



September 2018

# Apprenticeship and the Future of Nursing

## An Equity-Based Strategy to Address the Bachelor's Degree Gap

Ivy Love & Mary Alice McCarthy

## **Acknowledgments**

We would like to thank the Joyce Foundation for its generous support of this work.

We thank Keisha Powell and Laura Beeth of Fairview Health Services for their willingness to respond to our many questions, as well as Fairview's education partners, community partners, and nurse apprentices who offered their perspectives. We also thank the Minnesota Department of Labor and Industry and Department of Employment and Economic Development for offering their insight. We are grateful to the New America Education Policy program and communications team for their support. We thank Daniel Bustillo of the Healthcare Career Advancement Program for reviewing the report. The views presented here are not meant to represent those of the individuals and organizations named above.

## **About the Author(s)**

**Ivy Love** is a policy analyst with the Center on Education & Skills (CESNA) within the Education Policy program at New America, joining the team in October 2017.

**Mary Alice McCarthy** is the director of the Center on Education & Skills with the Education Policy program at New America (CESNA). Her work examines the intersection between higher education, workforce development, and job training policies

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## Introduction

Laura Beeth, Vice President of Talent Acquisition at Fairview Health Services of Minnesota, spends a good part of every week thinking about how to get nurses to go back to school and earn a bachelor's degree. She knows it is a lot to ask of people who are working full-time and have countless other personal and financial responsibilities. But studies have shown that hospitals with more bachelor-degreed nurses generate better patient outcomes,<sup>1</sup> so Fairview has charged Beeth with raising their share to more than 80 percent. The strategies Beeth develops are critical to helping Fairview secure "Magnet" status,<sup>2</sup> a prestigious designation awarded to just 475 hospitals across the country that exemplify best practices in nursing leadership, patient care, and education attainment.

Increasing the share of registered nurses with a bachelor of science in nursing (BSN) is a top priority for Fairview and many other health care systems around the country that are responding to the growing body of evidence connecting the presence of bachelor-degreed nurses to better patient outcomes. Beeth is keeping close tabs on Fairview's nursing workforce, ensuring at least 80 percent of new hires per week already have a bachelor's degree. "I have to report weekly on those ratios that end up going to the chief medical officer and chief nursing officer...I have to say what the solutions are [for getting more BSN nurses]."<sup>3</sup>

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She has a few strategies for getting that percentage up, but each one comes with some drawbacks. For example, she can limit any new hires to those that already have bachelor's degrees, but that cuts Fairview off from the pool of talent from local associate degree programs, many of which are very good. Even more importantly, restricting new hires to nurses with a BSN could leave Fairview with a much less diverse nursing workforce than it currently has or wants.<sup>4</sup>

She can encourage the 30 percent of registered nurses working at Fairview who lack bachelor's degrees to take advantage of the health system's tuition assistance program, which provides \$3,000 a year to all employees. The financial

assistance has helped Fairview make strides toward the 80 percent BSN goal, but not at the rate Beeth needs. To entice more nurses to enroll, she needs something that will make earning the degree more affordable and easier to integrate with current nurses' day-to-day work at Fairview while also opening the door for upward career mobility and leadership opportunities.

She may have found it. Fairview Health Services has partnered with the Minnesota Department of Labor and Industry (DLI) to set up a Registered Apprenticeship program for nurses in need of bachelor's degrees. Apprenticeship is an educational model that combines structured, on-the-job learning with academic coursework designed to prepare an individual for a particular occupation. The on-the-job learning is overseen by a qualified mentor. The classroom portion is delivered by a qualified instructor, and apprentices generally not responsible for paying tuition. The apprentice is employed throughout the program, earns a progressively higher wage, and is granted release time from work to attend classes.

Nurses are not those who come to mind when most people think of apprenticeship. Nor do bachelor's degrees. But apprenticeship is spreading into parts of our economy where it has had little presence historically: financial services, cybersecurity, early education, and health care.<sup>5</sup> And it is increasingly being used as a path to a job *and* a college degree, not in lieu of a degree.<sup>6</sup> For Fairview's registered nurses who only have an associate degree, the apprenticeship program provides an opportunity to earn the degree with almost no out-of-pocket costs, continue working full-time, and connect classroom learning to daily on-the-job experience. The program has enrolled 122 apprentices, making it the largest program of its kind and one of just a handful of Registered Apprenticeship programs nationwide that culminate in a bachelor's degree.

Fairview's apprenticeship program is an experiment well worth watching. Registered nursing is the fifth largest occupation in the United States, with nearly three million workers.<sup>7</sup> Changes in the educational requirements to enter and advance in the field are felt in every community in America. Today, one-third of registered nurses do not have a bachelor's degree, and the associate degree is still the primary point of entry into the profession.<sup>8</sup> Nursing apprenticeships have the potential to open a pathway to the bachelor's degree that is more effective, and more equitable, than just providing financial aid to nurses to go back to school on their own time. Understanding whether and how apprenticeship can help build the nursing workforce we need is critical to ensuring the profession continues to be a source of quality care for patients and economic security and mobility for millions of Americans.

