over time. It looks at differences in educational level and advancement patterns by age and race/ethnicity. And finally, it looks at the effect that different patterns of career advancement have on the economic well-being of RNs, focusing on educational debt and income.

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This report uses data from the 2015 Registered Nurse Workforce Survey. The survey asks respondents to provide information concerning both the initial professional degree that allowed them to practice nursing and the highest professional degree that they have obtained to date. The Healthcare Workforce Data Center has broken down these responses into five main categories: RN Diploma or Certificate, Associate Degree in Nursing (ASN), Baccalaureate Degree in Nursing (BSN), Master’s Degree in Nursing, and Doctorate in Nursing.

This report includes all RNs with a Virginia license. However, it excludes any nurses who either failed to provide answers to both their initial and highest professional degrees or provided invalid responses to the two main questions (e.g., listing an initial professional education that was more advanced than their highest professional education). Of the 92,381 RNs who held a Virginia license at some point during the survey time frame, about half would have been eligible for the survey because RNs are surveyed during their license renewal which happens every two years. Of the eligible RNs, 35,861 completed the survey. From this group, 1,006 nurses were further excluded from the analysis because of problems with respect to their survey responses: 950 nurses failed to provide answers to one or both questions concerning their educational histories, while 56 nurses provided invalid responses to these two questions. Using the HWDC weighting methodology, we estimate there were 92,355 RNs with a Virginia license in Virginia’s workforce in 2015. Of these, 89,740 are covered in this report. This does not include nurses who may be working in the state without a Virginia license under the Nursing Compact. Data in this study are subjected to HWDC’s weighting procedures. See the HWDC Methodology & Glossary and the report titled “Virginia’s Registered Nurse Workforce: 2013” for details.

This study is a retrospective study. It examines the current population of RNs in Virginia and looks back at how they have advanced through their careers. We do not have information on nurses who may have left the nursing profession prior to the survey. This limits the types of conclusions we are able to draw. For instance, while our data demonstrate that 28% of current nurses who entered the profession with an ASN have since attained a higher degree, we cannot conclude that 28% of nurses who entered with ASN go on to attain higher degrees. We do not know how many ASNs may have switched professions, stopped working, retired, lost their license or otherwise not maintained a license in Virginia.
Career Advancement among Virginia’s Registered Nurses

Educational Advancement

Nurses often do not limit themselves to the degree they have when they enter the nursing field. As seen in the following table, close to half who started with a Diploma RN⁢³ position obtained higher degrees during their career. In fact, 33% of nurses who started with a RN Diploma had a BSN or higher at the time of the 2015 RN Survey. And of those who started with a BSN, 21% had at least a Master’s degree at the time of the survey. Although the survey did not ask about the intervening steps, the analysis in the table shows that 31% of RNs who completed the survey made educational advancement after initiating their career. For some, it is obvious that they obtained multiple degrees during their career.

<table>
<thead>
<tr>
<th>Initial Professional Degree</th>
<th>RN Diploma</th>
<th>Associate</th>
<th>Baccalaureate</th>
<th>Masters</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>RN Diploma</td>
<td>11,102</td>
<td>51%</td>
<td>3,481</td>
<td>16%</td>
<td>4,817</td>
</tr>
<tr>
<td>Associate</td>
<td>-</td>
<td>-</td>
<td>25,022</td>
<td>72%</td>
<td>6,817</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>25,655</td>
</tr>
<tr>
<td>Masters</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Va. Healthcare Workforce Data Center

³ Since many nurses with both an RN Diploma and an LPN degree listed their LPN degree as their highest educational attainment, these two categories are combined in this study as the least attainment for a RN is a RN diploma.
Historical Shift in Education

Over the years, significant educational advancement has occurred for nurses. Compared to 1977 and earlier, fewer nurses are now entering the profession with just a RN Diploma. Compared to 52% who had just a RN Diploma at the point of entering the RN field in 1977 and prior years, only 11% of recent entrants into the RN field had a RN Diploma. In recent years, 47% possessed a BSN degree and another 41% have an Associate degree at entry. Thus, the proportion of RNs entering with an Associate degree has doubled since 1977 and prior years when only 20% did. Similarly, those with a BSN nearly doubled from 27% in 1977 and prior years to 47% in the most recent years.

