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## CHAPTER TWO

### Preparing Future Nurses

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As a critical component of health care delivery, the nursing profession should ideally mirror the diversity of the population it serves. However, current disparities in representation can lead to gaps in culturally competent care and understanding of diverse patient needs. A nursing staff that represents the population's diversity—including race, ethnicity, gender, disability, income, sexual orientation, and geographic origin—brings a variety of perspectives, which enhances the quality of care for an equally diverse patient population. Diverse nursing teams are better equipped to address health disparities and provide equitable health care services, as they can relate to a wider range of patient experiences and needs.

Moreover, a diverse workforce promotes a more inclusive and innovative work environment, fostering learning and growth among health care professionals. A diverse nursing workforce improves patient outcomes and has the potential to produce cost of care savings. In essence, diversity of the nursing workforce is not just a goal to be achieved for equality's sake; it is a strategic imperative for improving health care quality, patient satisfaction, community well-being, and the overall effectiveness of health services.<sup>1</sup>

Strong nursing workforce development pathways are essential to increasing the diversity of the nursing workforce and addressing the increasing rates of nurse retirement and the number of nurses leaving the profession.

### Why doesn't the nursing workforce reflect the diversity of our population?

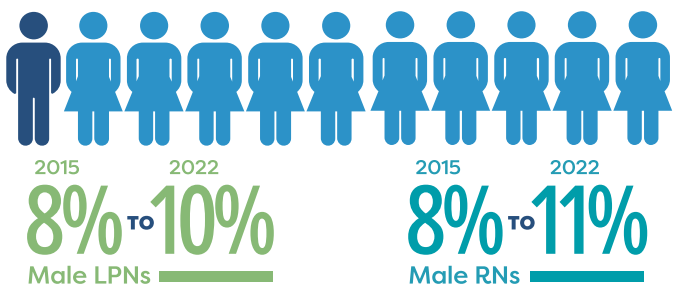
Disproportionate representation in the nursing workforce can be attributed to a multitude of factors. Historically, nursing has been perceived and marketed as a predominantly female profession, which has contributed to a gender imbalance. This stereotype, coupled with societal norms and gender roles, discourages many men from pursuing a career in nursing. Additionally, systemic barriers such as unequal access to education and economic constraints disproportionately affect people of color and can hinder access to nursing education. Additional challenges can include lack of awareness about nursing as a viable career path and limited availability of culturally relevant mentorship or role models in the field. Furthermore, implicit biases and discrimination within educational and professional settings can create unwelcoming environments for nursing students and professionals of color, leading to lower recruitment and retention rates. Addressing these issues requires a concerted effort to dismantle stereotypes, improve access to education, and foster inclusive environments in both academic and professional settings.

### In North Carolina



Source: North Carolina Board of Nursing. RN/LPN Ethnicity Statistics. <https://portal.ncbon.com/LicensureStatistics.aspx?ID=108> and RN/LPN Gender Statistics. <https://portal.ncbon.com/LicensureStatistics.aspx?ID=104> November 7, 2023

### Nationally, the proportion of RNs who are male has grown



Source: Smiley RA, et al. The 2022 National Nursing Workforce Survey. [https://www.journalofnursingregulation.com/article/S2155-8256\(23\)00047-9/fulltext](https://www.journalofnursingregulation.com/article/S2155-8256(23)00047-9/fulltext)

Graduation rates for nursing students of color increased from 2015 to 2019, however “the numbers indicate slow progression, yielding approximately 8% growth over four years. Similarly, data on enrollment and graduation rates of associate degree nursing programs indicate 8.6% growth over six years from 2012 to 2018.”<sup>2</sup> Similar rates are seen for nursing faculty, with “marginal growth of approximately 4% in diversity among all nursing faculty [ ] between 2007 and 2016.”<sup>2</sup>

*“Whether in a practice setting or academia, nurses repeatedly echoed the same experience of a presumption of incompetence and subsequent limitation and denial of opportunity. BIPOC nurses often described the feelings of being challenged and having their knowledge minimized based on the belief that they are less than and therefore cannot provide qualified care. This experience transcended races—Black, Latinx, Asian American, Pacific Islander. Nurses shared experiences of the perpetuation of this stereotype woven through undergraduate and graduate education and even post-licensure, while they are practicing.”*

- Summary Report Listening Sessions on Racism in Nursing from the American Nurses Association and the National Commission to Address Racism in Nursing. <https://www.nursingworld.org/-/49be5d/globalassets/practiceandpolicy/workforce/commission-to-address-racism/final-racism-in-nursing-listening-session-report-june-2021.pdf>

In 2023, the average age of LPNs in North Carolina was 47, while the average age for RNs was 46.