## The Push for the Bachelor's Degree in Nursing

Fairview Health Services is not alone in its efforts to increase the share of bachelor-degreed nurses working in its hospitals, clinics, and long-term care facilities. Health care providers around the country are pursuing similar goals and, in the process, transforming how nurses are trained, where they can work, and how they can advance in their careers.

### The Institute of Medicine's Ambitious Goal

The goal of increasing the share of bachelor-degreed nurses has come from the profession itself: national nursing associations, schools of nursing, and the health care research community. The specific target of 80 percent was proposed in a 2010 report published by the Institute of Medicine<sup>9</sup> (IOM) called *The Future of Nursing: Leading Change, Advancing Health*.<sup>10</sup> The report included eight core recommendations, each aimed at expanding the capacity of the nursing profession to provide high-quality, evidence-based care to an increasingly diverse and aging population. One recommendation focused on credential attainment:

**Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020.** Academic nurse leaders across all schools of nursing should work together to increase the proportion of nurses with a baccalaureate degree from 50 to 80 percent by 2020.<sup>11</sup>

The recommendation was built on a solid foundation of medical research<sup>12</sup> connecting hospitals staffed with BSN nurses with lower mortality rates, shorter patient stays, and fewer readmissions, all of which improve the care experience for patients and their families and help keep costs down. The findings are not surprising given the tremendous advances in medical science over the last several decades and the growing complexity of our health care system and patient population. Americans are living longer and often managing diseases or injuries that would have ended their lives just decades ago. Nurses are on the front lines across a growing variety of health care settings, from acute care hospitals, to long-term care facilities, to community clinics. They need to recognize a wide array of symptoms and deliver medical interventions for an increasingly diverse patient population. They also often have to coordinate care across different parts of the health care system, ensuring successful transitions from one setting to another. High-quality nursing today is built on an understanding of the intersections between medical science, technology,

caregiving, culture, and health care policy, and mastering these complex relationships is made easier with higher levels of education and training.<sup>13</sup>

The IOM's 2010 report acknowledged these new realities and issued a set of ambitious goals for strengthening the nursing profession, including dramatically increasing the share of bachelor-degreed nurses by 2020. At the time, just 49 percent of all nurses held a bachelor of science in nursing, and only 59 percent of registered nurses did so.<sup>14</sup> Despite the audacious nature of the goal—or perhaps because of it—the leading professional associations, including the American Nurses Association (ANA), Association of American Colleges of Nursing (AACN), American Organization of Nurse Executives, and the National League for Nursing, embraced it and quickly got to work.<sup>15</sup> That same year, the Robert Wood Johnson Foundation and AARP founded the Future of Nursing: Campaign for Action to help develop and coordinate strategies for bringing each of the IOM's recommendations to fruition.

### **Nursing Education: From the Hospital to the University**

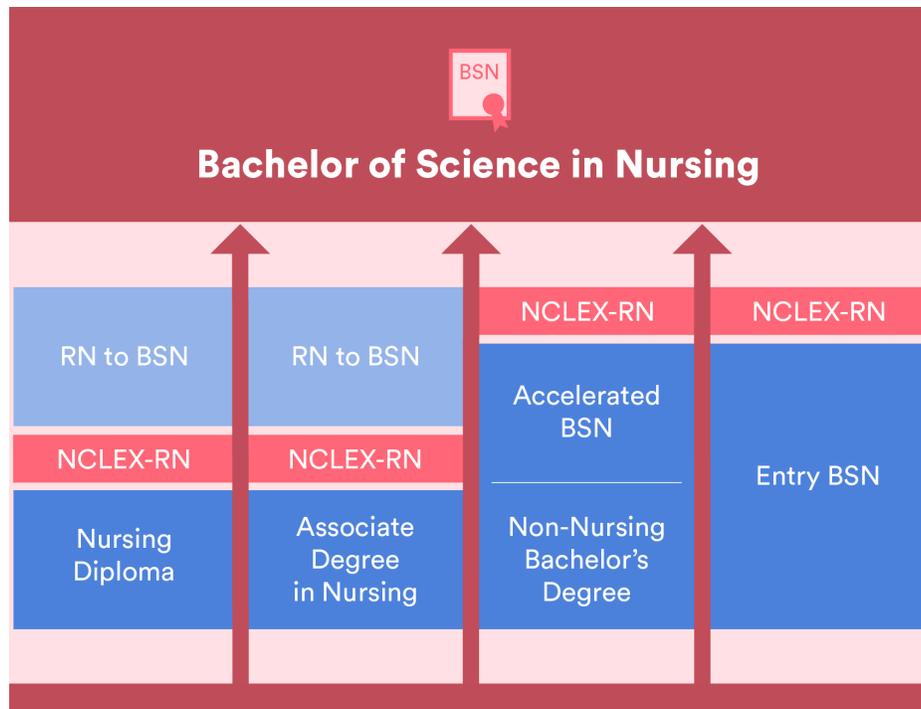
The IOM's recommendation culminated a generations-long effort to professionalize nursing education. Until well into the 19th century, nursing was seen mostly as a private matter that consisted mainly of providing comfort to the sick and dying. Advocates like Florence Nightingale helped change public perceptions of nursing so it could be recognized as a practice based on scientific principles that required formal training. The 1870s marked the establishment of the first formal nursing schools in the U.S., and their numbers grew steadily over the next few decades. But for most of the late 19th and much of the 20th century, hospitals were the primary locus of nurse education. Hospital-based “diploma” programs provided on-the-job training for aspiring nurses. In the early days, the programs were loosely structured, of widely varying quality, and included little in the way of academic preparation. In some cases, they could be exploitative, as hospitals brought on poorly-paid trainees more to staff hospital wards than to provide education. A nurse trainee might spend all her time in one understaffed ward and fail to learn about other care settings.<sup>16</sup> But over time, the programs became more structured, with a core curriculum, supervised learning, and a licensure exam at the end. The emphasis, however, remained on practice over theory. Diploma programs prepared the majority of nurses until well into the 1970s and a small number continue to operate today and provide a pathway to a career as a registered nurse.<sup>17</sup>

