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# *Pathways to BSN: A look at Virginia's Registered Nurse Workforce*

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Healthcare Workforce Data Center

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*33,971 Registered Nurses voluntarily participated in this survey. Without their efforts the work of the center would not be possible. The Department of Health Professions, the Healthcare Workforce Data Center, and the Board of Nursing express our sincerest appreciation for your ongoing cooperation.*

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***Thank You!***

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## Introduction

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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<sup>1</sup>. Many other regulated professions follow this model, both in and out of the health industry.

These limited-pathway-to-progress models contrast starkly 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 helps to ease the 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 skills needed to perform the activity, and whether they are willing to take professional responsibility for their action. If any of these are lacking, the activity is considered out of the individual nurse's scope of practice.<sup>2</sup>

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 the Virginia Certified Nurse Aide Workforce: 2018 report demonstrate that they can. Six percent of CNA respondents in the report were in an RN program. Another evidence of educational advancement is that 2,601 (12%) of Virginia RNs who currently hold 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 \$40,000-\$50,000, 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's 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.

<sup>1</sup> See Cornell, Stephen. Apr. 21, 2008. "Is it Time for a Bridge?" Advance Health Network for NPs&PAs. <http://nurse-practitioners-and-physician-assistants.advanceweb.com/Article/Is-It-Time-for-a-PA-to-Physician-Bridge.aspx>

<sup>2</sup> See Board of Nursing Guidance Document 90-23, "Decision-making Model for Determining RN/LPN Scope of Practice", available here: [http://www.dhp.virginia.gov/nursing/nursing\\_guidelines.htm](http://www.dhp.virginia.gov/nursing/nursing_guidelines.htm)

This report uses data from the 2018 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 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 111,083 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, 33,971 completed the survey. From this group, 3,449 nurses were further excluded from the analysis because of problems with respect to their survey responses: 3,415 nurses failed to provide answers to one or both questions concerning their educational histories, while 34 nurses provided invalid responses to these two questions. Data in this study were subjected to HWDC's weighting procedures. See the [HWDC Methodology & Glossary](#) and the report titled ["Virginia's Registered Nurse Workforce: 2017"](#) for details.

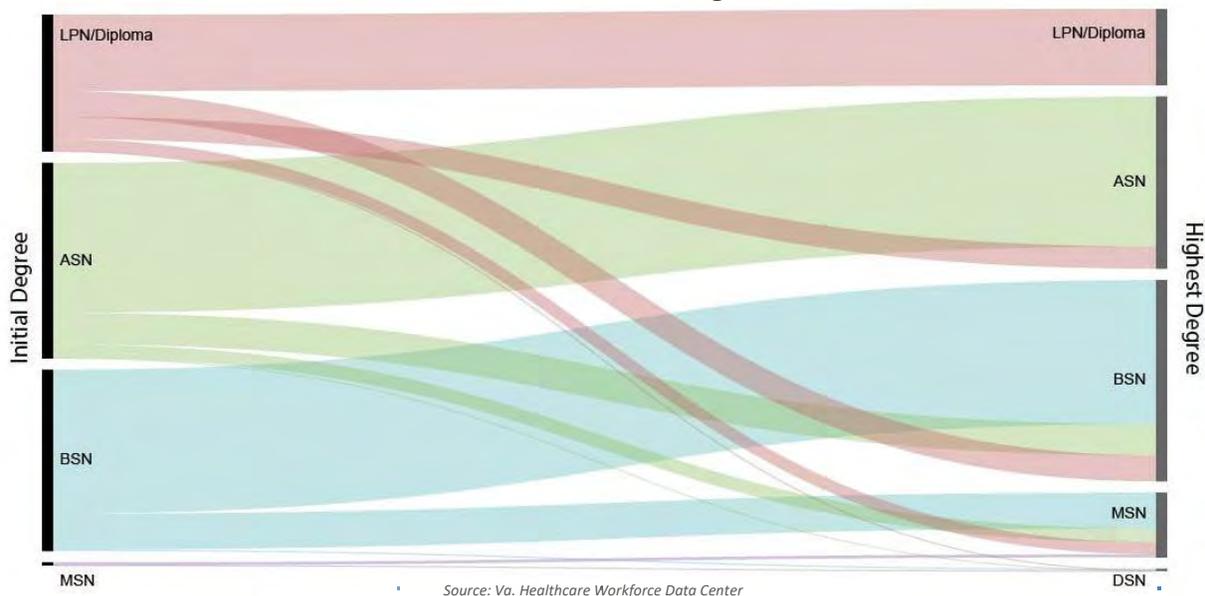
This study is a retrospective study. It examines the current population of RNs in Virginia and looks back at how they have advanced through their careers. We do not have information on nurses who may have left the nursing profession prior to the survey. This limits the types of conclusions we are able to draw. For instance, while our data demonstrate that 36% of current nurses who entered the profession with an ASN have since attained a higher degree, we cannot conclude that 36% 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, over half of nurses who started with a Diploma RN<sup>3</sup> have obtained higher degrees during their career. In fact, 30% of nurses who started with a RN Diploma had a BSN or higher at the time of the 2018 RN Survey. Further, of those who started with a BSN, 21% had at least a Master's degree or higher at the time of the survey. Although the survey did not ask about the intervening steps, the analysis in the table shows that 34% of RNs who completed the survey made educational advancement after initiating their career. For some, it is obvious that they have obtained multiple degrees during their career.