-NC Board of Nursing. *The Bulletin*. Fall 2023.  
[https://pub.marq.com/NCBONFall2023/#p12\\_ffdBBd-1](https://pub.marq.com/NCBONFall2023/#p12_ffdBBd-1)

In addition to a current lack of adequate diversity in the profession, the health care system is facing oncoming retirement of nurses, leading to a significant loss of experienced nurses at a time when there will be increased health care needs as the population ages. This scenario underscores the urgency of not only recruiting new nurses but also ensuring their retention and the transfer of invaluable knowledge from retiring nurses.

The Task Force on the Future of the Nursing Workforce has made one overarching recommendation related to developing future nurses.

### RECOMMENDATION #1

**Develop a strong and diverse nursing workforce that is representative of the communities served and is prepared to meet the growing health care needs of North Carolinians**

The task force recommends the following strategies to develop a strong and diverse nursing workforce that is representative of the communities it serves and is prepared to meet the growing health care needs of North Carolinians:

**Strategy 1:** Expand early pathways to develop a nursing workforce that is representative of the population of North Carolina

**Strategy 2:** Increase nursing program collaboration, sharing of best practices, and connections with employers

**Strategy 3:** Increase the number of North Carolinians graduating with nursing degrees by addressing faculty shortages

**Strategy 4:** Improve retention and graduation rates of nursing students by supporting economic and material needs and enhancing academic supports

**Strategy 5:** Enhance the preparation of nursing students through more inclusive educational environments and curriculum

### KEY RESOURCE NEEDS

Key resource needs to implement recommendations are highlighted through this report using the following icons.



**FINANCIAL  
RESOURCES**



**TOOLS AND  
NON-FINANCIAL  
RESOURCES**



**ADVOCACY  
OR PUBLIC  
AWARENESS**



## Strategy 1

Expand early pathways to develop a nursing workforce that is representative of the population of North Carolina

**Strategy 1.1** The North Carolina Nurses Association, North Carolina Future of Nursing Action Coalition, trade organizations representing employers of nurses, the North Carolina Department of Public Instruction, North Carolina Area Health Education Centers, the North Carolina Workforce Credentials Advisory Council, and health-related philanthropies in the state should collaborate to identify opportunities to partner with middle and high school counselors, career centers, and students to share information about health professional career paths—including the variety of pathways, degrees, and work settings for nursing.

### Desired Result

North Carolina's middle and high school students will have reliable and accurate information about careers in nursing, the educational pathways to those careers, financial resources for education, and the benefits of these careers to both individual economic stability and to the overall health of the state.

### Why does the task force recommend this strategy?

To meet North Carolina's nursing workforce needs, we must use a variety of strategies, beginning with identifying and educating young people interested in a career in health care, all the way to retention and career development strategies for established nurses. Interest in careers in health care, or a general interest in finding a career that helps people, can be identified early for many children. Understanding the variety of roles and educational pathways into nursing can be confusing, particularly for families without experience working in the field of health care. It is important that middle and high schoolers have access to adults in their educational space who can help them learn about educational and career opportunities in nursing, and the ways their secondary education may be able to prepare them for these careers. Many partners are called on for this recommendation due to their unique role or expertise in the nursing and educational spaces and the potential for existing and new resources they may be able to bring to this work.

### Context

Although there are no data indicating student interest specifically in nursing as a career option, a 2022 survey of high school and undergraduate students identified the number one intended career path as medicine or health-related fields:

- 34% said that health care or health-related issues were ones they are most interested in "impacting in [their] world"
- 27% said they expect to work in a medicine/health-related field in future
- 35% of women compared to only 17% of men were considering medicine/health-related fields<sup>3</sup>

Further, a 2022 report summarizing data on aptitude and interest in different career fields among high schoolers found that students have more aptitude for health sciences careers, including nursing, than interest in them:

- Students showed 1.8 times the aptitude for health sciences careers than interest in those careers.
- This gap was more pronounced for male students, who showed 2.2 times more aptitude for health science careers than interest, compared to female students, who showed a gap of 1.5 times.<sup>4</sup>

The gender gap displayed in responses to these surveys is an indicator of the disparity we see in the nursing workforce, which is over 90% female.<sup>5</sup>

### Spotlight on North Carolina

The North Carolina Healthcare Association (NCHA) is developing a workforce campaign designed to get teenagers interested in health care jobs. The "I Do Care" campaign will inform high school and middle school students about the variety of careers available at hospitals. A website will be part of this campaign and NCHA is working with hospital public relations officers to gather opportunities from across the state where teens can engage with their local hospital (e.g., teen volunteer programs, med camps, apprenticeships, etc.).