The two world wars of the 20th century further expanded the size and profile of the nursing profession; modern warfare increased the demand for modern nurses.<sup>18</sup> But it took until the 1960s before nursing advocates finally convinced policymakers of the need to invest in the professional education of America's nursing workforce. In 1964, Congress passed the Nurse Training Act, which

provided federal funding to establish collegiate programs in nursing.<sup>19</sup> Over the next several decades, colleges and universities across the country established schools of nursing and degree programs, gradually shifting responsibility for preparing new nurses away from hospitals and toward higher education.

### Diversity and the Value of Multiple Pathways into Registered Nursing

While universities established bachelor’s degree programs in nursing, community colleges and other private institutions of higher education developed associate degree programs. Both types of degrees prepare students for the licensure examination required to become a registered nurse, which makes the field of nursing quite unusual. In most professions, the educational requirements for licensure or certification are the same for all aspirants. But a registered nurse in the U.S. might have an associate degree, a bachelor’s degree, or a diploma from an accredited hospital-based training program. All are eligible to sit for the NCLEX-RN licensure exam and, if they pass it, carry the title of “registered nurse.”



This ability to enter registered nursing from different degree levels has helped make the profession more racially and ethnically diverse than some other professions that require a bachelor’s degree for entry. However, in a workforce that is currently comprised of 65 percent white women,<sup>20</sup> there is still much

progress to be made. The proportion of Black registered nurses is approaching their share of the population, though Black nurses are notably overrepresented in lower-paying nursing occupations that generally require less education, such as licensed practical nurse (LPN).<sup>21</sup> Meanwhile, the significant underrepresentation of Latinx among licensed practical nurses and among registered nurses at both the associate and bachelor's degree levels poses an increasingly urgent challenge for the field as the Latinx share of the population grows.<sup>22</sup> In order to cultivate a registered nursing workforce that mirrors the U.S. population, the field will need to ensure that aspiring nurses have financially accessible paths into the profession and to further education as their careers progress.

Increasing equitable access to a career in registered nursing will be critical to continued improvements in the quality of care. Just as research has shown that hospitals with more bachelor-degreed nurses generate better patient outcomes, cultural affinity between patients and caregivers may help reduce health disparities among different racial and ethnic groups.<sup>23</sup> In fact, cultural affinity has been shown to have a larger positive effect on patient outcomes than income or whether an individual has insurance.<sup>24</sup> Caregiving is an intimate and delicate exercise. The tacit knowledge that comes with a particular cultural identity can also help caregivers identify behaviors or underlying conditions that may not be obvious to a caregiver from a different background. When nurses and patients share a common language, religion, or other formative experiences, communication between them can be easier.

The challenge, then, is to figure out how to educate many more nurses to the BSN level without closing down valuable on-ramps to the profession that have been so critical for building a large and diverse workforce. While some groups have called for requiring the bachelor's degree for licensure, current strategies will not be able to produce enough bachelor's degree graduates to meet the current demand for registered nurses.<sup>25</sup> The associate degree remains the primary path to licensure. According to the Organization for Associate Degree Nursing, 81,633 associate-degreed nurses received their licenses in 2016 compared to 72,637 bachelor-degreed nurses.<sup>26</sup> If the field is to advance toward its goal of 80 percent BSN without undermining its efforts to maintain and expand a diverse workforce, it will need effective strategies for furthering the education of nurses with associate degrees.

## Current Strategies for Reaching the 80 Percent Goal

Since the release of the IOM report in 2010, the share of registered nurses with a bachelor's degree has risen from 59 to 66 percent. While still well shy of the 80 percent goal, a shift of seven percentage points in a workforce of three million is evidence of the profound impact the recommendation has had on the field.