**Educational Advancement of Virginia's Current RNs**



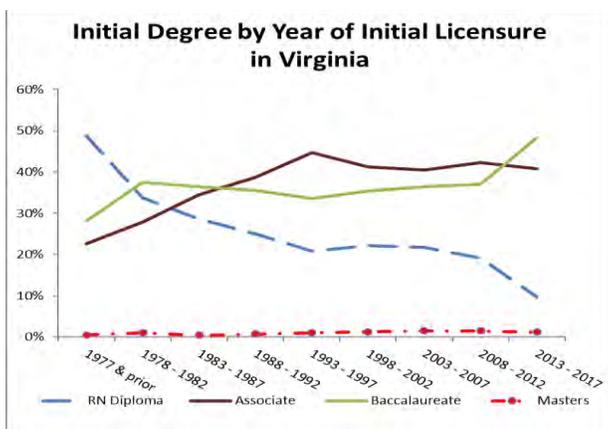
Initial Professional Degree	Highest Professional Degree									
	RN Diploma		Associate		Baccalaureate		Masters		Doctorate	
	#	%	#	%	#	%	#	%	#	%
<b>RN Diploma</b>	8,546	42%	3,732	28%	5,695	18%	2,313	11%	288	1%
<b>Associate</b>	-	-	25,044	64%	10,361	26%	3,604	9%	345	1%
<b>Baccalaureate</b>	-	-	-	-	30,837	79%	7,245	19%	939	2%
<b>Masters</b>	-	-	-	-	-	-	1,128	97%	36	3%

Source: Va. Healthcare Workforce Data Center

<sup>3</sup> 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

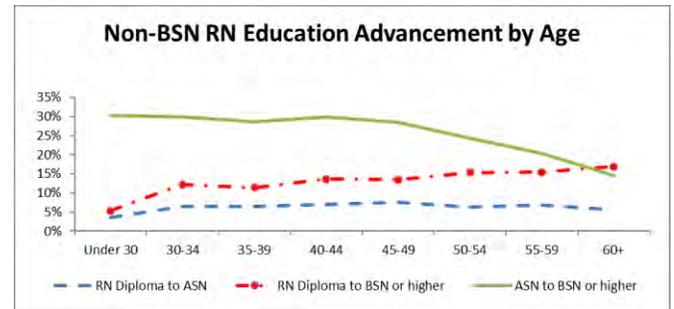
Over the years, significant educational advancement has occurred for RNs. Compared to 1977 and earlier, fewer nurses are now entering the profession with just a RN Diploma. Compared to 49% who had just a RN Diploma at the point of entering the RN field in 1977 and prior years, only 10% of recent entrants into the RN field had a RN Diploma. In recent years, 48% possessed a BSN degree compared to 28% of those who entered prior to 1978. Another 41% have an Associate degree at entry. Thus, the proportion of RNs entering with an Associate degree is close to doubling since 1977 and prior years when only 23% did.