### KEY RESOURCE NEEDS



Responsible parties will need to identify strategies for educating guidance counselors and resources that guidance counselors can continue to refer to (e.g., database or repository of resources).



## CHAPTER 2 - PREPARING FUTURE NURSES

### Strategy 1

Expand early pathways to develop a nursing workforce that is representative of the population of North Carolina

**Strategy 1.2** Employers of nurses should work with local public school units to develop nurse training Career and Technical Education programs in local high schools or increase capacity of existing programs.

#### Desired Result

More North Carolina high schoolers will be able to explore careers in nursing and complete preparatory programs prior to entering a post-secondary nursing degree program.

#### Why does the task force recommend this strategy?

Nurse education programs at the high school level provide an opportunity to introduce students to careers in nursing as they are thinking about their future careers and post-secondary education plans. These programs can connect students to local employers and help them gain credentials as Certified Nursing Assistants (CNAs). Connections with employers and CNA credentials can be leveraged to explore opportunities for early employment and gain real-world experience in health care before or during enrollment in a nursing education program at the community college or university level.

#### Context

Local public school units (formerly called local education agencies) can offer a variety of Career and Technical Education (CTE) programs. The programs must follow the same rules as community colleges and proprietary schools offering similar courses of learning. CTE programs in health sciences must use a curriculum adapted from the North Carolina Division of Health Services Regulation. The North Carolina Department of Public Instruction (DPI) reviews high school programs yearly for adherence to standards. Funding for these programs is supported through federal Perkins Grants to the local level. Instructors for CTE programs must have a teaching license. This can present some challenges in recruiting teachers for CTE programs in nursing as the teaching licensure process can be lengthy and expensive.<sup>6</sup>

Over 2,000 North Carolina high school students earn their CNA credentials per year through CTE. To earn this credential, students complete the standard 40 hours of clinical experience and take the same exam as those from community college CNA programs.<sup>6</sup>

Employers interested in developing partnerships with local schools for CTE programs can contact the CTE Director or the CTE Advisory Board or Council of the local school system. According to state law, CTE Advisory Boards or Councils “serve local boards of education by identifying economic and workforce development trends related to the training and educational needs of the local community and advocating for strong, local career and technical education programs, including career pathway development that provides work-based learning opportunities for students and prepares students for post-secondary educational certifications and credentialing for high-demand careers.”<sup>7</sup>

#### In North Carolina, 2021-2022



**547,176** secondary career and technical education (CTE) participants

**39,058** (7%) were in health sciences with a **97%** Graduation Rate

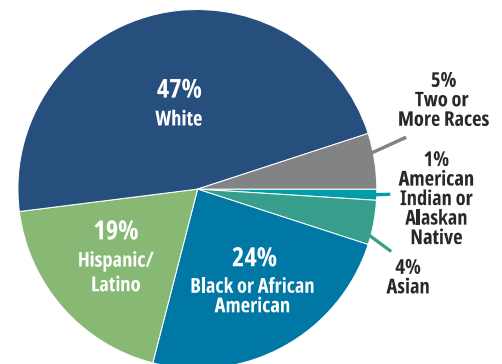
#### Students in North Carolina health sciences CTE in 2021-2022:

**33%** had economically disadvantaged families

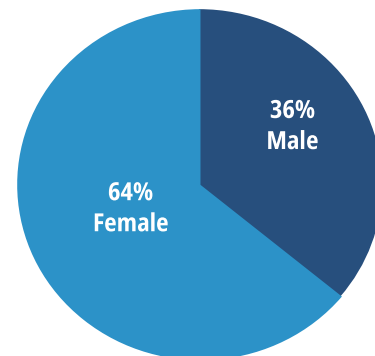
**7%** had a disability

**5%** were English learners

#### Race and Ethnicity



#### Gender



Source: Perkins Collaborative Resource Network. North Carolina State Enrollment Data. <https://cte.ed.gov/pcrn/profile/state/enrollment/2022/NC/participant/secondary/gender/allcareerclusters>



## North Carolina Spotlight - Current and Developing Programs

**Surry and Yadkin County Schools Partnership with Northern Regional Hospital** A two-year grant from Strada Education Network's Employer and Community College Partnership Challenge is helping to develop health care career pathways for students in Surry and Yadkin County schools. A Healthcare Career Liaison and Health Science Student Success Advisor will work in middle and high schools to increase awareness of career pathways and provide classroom and laboratory instruction. "Northern Regional Hospital will provide clinical instruction and supervision for students during rotations, provide opportunities for internships and other professional development activities, and contribute to funding the liaison position after the grant period ends." Students at nine middle schools will have access to classroom presentations, field trips to Northern Regional Hospital and Surry Community College, a health care career camp, career fairs, and hands-on experiences through simulations. Students at 10 high schools will receive similar programming, as well as job shadowing experiences at the hospital.