### Building more Pathways to the BSN

This increase was the result of expanded enrollments in three types of bachelor of science in nursing degrees: “entry,” “accelerated,” and “bridge.” The entry BSN—so-called because students complete it before taking the license exam to enter registered nursing—is a traditional, four-year bachelor's degree. Since it is prelicensure it requires a variety of clinical experiences and practicums, similar to the associate degree in nursing. But since it is a four-year program, it also includes more general education classes as well as more academic coursework on nursing, health care, and the health sciences. The accelerated BSN is designed for graduates of other bachelor's degree programs who want to become registered nurses. The programs are shorter and limited to core nursing requirements, in recognition that students have already completed the general education requirements of a bachelor's degree. Since they are also prelicensure, they require the same clinical experiences as entry BSN programs. The bridge programs, also called “RN-BSN” programs, are designed for registered nurses who already have an associate degree. These are post-licensure programs, and therefore do not require the same amount of clinical experience. Instead, the programs are made up of general and academic courses that are not included in the shorter and more practically focused associate degree programs. A typical program will include courses on leadership, research, health care policy, and culturally competent care, along with deeper dives on topics like pharmacology or gerontology. Most of them are also accelerated, in recognition that students have completed many of the core requirements of a prelicensure nursing program.

All three types of degree programs have expanded since the IOM report, causing a 74 percent jump in the number of BSN degrees awarded since 2010.<sup>27</sup> There are now more RN-BSN than entry BSN programs, and while there are only about one-third as many accelerated as entry BSN programs, that number is climbing fast.<sup>28</sup> Both RN-BSN and accelerated BSN programs are also producing a significant share of overall BSN degrees, with the accelerated BSN at 9 percent and RN-BSN completers at 47 percent of total BSN degrees awarded in 2016.<sup>29</sup>

The lion's share of the growth in BSN graduates has come from RN-BSN programs.<sup>30</sup> A big part of the reason the RN-BSN programs have grown so much more than the other two types of bachelor's degree programs is because they are post-licensure, and therefore do not require the same clinical experiences necessary for a pre-licensure program. The need to secure clinical placements for students is a major constraint on the growth of pre-licensure nursing programs. According to AACN, in 2017 nursing schools turned away more than 60,000 qualified applicants to bachelor and graduate degree programs.<sup>31</sup> A survey of nursing school leaders indicated that lack of clinical placements was the primary reason for turning away qualified applicants.<sup>32</sup>

The fact that RN-BSN programs require less in the way of clinical experiences makes them easier for schools to deliver. The general and academic nature of the coursework also makes them ideally-suited for online delivery. The online format, in turn, allows schools to enroll far more students than could fit into their physical classrooms. It also enables a faculty member to serve many more students than is possible in an in-person setting. A shortage of qualified faculty was the second most commonly-cited constraint on expanding enrollments in the National League for Nursing survey of school leaders,<sup>33</sup> and online programs expand the capacity of existing faculty.

Any internet search will quickly reveal that RN-BSN programs are widely available and easy to find. Since 2010, they have significantly expanded their share of BSN graduates. There are now approximately 750 RN-BSN programs operating in the country, more than the number of entry BSN programs.<sup>34</sup> Over half of them are entirely online and over 80 percent are at least partially online.<sup>35</sup> Some are high-enrollment programs like the one delivered by Western Governors University that serves more than 7,000 students a year or the University of Texas-Arlington program that enrolls over 3,000 students from all parts of the country. Others, like St. Catherine's University in Minneapolis, are smaller and focused on local markets. But whether designed to serve national or local communities, they all aim to help registered nurses who are already working complete their bachelor's degrees as quickly as possible. The compressed course schedules, open start dates, and online content that many programs offer are all designed to help students fit school around full-time work.

### **The Limits of the Online RN-BSN**

RN-BSN programs are not new, but since 2010 they have moved from the sidelines to the very center of nursing education and become the solution to the profession's most ambitious goal. For advocates of the programs, they exemplify Clay Christensen's theory of "disruptive innovation" in which products or services on the margins of a market eventually overtake the less flexible and more tradition-bound incumbents: in this case, entry BSN programs. The online

programs have provided an elegant solution to the constraints of pre-licensure programs and allowed the field to advance toward its 80 percent goal without closing down the associate degree pathway into the profession. As a strategy for increasing access to BSN programs, these programs have been highly successful.

However, there are reasons to doubt they will be enough to close the remaining 14 percentage point gap anytime soon. In fact, at the current rate of degree production, the field will not reach 80 percent for another two decades. While the rate could go up (along with the retirement rates of associate-degreed nurses), that is still a long way to go. And there are signs that the online RN-BSN may be reaching its peak enrollment level. According to AACN, after 13 years of positive growth, enrollments in RN-BSN programs increased by just 1 percent in 2017.<sup>36</sup>

Two factors appear to be constraining their growth: 1) many nurses do not feel the programs are worth the time or effort and 2) many employers offer few reasons to change their minds. Going back to school while working as a registered nurse is difficult, particularly for adults with families. Surveys of associate-degreed nurses who have chosen not to advance their education cite family obligations and a lack of flexibility from the employers for time off as a key barrier.<sup>37</sup> Registered nurses who come through the associate degree path are, on average, older than their counterparts in entry BSN programs and much more likely to have children. Sixty percent of students enrolled in RN-BSN programs are over 30 years of age.<sup>38</sup> While the online format can help students juggle work and home schedules with school, that does not make the coursework any easier. In fact, as anyone will tell you who has completed an online degree, it is demanding and time-consuming. And despite claims by providers that the RN-BSN degrees can be completed in just nine months, students may require more time or need to complete a variety of pre-requisite courses before they can enroll in the actual program.