In addition to new RNs possessing more advanced educational attainment at initial entry into nursing, RNs in the system are also not staying stagnant with their educational attainment. They are increasing their educational attainment as they age while registered as a RN. The cross-sectional data revealed that education advancement is lowest for those under age 30; 69% of this group have had no education advancement. Education advancement peaks at 40% for the 40-44 year old age group and then declines slowly to 33% for those above age 60. The following chart reveals that 5%, 7%, and 19% of RNs under age 30 have moved from a RN diploma to an Associates, BSN or higher degree, and from an Associate degree to a BSN or higher degree; the comparative prevalence for those aged 40 to 44 years is 7%, 11%, and 22%, respectively. However, RNs age 60 and over reported the highest transition from RN diploma to a Baccalaureate degree or higher; 17% of RNs in this age group who reported a RN diploma educational attainment at entry into the RN career now have a BSN or higher degree.

However, the youngest RNs are not resting on their oars either. Of those who do not have at least a BSN yet, the youngest age group had the highest proportion intending to pursue additional education in the next two years. Sixty-eight percent of RNs under 30 years old who do not have a BSN plan to pursue additional education in the next two years. Over half of all age-groups up to RNs aged 40 to 44 years plan to pursue additional education. The percent desiring additional education falls below 50% for 45-49 year old RNs and continues to fall up to the highest age group; only 8% of RNs aged 60 and over who do not have a BSN plan to pursue additional education in the next two years.

Source: Va. Healthcare Workforce Data Center

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The opportunity for additional educational attainment within the nursing career is a great benefit. Particularly, educational opportunities while being employed may level the playing field by allowing nurses from lower income backgrounds, underserved communities, and disenfranchised minority groups to pursue additional education. Those who may not have had the same access to educational resources to begin their career can and do use nursing’s educational ladder to advance their careers. Although there is no data on the socioeconomic status of nurses prior to obtaining their license, a look at educational advancement by Race and Ethnicity and by Rural/Urban childhood may provide some insight.

Among current RNs, non-Hispanic Blacks or African Americans are the most likely to have entered the profession without a BSN or higher degree, but only slightly so; they were 0.4% less likely than Whites but the difference rounded out. However, among Black RNs without a BSN, over 40% advanced to a BSN from a non-BSN degree, more than any other race group.

By contrast though, RNs with urban childhood were the next least likely to have at least a BSN degree at entry into the profession. However, they have had the most gain since entering nursing and have significantly narrowed the gap between them and their suburban counterparts who still have the highest percent with at least a BSN degree.

Unlike the non-BSN Black RNs, RNs who grew up in rural area in childhood were least likely to enter the profession with a BSN. The average for all RNs is 37% and only 28% of rural childhood RNs had a BSN when they entered nursing. Unlike the pattern observed by racial breakdown though, RNs with a rural childhood don’t recover from their initial disadvantage. They reported the least amount of gain; the accompanying chart shows that only 36% of them have advanced today.

In fact, nearly half of Black or African American RNs who entered the profession without a BSN advanced their education, including 40% who attained a BSN or higher degree. They were followed by Hispanic RNs, of which 40% advanced their education and 34% advanced to a BSN or higher degree. Ultimately, a higher proportion of Black and Hispanic RNs hold a BSN or higher degree than Virginia’s RN population overall. Although both groups are
The Geography of Educational Advancement

There is significant variation in the proportion of RN’s starting their nursing career with a BSN or higher. Over half of RNs whose primary work location is in the Northern Virginia Area Health Education Center region entered nursing with a BSN or higher degree, and two-thirds currently hold a BSN, whereas 14% of RNs in Southside Virginia entered the profession with a BSN or higher degree. Rappahannock, South Central and Southwest Virginia also have less than 30% of RNs who initially started with a BSN or higher. These initial starting points matter a lot as less than half of RNs in Southside, Rappahannock, and Southcentral and Southwest Virginia have yet obtained a BSN. However, the educational advancement that is possible in their career has resulted in close to an additional 20% of nurses obtaining a BSN in these communities since starting their career.