*Source: Surry Community College. Surry community college receives grant to strengthen employer partnership with Northern Regional Hospital and connect learners with opportunities. November 28, 2022. <https://surry.edu/news/surry-community-college-receives-grant-to-strengthen-employer-partnership-with-northern-regional-hospital-and-connect-learners-with-opportunities>*

### New Hanover Community Endowment

The New Hanover Community Endowment has provided a grant of over \$22 million to Cape Fear Community College, New Hanover County Schools, the University of North Carolina at Wilmington, and the Wilmington Chamber of Commerce. In part, the grant will help to develop a high school program for students interested in careers in health care. The funding will help to increase CTE enrollment in New Hanover schools by 40%. A key objective of this effort is to "significantly increase the number of students admitted into and graduating from nursing programs at Cape Fear Community College and the University of North Carolina Wilmington, with an emphasis on retaining graduates in the region."

*Source: University of North Carolina Wilmington. UNCW receives grant funding for groundbreaking healthcare workforce partnerships. December 18, 2023. <https://uncw.edu/news/2023/12/uncw-receives-grant-for-groundbreaking-healthcare-workforce-partnerships>*

### Bloomberg Grant for Durham and Charlotte schools

Durham Public Schools and Charlotte-Mecklenburg Schools have been awarded grants by Bloomberg Philanthropies to develop programs that "offer students robust academic programming, specialized health care classes, work-based learning at the partner health system and the opportunity to earn industry-valued credentials and certifications...." As part of this initiative, all health system partners have committed to providing job opportunities for students who successfully complete the graduation requirements of their respective programs." In Durham, the partnership is between Duke Health, Durham Technical Community College, and Durham Public Schools, with the program opening at the Durham Technical Community College campus in fall 2025 for 100 ninth-grade students. Students will be able to graduate with "one or more credentials required to fill positions such as certified nursing assistant...."

*Source: Bloomberg Philanthropies. Bloomberg Philanthropies launches first-of-its-kind innovative healthcare-focused high schools in 10 urban and rural communities across the country. January 17, 2024. <https://www.bloomberg.org/press/bloomberg-philanthropies-launches-first-of-its-kind-innovative-healthcare-focused-high-schools-in-10-urban-and-rural-communities-across-the-country/>; Hui TK. Durham and Charlotte get grants to create high schools focusing on healthcare jobs. News & Observer. January 17, 2024. <https://www.newsobserver.com/article284342429.html>*

### High School Program to Earn LPN Diploma

The North Carolina Board of Nursing (NCBON) is working with the North Carolina Community College System (NCCCS) to develop an LPN education program for high schoolers. The program will help high school students complete an LPN diploma and provide eligibility to begin working as an LPN after high school graduation. LPN curriculum approved by the NCBON for the NCCCS will be used for the program. One aim of the program is to give students with limited financial resources the ability to obtain an initial nursing license and create a pathway for LPNs to complete their RN degree while still working with the support of an employer. The program is under development and will be piloted in a rural county in the western region of North Carolina.

*Source: Personal communication with NCBON Chief Executive Officer, Crystal Tillman. March 27, 2024.*

## KEY RESOURCE NEEDS



- The Department of Public Instruction (DPI) can provide training on development of health science education programs, possibly through the Health Talent Alliance, to help educate employers on opportunities for supporting the initiation of CTE programs. Additional resources could allow prioritization of schools that serve a diverse and/or rural student population.
- The North Carolina Division of Health Service Regulation can examine where it can offer flexibility in regulations or enforcement to enable more nursing education partnerships in nursing facilities. Some nursing facilities lose the ability to be clinical sites due to enforcement actions, even if the enforcement concern is not related to clinical care.



- Trade associations for employers of nurses should help raise awareness of these types of programs among members.
- DPI and school districts with CTE programs in health science education should identify opportunities to raise awareness of these programs among high school teachers, administrators, counselors, and families.