The economic benefits of completing the degree are also far from clear for many nurses, particularly those who are older and/or have been practicing for some time. Demand for registered nurses is strong, regardless of degree level. Experienced nurses with an associate degree will not struggle to find work or keep their jobs in today's labor market. They may not move up the career ladder, but for many nurses who are earning decent salaries, that is not a bad tradeoff. Add to that the fact that most graduates of RN-BSN programs receive little or no wage increase for their trouble, and it is not hard to understand why many associate-degreed nurses are content to stay where they are. While the long-term wages of BSN nurses are higher, due primarily to their ability to move into management positions and graduate education, many nurses are focused on the more immediate costs and benefits of returning to school.

Finally, the health care employer community is sending mixed signals on just how much it values the bachelor's degree. While the AACN touts the fact that 94 percent of employers prefer to hire nurses with bachelor's degrees, according to

the same survey, only half require it. Other research casts doubt on that number. A recent survey of acute care hospitals in Massachusetts that included six Magnet hospitals and 11 teaching hospitals revealed that just 41 percent required their nursing staff to obtain a BSN. Among the non-acute care hospitals in the survey, none required a BSN.<sup>39</sup> A similar study by the University of California–San Francisco indicated that fewer than 5 percent of health care employers in the state require a bachelor’s degree for hire.<sup>40</sup>

Not only do relatively few employers require a bachelor’s degree for hire, the University of California—San Francisco study shows that the majority do not make any salary distinction between registered nurses with an associate or bachelor’s degree.<sup>41</sup> Just over half of the acute care hospitals in the Massachusetts survey rewarded degree completion with a salary increase, and only 14 percent of other health care providers did so.<sup>42</sup> And even among those institutions that do award a salary increase, the amount is often quite low—less than \$3,000, according to one national study.<sup>43</sup> Outside a relatively small number of teaching hospitals, labor management training partnerships, and hospitals seeking Magnet status, employers appear to be doing little in the way of targeted strategies to upskill their associate degree workforce. The survey of California employers indicated that just a quarter provided paid time off to nurses in RN-BSN programs, and just 35 percent were willing to provide unpaid leave.<sup>44</sup> The most common support strategy is to offer tuition reimbursement, which rarely covers the full cost of the degree. While tuition reimbursement can help, it is primarily used as a recruitment and retention strategy, not a talent development strategy. As one study of employer practices put it:

This implication is suggested by the fact that most institutions offer tuition reimbursement—which is a well-proven retention strategy—regardless of whether nurses actually use the program or complete their studies. On the other hand, salary differentials—which are, by definition, linked to achieving educational progress rather than achieving lower turnover rates—are far less commonly applied.<sup>45</sup>

Given the lack of clear incentives and rewards, it is not surprising that many nurses prefer to stay at the associate degree level. The ability to take programs online still does not address many of the downsides of returning to school, including the considerable time and cost involved. What is missing from these RN-BSN programs are designs that make it easier to combine work and school and that more directly engage employers in the talent development process. In fact, when considering the online RN-BSN program, what distinguishes it from other degree programs may be precisely what keeps it from meeting the needs of more nurses and employers. The programs are designed to be completed *outside of work*, even though the students are working as nurses. The ability to access the

program at home, at night, and on weekends, is often touted as its greatest strength. But for many nurses, it might well be its greatest deficit.

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The online designs and fewer clinical requirements also absolve employers of responsibility for creating opportunities for nurses to connect what they are learning to their practice. The courses are generic enough that they can meet the needs of registered nurses working in any health care setting or location: an emergency room in Philadelphia, a family practice clinic in Cedar Rapids, a nursing home in Phoenix. The content of the courses, with their focus on leadership, assessments, health care policy, and cultural competency, may be well aligned with the knowledge and skills needed of a bachelor-degreed nurse, but the program design limits opportunities to connect any new learning to practice. That lack of a linkage between course content and nursing practice makes the programs far less valuable as a talent development strategy for employers than they could be.

## Apprenticeship and Nursing

There is a way to design an RN-BSN program that makes registered nurses' current work a foundation to build upon rather than an obstacle to overcome. It is called apprenticeship, a time-tested teaching and learning model that makes the workplace a location of learning, full of valuable instructors and opportunities to connect theory and practice. In fact, putting work at the center of theoretical and applied learning is the hallmark of apprenticeship.

Nursing is not an occupation that springs to mind when one thinks of apprenticeship. But modern apprenticeship programs share much in common with pre-licensure nursing degree programs. Similar to the associate and bachelor of nursing programs which require significant on-site learning through clinical experiences and practicums, apprenticeship combines structured on-the-job learning with related classroom instruction. To be sure, the emphasis in an apprenticeship program is more tilted toward the on-the-job learning component, and apprentices are full-time, paid employees, but the combination of academic and hands-on learning is common to both approaches.