Source: Va. Healthcare Workforce Data Center

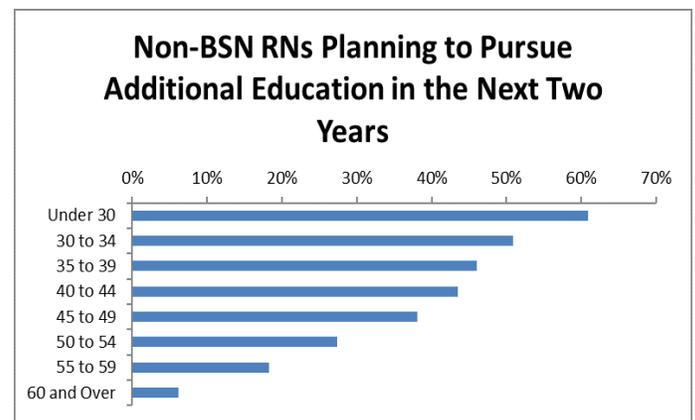
In addition to new RNs possessing more advanced educational attainment at initial entry into nursing, RNs in the system are also not staying stagnant with their educational attainment. They are increasing their educational attainment as they age while registered as a RN. The cross-sectional data revealed that education advancement is lowest for those under age 30; 61% of this group have had no education advancement. Education advancement peaks at 51% for the 40-44 year old age group and then declines slowly to 37% 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, respectively; 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.



Source: Va. Healthcare Workforce Data Center

However, the youngest RNs are not staying stagnant 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-one percent of RNs under 30 years old who do not have a BSN plan to pursue additional education in the next two years. Between 40% to 50% of all age groups up to RNs aged 40 to 44 years plan to pursue additional education. The percent desiring additional education falls below 40% for 45-49 year old RNs and continues to fall up to the highest age group; only 6% 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

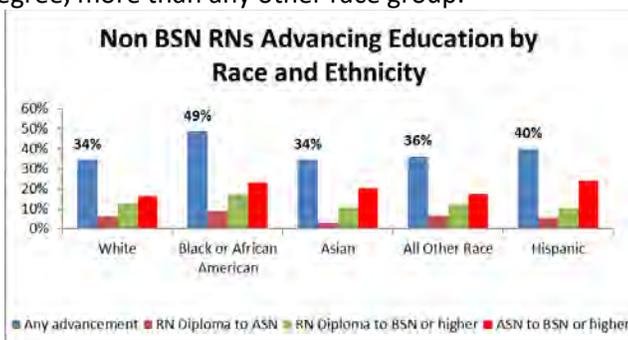
## Educational Advancement & Background

BSN or Higher Degree by Race and Ethnicity						
BSN or Higher Degree	White	Black or African American	Asian	All Other Race	Hispanic	All RNs
Initial Degree	38%	37%	68%	39%	47%	40%
Highest Degree	60%	66%	82%	66%	70%	63%
% of BSN w/o	36%	47%	44%	45%	43%	38%

Source: Va. Healthcare Workforce Data Center

The opportunity for additional educational attainment within the nursing career is a great benefit. Particularly, access to educational opportunities while 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 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 (Blacks) are the most likely to have entered the profession without a BSN or higher degree, but only slightly so; they were 1% less likely than Whites. However, among Black RNs without a BSN, over 40% advanced to a BSN from a non-BSN degree, more than any other race group.



Source: Va. Healthcare Workforce Data Center

In fact, nearly half of Black 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 whom 40% advanced their education and 35% advanced to a BSN or higher degree. Ultimately, a higher proportion of Black and Hispanic RNs hold a BSN or higher degree than the average Virginia RN population.

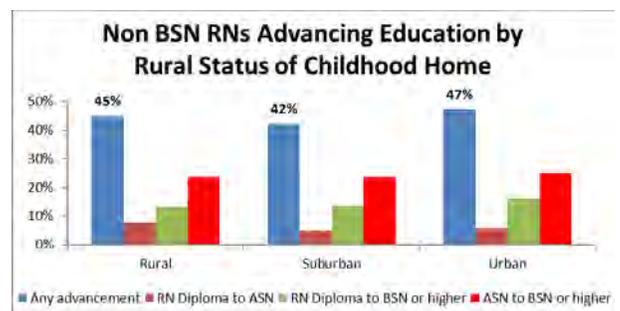
Blacks are underrepresented in the RN population—Blacks constitute 11% of the RN workforce but are 19% of the state population. However, they make up 30% of Virginia's LPN workforce. Similar advancement in the LPN workforce will eventually bring more Blacks into the RN workforce.

Only 42% of RNs with urban childhood had at least a BSN degree at entry into the profession. However, they have had significant 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.