### Strategy 1

Expand early pathways to develop a nursing workforce that is representative of the population of North Carolina

**Strategy 1.3** The North Carolina Future of Nursing Action Coalition should partner with myFutureNC, the North Carolina Association of Nursing Students, and the Health Occupations Students Association to develop a speakers bureau to partner with youth-focused organizations, including religious communities, community centers, and community-focused volunteer/philanthropic organizations (e.g., sorority/fraternity alumni organizations). The goal of this speakers bureau would be to provide information and guidance to middle and high school students about health professional careers in nursing. Speakers should receive training, key messages, and resources for students interested in learning more about nursing as a career.

#### Desired Result

More North Carolina middle and high school students will learn about and develop an interest in careers in nursing through connection with trusted leaders and adults in their community.

#### Why does the task force recommend this strategy?

Increasing interest in careers in nursing and improving the diversity of the workforce will require a variety of strategies. While some students may seek guidance from counselors in the school system or learn about opportunities through Career and Technical Education (CTE) programs, others may look for guidance from other trusted people in their community (e.g., church or civic group leaders and members). Connecting and partnering with community leaders and groups outside of educational settings can help to identify new venues through which to reach students. Those making connections and providing informational presentations should use standardized outreach materials that cover important general topics (e.g., different forms of licensure and educational pathways).

#### Context

##### MYFUTURENC

myFutureNC is a “statewide nonprofit organization focused on educational attainment and is the result of cross-sector collaboration between North Carolina leaders in education, business, and government.”<sup>8</sup> The organization supports several state collaboratives, as well as 15 regional collaboratives that “establish[] local goals, identify[] strategies and priorities to meet these goals, and work[] as partners of myFutureNC.”<sup>9</sup>

##### NORTH CAROLINA ASSOCIATION OF NURSING STUDENTS

The North Carolina Association of Nursing Students (NCANS) is the organization for pre-licensure nursing students in North Carolina that supports “nursing students in making the important transition from students to licensed nurses.”<sup>10</sup> Through its participation in the Breakthrough to Nursing initiative, NCANS seeks to enhance the nursing workforce through a focus on “recruitment and retention, minority recruitment, men in the profession, young students, non-traditional students, and mentoring and support of all enrolled in professional nursing programs.”<sup>11</sup>

##### HOSA FUTURE HEALTH PROFESSIONALS

HOSA Future Health Professionals is a career and technical student organization “for students who are or have been enrolled in a Health Science Education program or are interested in a healthcare career. The mission of HOSA is to empower Future Health Professionals to become leaders in the global health community through education, collaboration, and experience.”<sup>12</sup> HOSA Future Health Professionals has both middle and high school divisions with locally organized chapters.

#### KEY RESOURCE NEEDS



Funding will be needed for administration of a speakers bureau-style program and production of related materials.



Once developed, awareness of the program will need to be raised through community connections.



## Strategy 2

### Increase nursing program collaboration, sharing of best practices, and connections with employers

**Strategy 2.1** The Center on the Workforce for Health should convene a collaborative of North Carolina community college and university nursing programs to share academic best practices in addressing issues such as nurse faculty and student needs, pathway program support, and partnerships with local employers of nurses.

**Strategy 2.2** University and community college nursing programs should commit to actively participating in the collaborative recommended in Strategy 2.1 with the goal of learning and sharing best practices and lessons learned to support nursing student success.

#### Desired Result

North Carolina's nursing education programs will be meaningfully connected, allowing them to share lessons learned from successes and challenges in implementing strategies, programs, and partnerships intended to improve the educational environment and student experience.

#### Why does the task force recommend this strategy?

Different nursing education programs are often tackling similar challenges. There is not a dedicated convening for community college and university programs to share what they have learned from their efforts to implement strategies, programs, and partnerships to address topics such as faculty shortages, admissions, partnerships with employers, and economic or academic supports for students. A dedicated convener could help programs share what is working for them and learn about solutions that are working for others. This can help to address the cycle of "reinventing the wheel" that can occur as siloed groups work to address similar problems.

#### Context

North Carolina has 147 pre-licensure nursing education programs, including 37 Bachelor of Science in Nursing (BSN) programs, 61 Associate Degree in Nursing/Associate of Science Degree in Nursing (ADN/ASN) programs, and 49 Practical Nursing (PN) programs.<sup>13</sup> These programs are working to meet the challenges of nursing faculty shortages, creating more inclusive educational environments, supporting the needs of students to improve graduation rates, and developing partnerships with employers and other community partners.