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Apprenticeship also shares much in common with a new trend in nursing education: residency programs for recent nurse graduates. Residencies are a form of paid, on-the-job learning, combined with a related curriculum, that help new entrants to the profession connect their academic preparation to the real-world demands of nursing. Residencies have become more common over the last decade as the number of nurses entering the field from four-year degree programs has increased. They are designed to address complaints from employers about the lack of practical skills, knowledge, and experience among entry BSN graduates. They also aim to stem the high attrition rates among new BSN graduates entering acute care settings who can feel overwhelmed. The need for more programs to help new BSN graduates connect their academic learning to the actual practice of delivering care is widely recognized in the field. In fact, the same IOM report that calls for 80 percent of nurses to hold a BSN also includes a

recommendation calling for the expansion of residency programs for new nurse graduates.

From the practice-focused hospital-based diploma programs of the last century to the academically-focused BSN programs in high demand today, the nursing profession has been struggling to find the right balance between on-the-job and classroom-based learning. The trend has been toward ever greater reliance on academic and classroom learning delivered by universities. The re-introduction of on-the-job training for new BSN graduates in the form of residencies brings the field full circle and points to the critical need for a combination of practical and academic learning to build a highly-skilled nursing workforce.

Apprenticeships and residencies are essentially the same. In fact, they are so similar that Yale New Haven Hospital in Connecticut recently registered its longstanding first-year residency program as an apprenticeship, offering integrated seminar-based and work-based learning opportunities to new nurses launching their careers.

Today's nurse residency programs are primarily designed for nurses who have already completed their bachelor's degree. But there is a way to bring the same model to nurses without a bachelor's degree. Many modern Registered Apprenticeship programs demonstrate how to combine a paid, on-the-job learning model with a degree program. For example, Harper College just outside Chicago has established a variety of degree apprenticeship programs in financial services, logistics, and information technology. The Community College of Philadelphia delivers an Associate of Arts in Early Education through a Registered Apprenticeship program. The New Jersey Institute of Technology recently launched an apprenticeship program that can lead to either an associate or bachelor's degree.

A well-designed nursing apprenticeship could take many of the best elements of associate degree, bachelor's degree, and nurse residency programs and combine them to create an affordable, high-quality RN-BSN program that allows working nurses to master new knowledge in an applied setting with the support of their peers and mentors. It could operate much like a residency—but in reverse. Rather than being designed to help new graduates apply academic knowledge to real world settings, the programs can help veteran nurses master new academic knowledge through the work they are already performing. Integrating academic and practical learning could take the form of expanding technical skills through on-the-job mentoring or opportunities outside of the clinical setting, such as defining, practicing, and reflecting on principles of ethical nursing with the guidance of a mentor.<sup>46</sup>

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Apprenticeship offers several potential advantages over existing BSN models – both traditional BSN and RN-BSN. As in a residency, nurse apprentices are employees paid to learn on the job. They have access to on-site mentors, designated time to attend classes, and opportunities to connect classroom learning with hands-on learning. But unlike a residency program, the on-the-job learning occurs simultaneously with the academic experience, not afterwards. And while the apprenticeship-like diploma programs of nursing’s early days were of varying quality and sometimes exploitative, Registered Apprenticeship programs today are required to meet clearly-defined industry standards and include a host of worker protections. When considered alongside the growing reliance on residency programs, it is clear that apprenticeship might be a valuable tool for expanding access to the bachelor’s degree. That is what the leadership at Fairview Health Services has decided to find out.

### **Apprenticeship at Fairview**

By 2016, Laura Beeth knew that Fairview’s existing strategies for increasing the share of bachelor-degreed nurses were hitting their limits. The tuition assistance was just not enough for some nurses. She also knew that asking nurses to find the time and money to return to school put too heavy a burden on their shoulders. “Life happens. It’s really hard for people to go [back] to school,” she said. Well aware of the challenges of juggling family, school, work, and the rest of life, Beeth and her team knew they needed another pathway to the BSN that would keep burden on nurses to a minimum.

In 2015, Beeth attended an event on German models of apprenticeship that caught her attention. Speakers described clear, well-structured pathways to new skills and higher credentials, all led by employers. Apprentices worked with highly-skilled mentors to learn by doing, in addition to taking rigorous coursework applicable to their day-to-day work. Theory and applied learning

came together in apprenticeship to launch participants into and through career pathways, without any cost to the apprentice.

Beeth thought of all the Fairview nurses she knew were struggling to earn a bachelor's degree and thought: "We can do this!"

Creating a Registered Apprenticeship made perfect sense as a clear and financially viable path for more Fairview nurses to earn the BSN. "We already have all the academic pieces in place," Beeth later explained. "We have history and infrastructure with people who know how to do this, our workforce development team." Beeth and her team connected with the Minnesota Department of Labor and Industry and Department of Employment and Economic Development (DEED) to discuss creating a groundbreaking RN-BSN Registered Apprenticeship.