BSN or Higher Degree by Rural Childhood Status				
BSN or Higher Degree	Rural	Suburban	Urban	All RNs
Initial Degree	30%	47%	42%	40%
Highest Degree	56%	67%	66%	63%
% of BSN w/o	37%	37%	41%	38%

Source: Va. Healthcare Workforce Data Center

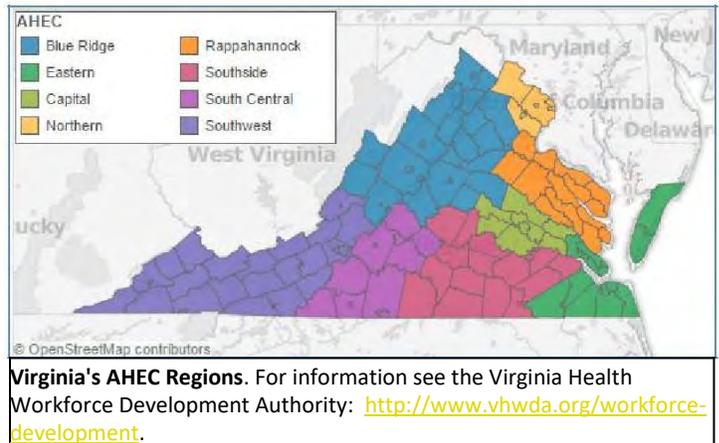
Like the non-BSN Black RNs, RNs who grew up in a rural area in childhood were least likely to enter the profession with a BSN. Only 30% of rural childhood RNs had a BSN when they entered nursing. Unlike the pattern observed by racial breakdown though, RNs with a rural childhood do not recover from their initial disadvantage. The accompanying chart shows that only 37% of them have advanced today compared to 41% of those with an urban childhood.



Source: Va. Healthcare Workforce Data Center

## The Geography of Educational Advancement

There is significant geographical 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 17% of RNs in Southside Virginia entered the profession with a BSN or higher degree. Less than a third of RNs initially started with a BSN or higher in Rappahannock, South Central and Southwest Virginia. 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.

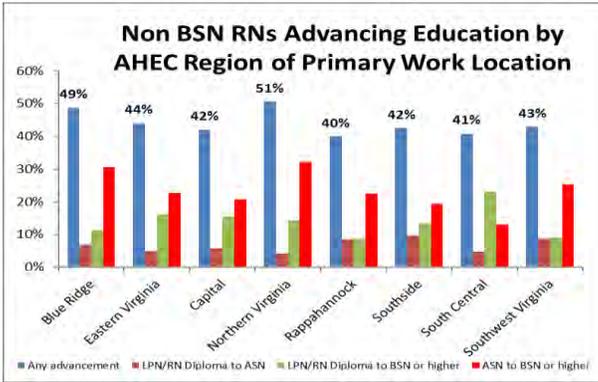


BSN or Higher Degree by AHEC Region of Primary Work Location									
BSN or Higher Degree	Blue Ridge	Eastern Virginia	Capital	Northern Virginia	Rappahannock	Southside	South Central	Southwest Virginia	All RNs
Initial Degree	41%	36%	40%	58%	27%	17%	32%	28%	40%
Highest Degree	66%	61%	61%	77%	49%	44%	57%	52%	64%
% of BSN w/o	42%	39%	36%	46%	31%	33%	36%	34%	39%

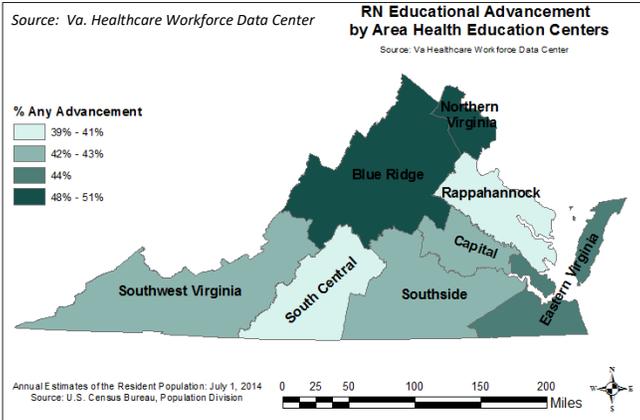
Source: Va. Healthcare Workforce Data Center

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; 46% 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, none has a higher proportion of initial non-BSNs advancing their education than the state advancement average of 39%. Rappahannock, Southside, Southwest, and South Central have the lowest proportion of initial non-BSNs advancing their education.