#### Existing Collaborations and Resources to Build From Center on the Workforce for Health

The NC Center on the Workforce for Health is a new collaborative effort by NC AHEC, NCIOM, and the Sheps Center Program on Health Workforce Research and Policy. It aims to provide a forum for health employers, workers, educators, regulators, policymakers, and others throughout North Carolina to convene around health workforce issues, discuss challenges and opportunities, share best practices and lessons learned, identify potential solutions and metrics for success, and monitor progress toward addressing these challenges. Although the Center is still under development, nursing workforce has been identified as a priority area of study and action.

#### North Carolina Council of Higher Education in Nursing

The North Carolina Council of Higher Education in Nursing (NCCHEN) is a group of in-state universities and colleges with nursing programs. It seeks to improve the nursing profession by "advancing the quality of baccalaureate and graduate programs in nursing."<sup>14</sup> Representatives from participating programs meet a few times a year.

*"We have a special responsibility because we're putting out the future nurses, and frankly we have all the same challenges. It really doesn't matter how big your program is or how small it is, the challenges are very, very similar."*

- Dr. Marion Broome, former dean of Duke University's School of Nursing, 2019 NCCHEN spring meeting <https://www.uncg.edu/featured/coffee-and-collaboration-and-nursing-deans-throughout-the-region/>

#### North Carolina Associate Degree Nursing Council

The North Carolina Associate Degree Nursing Council "was formed to promote professionalism, education, and innovation in the field of health education practitioners in North Carolina."<sup>15</sup> It advocates for associate degree nursing education and practice by facilitating recruitment of nursing faculty, developing partnerships, and collaborating with organizations to meet community needs, among other efforts.

#### North Carolina Nurses Association - Nursing Education and Professional Development Council

The Nursing Education and Professional Development Council is a group within the North Carolina Nurses Association (NCNA) that is meant to "support both academic nursing educators and nursing professional development (NPD) practitioners.... and allow[s] nursing academicians and NPD practitioners to come together to learn more about each other's roles, help come up with creative solutions to the issues faced in nursing academia and in healthcare systems, and reinforce/reinvent efforts to best prepare nurses (new graduates and advanced practice nurses) for their roles at the bedside."<sup>16</sup>



## CHAPTER 2 - PREPARING FUTURE NURSES

### **North Carolina Board of Nursing**

The North Carolina Board of Nursing (NCBON) can play a role in facilitating conversations with nursing education programs and/or showcasing exemplars in best practice through their Annual Education Summit. The summit has featured presentations on some of the topics noted in this strategy (e.g., academic-practice partnerships, student nurses and the Americans with Disabilities Act, and best practices in assessing clinical competency). The NCBON intends to continue to provide offerings that speak to the needs of relevant parties including information around holistic admissions, open education resources, and academic progression models (e.g., Regionally Increasing Baccalaureate Nurses (RIBN) programs).<sup>13</sup>

### **Collaborative Activities**

The NCIOM Task Force on the Future of the Nursing Workforce considered many potential activities for the collaborative, including:

- Sharing best practices, such as implementation of success coaches to support students, supporting retired nurses in delivering skills-based education or tutoring, bolstering existing student support centers and programs, and launching peer-to-peer support programming.
- Identifying opportunities to streamline application processes across multiple schools of nursing.
- Identifying opportunities to strengthen and further disseminate pathway programs and educational progression programs to ensure availability throughout the state.
- Housing or supporting a clearinghouse of grant and other funding opportunities.
- Engaging in discussions with employers to learn about challenges for new graduates they hire and opportunities to improve preparation for the practice environment.
- Maintaining connections with statewide efforts to address nursing workforce needs through educational initiatives (e.g., Caregiving Workforce Strategic Leadership Council).

### **Collaboratives In Other States**

**Indiana** – The Council of Indiana Nursing Deans and Directors is a leadership group of nursing school deans and Chief Nursing Officers. Coordinated by Indiana Center for Nursing, this group collaborates on initiatives, policy, and legislative action related to nursing in Indiana. The council meets at least twice a year and seeks to promote “excellence in Indiana nursing education, and safety and quality of patient care by:

- increasing nursing education’s responsiveness to the health and healthcare needs of Indiana citizens
- sharing and promoting best practices in nursing education
- providing a forum for collaboration and meaningful discussion about nursing education.”

*Source: Indiana Center for Nursing. Education—Council of Indiana Nursing Deans and Directors (CINDD). <https://ic4n.org/strategic-initiatives/council-of-indiana-nursing-deans-and-directors/>*

**Colorado** – The Colorado Center for Nursing Excellence convenes the Alliance for Clinical Education, a collaborative of representatives from health care organizations, educational institutions, and regulatory agencies in the state. The group “meets quarterly as a forum to share ideas, information and make recommendations surrounding best practices, community standards, and regulatory compliance, in an effort to provide optimum clinical student learning experiences.”