<table>
<thead>
<tr>
<th>BSN or Higher Degree by AHEC Region of Primary Work Location</th>
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<tbody>
<tr>
<td>BSN or Higher Degree</td>
</tr>
<tr>
<td>Blue Ridge</td>
</tr>
<tr>
<td>Initial Degree</td>
</tr>
<tr>
<td>Highest Degree</td>
</tr>
<tr>
<td>% of BSN w/o</td>
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</table>

Source: VA Healthcare Workforce Data Center

Northern Virginia not only has the highest proportion of nurses starting with a BSN or higher, it also boasts of the highest proportion of initial non-BSNs who now have a BSN or higher degree; 42% of Northern Virginia’s RNs who initially entered nursing without a BSN have advanced their education to a BSN or higher. It is possible that non-BSN nurses in this region feel more compelled to pursue additional education due to difficulty in competing in a job market saturated by BSN holders. Of the AHEC regions with the lowest proportion of initial BSNs, only Southwest Virginia has a higher proportion of initial non-BSNs advancing their education than the state advancement average of 36%. Rappahannock, Southside and South Central have the lowest proportion of initial non-BSNs advancing their education.
The ability to pursue additional education in nursing is critical in leveling the field. However, this leveling field may come at a cost. Compared to 64% of nurses under age 40 with a RN Diploma who have not advanced their education but hold educational debt, 72% of those in similar age groups who advance to an Associate degree hold educational debt. This is, however, comparable to the 72% whose initial educational attainment was an Associate degree and who have not obtained an additional degree.

The advantage of educational advancement is, however, apparent when the median debt is considered. Nurses who advance from a RN Diploma to an Associate Degree report the lowest amount of debt—$5,000—whereas RN Diploma and ASN holders with no advancement report $15,000 and $13,022 education debt, respectively.

This debt advantage does not translate for RNs under age 40 with a BSN. A lower proportion of RNs who entered the profession with a BSN hold educational debt compared to those who later obtained a BSN. Further, when the amount of debt held is considered, there is still no apparent advantage for educational advancement to BSN, although the debt burden is lower for RN Diploma holders who now have a BSN compared to Associate degree holders who advanced to BSN.

The absence of an advantage when observed through the lens of education debt does not mean the advantage does not exist. When median educational debt is considered for all ages, all groups had zero median debt apart from ASN who have not advanced who still had $5,000 median debt. So, the old wisdom that educational advancement is advantageous is true, at least with regards to educational debt when looking across all ages.

Another way to investigate whether education advancement holds an advantage is to look at income. Income data suggests that educational advancement may be advantageous at the BSN level. Compared to RN Diploma holders and Associate degree holders who do not advance their education, those who earn a BSN have a median income of $60,000 to $69,000. Even more perplexing is that their income is higher than BSNs who do not advance. Nurses with BSNs who do not advance their education reported the same median income of $50,000 to $59,000 as RN Diploma nurses and Associate degree holders who do not advance their education. This could be because educational climbers accumulate varied experience from their different career and educational pursuits that puts them at an advantage, or changing careers after obtaining their BSN, they may be more astute at salary negotiation since they are familiar with the field.

When income distribution is compared for the different educational pathways, RN Diploma holders who have not advanced report the highest percent in the lowest income group, followed by BSNs who have not advanced. The ASN to BSN advancing group reported the least percent in the lowest income group and the highest percent in the highest income group.
Taken together, it appears that education advancement offers some financial advantage although the presence of an advantage varies by different pathways. It is also critical to point out that some of the advantage of education advancement may not be captured in just monetary terms and be intrinsic. Further, this paper only looks at a cross-section of nurses. A longitudinal study following matched groups of nurses, though not ethically advisable, would offer the most persuasive result.

**Who Benefits?**

In addition to the nurses themselves, employers and patients benefit from the additional knowledge and skills advanced education offers. Nurses who have climbed the nursing education ladder work in all parts of Virginia’s health system. Their distribution by major establishment grouping, illustrated in the tree map below, largely matches the distribution of Registered Nurses overall. The tree map includes major establishment groups of primary work for all nurses who entered the profession without a BSN or higher, but who advanced their education.

**Distribution of Nursing Education Climbers by Major Establishment Group**

![Distribution of Nursing Education Climbers by Major Establishment Group](source: Va. Healthcare Workforce Data Center)