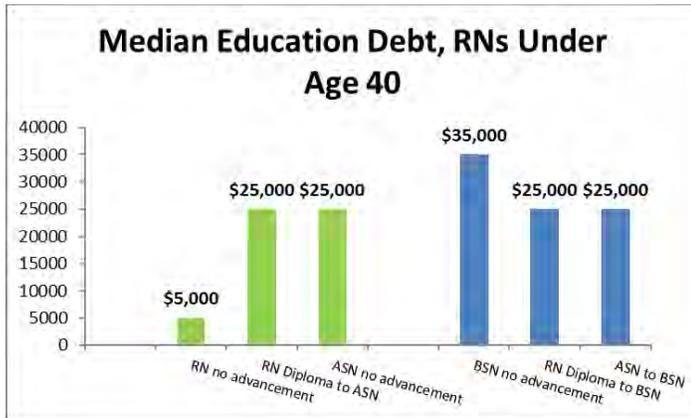
Source: Va. Healthcare Workforce Data Center



## Educational Debt & Advancement

The ability to pursue additional education in nursing is critical in leveling the field. However, this leveling may come at a cost. Compared to 58% of nurses under age 40 with a RN Diploma who have not advanced their education but hold educational debt, 71% of those in similar age groups who advanced to an Associate degree hold educational debt. This is also comparable to the 65% whose initial educational attainment was an Associate degree and who have not obtained an additional degree.

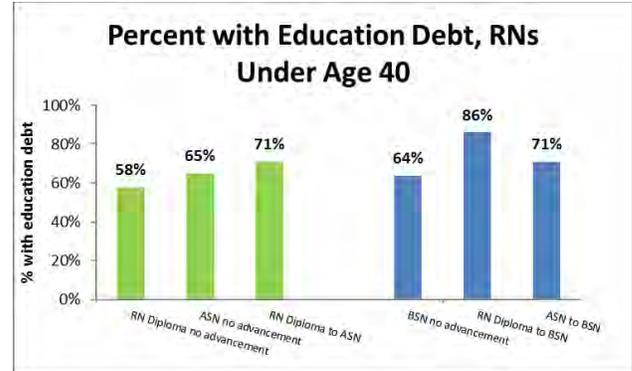
Although a higher proportion of nurses under age 40 who advance hold education debt compared to their non-advancing counterparts, the median education debt held by both groups do not differ in some cases. For example, nurses who have not advanced from an Associate Degree and initial Associate degree holder who now hold a BSN both reported \$25,000 in education debt.



Source: Va. Healthcare Workforce Data Center

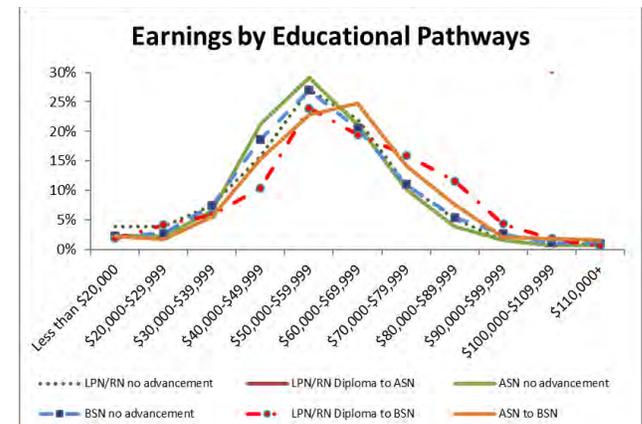
Obtaining a BSN after a diploma or Associate rather than directly, however, comes with a cost for RNs under 40 years of age. A lower proportion of RNs who entered the profession with a BSN hold educational debt compared to those who later obtained a BSN. However, when the amount of debt held is considered, there is an advantage for educational advancement to BSN, as the debt burden is lower for RN Diploma holders who now have a BSN and Associate degree holders who advanced to BSN compared to BSN holders who have not advanced.

Further, when median educational debt is examined for all ages, all groups had zero median debt apart from ASN who advanced to a BSN who 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.