*Source: Colorado Center for Nursing Excellence. Alliance for Clinical Education (ACE). <https://www.coloradonursingcenter.org/alliance-for-clinical-education/>*

### **KEY RESOURCE NEEDS**



The North Carolina General Assembly, health care philanthropies, and major employers of nurses can identify funding resources to support and sustain the administrative needs of the group recommended in this strategy.



### Strategy 3

#### Increase the number of North Carolinians graduating with nursing degrees by addressing faculty shortages

**Strategy 3.1** Employers and educators of nurses, in partnership with the North Carolina Area Health Education Centers and the NC Health Talent Alliance, should collaborate to develop plans to align the demand for nurses with the ability of local institutions to educate nurses. These collaborations should identify shared investments and shared strategies to increase numbers of faculty to support education of nurses and increase graduation rates.

#### Desired Result

There will be a reduction in nurse faculty shortages with increased opportunities for hybrid roles in academic and practice settings.

#### Why does the task force recommend this strategy?

With an increased demand for health care for a growing and aging population, building capacity to educate the next generation of nurses is essential.<sup>17</sup> According to the 2022 National Nursing Workforce Survey, the median age of RNs and LPNs is 46 and 47 years, respectively, and more than one-quarter of nurses in the survey report a plan to leave nursing or retire within the next five years.<sup>18</sup> In North Carolina, projections from the Program on Health Workforce Research and Policy at the Cecil G. Sheps Center for Health Services Research estimate a gap in the supply of RNs at over 12,000 positions by 2033.<sup>19</sup> The largest shortage is projected to occur in nursing home, extended care, and assisted living facilities, which are essential to meeting the needs of older adults. These long-term services settings also employ the greatest number of LPNs in the state, and projections forecast a nearly 50% shortage of LPNs within the decade. To fill the growing gaps in the nursing workforce, we will need to simultaneously work to retain current nurses and educate more new nurses. However, increasing nursing program enrollment will first require serious efforts to address the nursing faculty shortage. Partnerships with employers of nurses can help to create more opportunities for hybrid roles in practice and academic settings to increase interest in serving as nursing faculty.

#### Related Recommendations from Other Groups

**North Carolina Caregiving Workforce Strategic Leadership Council Initiative #2:** Enhance and invest in clinical partnerships - AHEC should secure additional funding to support the expansion of the existing NC AHEC Nursing Clinical Instructor Partner (CIP) program. Dedicated funding is essential for supporting new partnerships, training nurses to become faculty, marketing the program, and identifying additional stakeholders to participate in the program.

<https://www.ncdhs.gov/investing-north-carolinas-caregiving-workforce-recommendations-strengthen-north-carolinas-nursing/download?attachment>

#### Context

The North Carolina Area Health Education Centers (NC AHEC) is a statewide initiative to address health care professional workforce issues. NC AHEC consists of nine regional AHECs.<sup>20</sup> The mission of NC AHEC is to provide educational support, activities, and services to recruit, train, and retain health care professionals within the state. A critical focus has been supporting primary care health care professionals in rural communities. Through NC AHEC programming, health care providers within the state receive affordable training and continuing education to stay informed on emerging technologies, best practices, and the latest advancements in research. The total number of NC AHEC participants trained annually is over 215,000.

The NC Health Talent Alliance is an innovative partnership between the NC Chamber Foundation and the North Carolina Center on the Workforce for Health to address the statewide health care professional shortage.<sup>21</sup> The aim of the NC Health Talent Alliance is to eliminate this shortage by developing a sustainable talent pipeline through regional collaborations. Through use of the Talent Pipeline Management (TPM) approach, the Alliance manages employer-led initiatives to identify gaps in training availability, create systems of support to help individuals join the health care workforce, and organize public and private partnerships to recruit and retain local talent. Next steps by the NC Chamber Foundation and the NC Center on the Workforce for Health include launching phase-one implementation through coalition-building, training employers on the TPM approach, and further supporting this talent pipeline framework.