Fairview began the process of creating a Registered Apprenticeship at an opportune time. Besides the groundswell of support for apprenticeship among business and community leaders, the Obama Administration had just launched the American Apprenticeship Initiative (AAI), a \$175 million investment administered by the U.S. Department of Labor to help spread apprenticeship into new sectors. The state of Minnesota was one of 46 recipients of AAI funds, receiving \$5 million to create the Minnesota Apprenticeship Initiative (MAI), designed to bring apprenticeships into key industries and to support 800 apprentices participating in new programs.<sup>47</sup> A nursing apprenticeship fit perfectly into MAI's vision for expansion, and Fairview received \$800,000 from the MAI to support new RN-BSN apprentices.

To qualify for MAI funds, Fairview had to register the program with the state's apprenticeship agency, DLI, and meet all the requirements specified in federal regulations.<sup>48</sup> The registration process involved working with a team at DLI to prepare the apprenticeship standards, a document describing programs' on-the-job training component and related technical instruction—in this case, apprentices' BSN classes. Once an apprentice earns a BSN, they will have completed the apprenticeship, moved into Fairview's pay scale for BSN nurses, and earned a certificate of completion for the apprenticeship program from the state of Minnesota.

In January 2017, after a year of collaboration, DLI approved the apprenticeship standards. Getting the program off the ground was a fairly easy feat for Fairview, since it aimed to make maximum use of existing education partnerships and employee assessment practices. Fairview also limited eligibility for the apprenticeship to nurses who were already enrolled in RN-BSN programs, smoothing the apprentice recruitment process. By early 2018, Fairview had 122 nurse apprentices enrolled, making it one of the largest single-employer apprenticeship programs in the country.

The classroom instruction component of Fairview's apprenticeship is delivered by accredited colleges and universities and consists of the courses necessary to complete an RN-BSN program. Since all of Fairview's apprentices were already enrolled in bachelor's programs at wide variety of colleges and universities, from local schools like St. Catherine's University and Metropolitan State University to large online programs like the University of Texas–Arlington and Western Governors University, each of these schools became de facto education partners of the apprenticeship program. The institutions may or may not know that some of their students who work at Fairview are also registered apprentices or that they are providing the related technical instruction of a Registered Apprenticeship program.

The on-the-job learning components of Fairview's program, including the list of skills apprentices should acquire, were developed through collaboration between nursing leadership and higher education partners. Usually, the process of moving apprentices through the list of skills includes connecting them with experienced mentors, providing hands-on opportunities to acquire new competencies at work. But at Fairview, all nurses are already regularly assessed on technical skills needed for quality patient care. So, rather than creating a separate assessment structure for apprentices, Fairview counts regular performance reviews as an assessment of competencies required to progress through the apprenticeship. The fact that the roles of nurses, supervisors, and colleges changed very little within the context of the apprenticeship kept the implementation process simple.

### **Challenges in Connecting Theory and Practice**

Fairview succeeded in quickly setting up a Registered Apprenticeship, leveraging the program to offer additional financial resources to nurses in RN-BSN programs. The relative ease of the program launch shows just how compatible apprenticeship is with existing approaches to nurse education. But by making so few changes to existing programs for supporting nurses in RN-BSN programs, Fairview left significant value on the table. In particular, the health care system missed opportunities to connect the academic coursework nurses are taking with the structured, on-the-job learning required of an apprenticeship program. It might seem like nurses who have been working in the field for years would not benefit from formal on-the-job training. But research on adult learning indicates that when experienced students have opportunities to connect new knowledge to what they already know and are doing, they learn faster and retain more.<sup>49</sup> On-the-job training could consist of a variety of professional and leadership development experiences, such as working alongside hospital nursing administration or learning from mentors in a research setting.

The growth of nursing residencies points to the field's appreciation of the need to better connect theory and practice, even for experienced nurses. For example,

the Clinical Ethics Residency for Nurses at Massachusetts General Hospital is a 10-month program that combines classroom instruction on the theory and history of ethics in health care with an on-the-job practicum aimed at helping nurses apply new knowledge.<sup>50</sup> Although the first cohort of nurses in the program had, on average, 20 years of experience, they benefited from the opportunity to connect their new knowledge to their everyday work through a structured curriculum. The emphasis of the program on connecting the classroom learning to the actual practice of caregiving also sends a powerful signal about the hospital's goals and expectations of the nurses it enrolls in the program, in strong contrast to the broad-based tuition reimbursement programs that most hospitals use to support BSN attainment. Investing in apprenticeship provides employers opportunities to wrest more value out of degree attainment strategies for the nurses they employ.

## Recommendations

The relative ease with which Fairview incorporated apprenticeship into its existing professional development strategies demonstrates that it is already a close fit. It also shows that apprenticeship can be a valuable tool for helping the field reach its goal of increasing the share of bachelor-degreed nurses to 80 percent. But expanding the use of apprenticeship in nursing and realizing its full potential as an education and training model will require support from a broad range of stakeholders across the public and private sectors—state and federal policymakers, philanthropy, advocacy groups and professional bodies, and health care employers. Below are steps each group can take to broaden access to high-quality nursing apprenticeships.