Source: Va. Healthcare Workforce Data Center

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 later earn a BSN have a median income of \$60,000 to \$69,000. Even more puzzling 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. It could also be that they are more astute at salary negotiation when changing careers after obtaining their BSN since they are more familiar with the field.



Source: Va. Healthcare Workforce Data Center

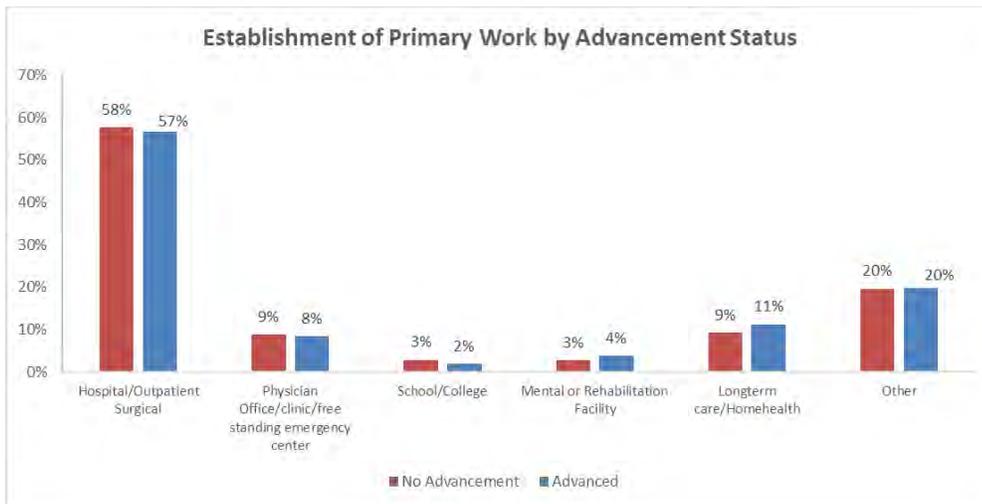
When income distribution is compared for the different educational pathways, RN Diploma holders who have not advanced report the highest percent in the lowest income group. The ASN to BSN advancing group reported the least percent in the lowest income group and the highest percent in the highest income 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 advantages of education advancement may not be captured in just

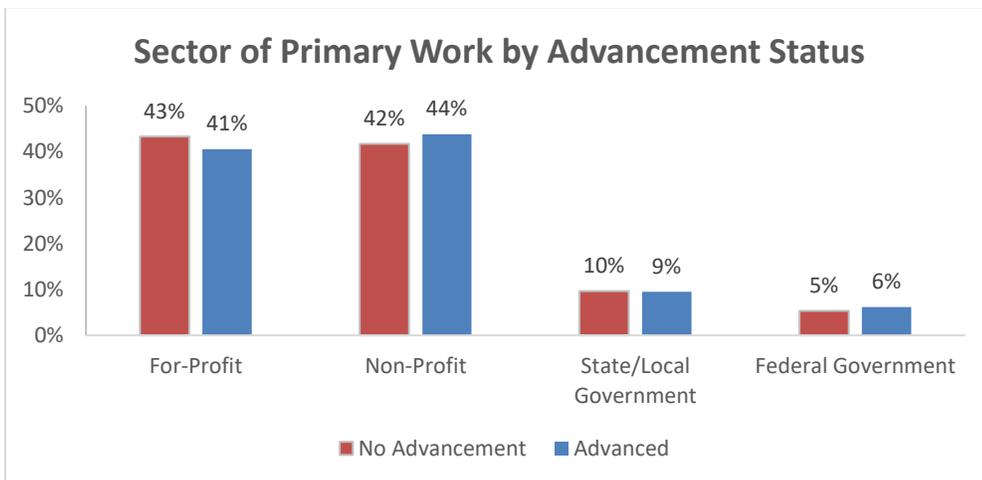
monetary terms and be intrinsic. Further, this paper only looks at a cross-section of nurses. A longitudinal study following matched groups of nurses, though not ethically advisable, would offer the most persuasive result.

## Sectors and Establishments

There is little difference in the primary work sectors and establishments of RNs who have advanced their education versus those who have not. RNs who have advanced are more likely to work in long-term care whereas their non-advancing colleagues were more likely to work in hospitals and outpatient surgical units. RNs who have advanced their education are also slightly more likely to work in the non-profit sector compared to their non-advancing colleagues who are slightly more likely to work in the for-profit sector.



Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center