**The Role of Federal and State Government:** Federal and state policymakers have an important role to play in expanding the use of apprenticeship in the health care sector and should:

- **Convene Key Stakeholders to Discuss Registered Apprenticeship:** Leaders can bring together key stakeholders in the nursing sector—employers, state boards of nursing, researchers, unions, institutions of higher education—to explore the value of apprenticeship and identify opportunities and barriers to expansion. Significantly expanding the use of Registered Apprenticeship in nursing will require coordinated policymaking. Governors and federal agencies are well positioned to host these conversations.
- **Create targeted grant programs:** Fairview’s experiment with Registered Apprenticeship was made possible by a federal grant program, the American Apprenticeship Initiative (AAI). Grants funds covered one of the biggest barriers to apprenticeship expansion, the cost of developing a new program. Congress and the Executive Branch should consider a targeted discretionary grant program to help more employers set up apprenticeship programs in the health care sector, including for registered nurses. Funding should also support the role of workforce intermediaries who can work with groups of employers and help scale up high-quality programs. The U.S. Department of Labor’s Office of Apprenticeship and the Health Resources and Services Administration at the Department of Health and Human Services could jointly administer the program. Similarly, governors and state legislatures should identify opportunities to seed the development of apprenticeship programs as part of their efforts to meet the 80 percent goal. New York recently passed the country’s first law mandating that registered nurses obtain a bachelor’s degree within 10 years of being licensed. Similar “BSN-in-10” legislation is under consideration in other states. States that choose to legislate degree

requirements should consider Registered Apprenticeship as an equity-based strategy for increasing their share of BSN nurses.

- **Support research and evaluation:** The IOM’s study of the impact of bachelor-degreed nursing on patient outcomes has been transformative. But little is known about the effectiveness of different models to support BSN attainment. Any additional investments in health care apprenticeship should include a robust evaluation of its effectiveness as a teaching and learning model, particularly in comparison to other strategies, including the fully online RN-BSN and the entry BSN.

**The Role of Philanthropy, Nursing Associations, and Advocacy Groups:**

The healthcare policy community is broad and includes many influential health care stakeholders beyond government and employers. These groups can play an essential role in building support within the public and private sectors for apprenticeship in nursing and should:

- **Raise awareness of apprenticeship:** The Campaign for Action, funded by the Robert Wood Johnson and AARP Foundations, has played an essential role in raising awareness among employers and practitioners of the IOM’s goal and strategies for reaching it. These groups could play a similar role in raising awareness of apprenticeship as an educational strategy to move associate-degreed nurses up to the bachelor’s degree.
- **Fund pilots and evaluation:** National and local philanthropic organizations can provide funding for pilot programs and evaluations to further understand how apprenticeship can be of value to the nursing sector.
- **Recognize apprenticeship as compatible with “Magnet” status:** The Magnet status designation awarded by the American Nurse’s Credentialing Center (ANCC) sends an important signal regarding high-quality professionalization strategies for nurses. ANCC should explore the value of Registered Apprenticeship as a credentialing strategy and consider including it in its list of activities that contribute to Magnet status.

**The Role of Employers:** Healthcare employers should explore how Registered Apprenticeship could advance their workforce development goals, particularly increasing BSN attainment levels. An apprenticeship program with a robust on-the-job learning component may well provide more return on investment than traditional tuition reimbursement programs. As apprenticeship sponsors, employers can have more influence over the curriculum and the instructors than in a traditional degree program. And the convenience of learning-on-the-job may entice more of their associate-degreed nurses to enroll in the program. Employers interested in apprenticeship should:

- **Partner with health care workforce intermediaries to develop apprenticeship programs:** Hospitals and other health care employers

are already spending a lot of money on professional development for their staff, but they likely have little familiarity with Registered Apprenticeship. There are organizations that specialize in the design and development of apprenticeship programs—nonprofits like the Healthcare Career Advancement Program and government agencies such as local workforce development boards or state departments of labor—that can help.

- **Partner more selectively with institutions of higher education to ensure quality and drive down tuition:** Apprentices at Fairview are enrolled in RN-BSN programs all over the country, paying varying rates of tuition for a similar set of courses. Because high-quality apprenticeship programs require strong connections between on-the-job and classroom-based learning, they are best supported by a single educational partner that has helped develop both components of the program. An additional advantage of working closely with one educational partner is the opportunity to negotiate better deals on tuition.

## Conclusion

While the term *apprenticeship* might be unfamiliar in the field of nursing, the practice of formally connecting health care work and learning has deep roots, from the diploma programs of the last century to the nurse residencies of today. It recognizes the workplace as a valuable location of learning and provides a more convenient and affordable pathway to a degree than an online program by itself. Combining apprenticeship with degree programs allows employers to integrate the best of higher education with the best of on-the-job learning.

Fairview Health Services has taken a step in that direction with its Registered Apprenticeship program for associate-degreed nurses. The program has not quite tied all the pieces together to fully realize the potential of on-the-job learning for RN-BSN students, but it demonstrates that apprenticeship is a model that can work for nursing and may provide a valuable complement to existing online RN-BSN programs. As the field seeks effective strategies for increasing BSN attainment, they may find that the future of nursing is where theory meets practice in apprenticeship.

## Notes

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