#### Nursing School Admissions

In the 2020–2021 academic year, 15,055 applicants were qualified to attend pre-licensure nursing programs in North Carolina.<sup>22</sup> Among the applicant pool, 9,048 (60%) were admitted to nursing programs, and just 7,763 (51%) of applicants enrolled. For every 100 additional nursing enrollees at a University of North Carolina (UNC) system institution, 86 become new graduate nurses.<sup>23</sup> At a North Carolina Community College System institution, for every 100 additional enrollees, 56 become new graduate nurses based on historical attrition data.<sup>23</sup>

A limitation to the number of students admitted to nursing education programs is the shortage of nursing faculty. In the 2022–2023 academic year, there were 1,041 full-time faculty, 446 part-time faculty, and 934 adjunct clinical faculty.<sup>13</sup> At that time, the total number of faculty vacancies across nursing education programs for both full and part-time positions was 273 positions, a decrease of 31 vacancies compared to the prior year.<sup>13</sup>



*"I normally work Monday through Friday with my teaching job. We all know how poorly teachers are paid... I have my highest degree but am getting paid the least... something needs to change. I am scheduled to work every Saturday until December to make up for the salary loss. Yes, I still want to work bedside, but I am actually only required to work two shifts a month. I have to work over to make bills."*

*-North Carolina nurse faculty member*

### **Contributors to the Nursing Faculty Shortage**

Significant salary disparities between clinical nursing and academic positions have substantially contributed to the nursing faculty shortage.<sup>23</sup> Average faculty salaries are significantly less than clinical practice salaries, with master's level nurses earning an average of \$57,454 in the academic setting compared to more than \$100,000 in practice.<sup>24</sup>

Increasing rates of retirement among the current nursing faculty workforce also contribute to the shortage. Currently, the average age of a doctoral-prepared professor is 62.5 years, whereas associate professors and assistant professors average 56.7 years and 50.6 years, respectively.<sup>25</sup> A looming "brain drain" is imminent, as up to one-third of the current nursing faculty workforce in baccalaureate and graduate programs could retire by 2025.<sup>26</sup>

Academic-practice partnerships serve as a potential solution to challenges in recruiting and retaining nursing faculty. These dual-role joint appointments help bridge academic learning into clinical practice.<sup>27</sup>

### **Examples of Academic-Practice Partnerships**

The **NC AHEC Nursing Clinical Instructor Partner (CIP) program** aims to increase the number of nursing faculty by bridging together academic nursing programs across North Carolina with clinical practice organizations. As an innovative clinical education model, the CIP program prepares qualified RNs to serve as clinical instructors to students without leaving their clinical nursing role. Through a combination of online modules, live webinars, and one shadowing experience in a peer cohort, the CIP program provides essential knowledge and skills to be a clinical instructor and a supportive network to new educators. The CIP program has also already been approved by the North Carolina Board of Nursing (NCBON) to meet the 45-hour teaching and learning requirement for new faculty members.

*Source: NC AHEC. Nursing Clinical Instructor Partner Program. <https://www.ncahec.net/nursing-clinical-instructor-partner-program/>*

The **UNC-Chapel Hill School of Nursing and UNC Health** have developed a program for nurses on hospital units to support the education of nursing students given one day per week. They have piloted this approach and are growing it for the future. The program has had positive outcomes, giving practicing nurses an opportunity to serve in a new role, and provides clinical faculty for the nursing school.

*Source: Personal communication with task force member. March 29, 2024*

**Grand Valley State University Kirkhof College of Nursing (KCON)** in Michigan was awarded a Health Resources and Services Administration (HRSA) Advancing Nursing Education Workforce grant and a HRSA Nursing Workforce Diversity grant in 2022. This funding provided financial support to 29 McLaren HealthCare (MHC) nurses to complete the BSN-to-DNP program at KCON, funded four nurses as the inaugural cohort for the Interprofessional Healthcare Informatics Certificate, helped with development of the Preceptor Resources Network, enhanced KCON's Holistic Admission process, and aided the development of a student retention plan to address social determinants of health and education.

*Source: American Association of Colleges of Nursing. Academic-Practice Partnership Exemplars. <https://www.aacnnursing.org/our-initiatives/education-practice/academic-practice-partnerships/academic-practice-partnership-exemplars>*



### Strategy 3

#### Increase the number of North Carolinians graduating with nursing degrees by addressing faculty shortages

**Strategy 3.2** The North Carolina General Assembly should leverage the information and plans developed through Strategy 3.1 to ensure there is an adequate number of nursing faculty in nursing programs and increase opportunities for innovative training solutions by:

- a) Partnering with UNC system, community college system, and North Carolina private educational institution leaders to:
  - i. Increase salaries for nursing faculty and educators.
  - ii. Identify and increase incentives for nursing students at the graduate level to attract and educate individuals for nursing faculty positions.
  - iii. Identify and increase incentives for educators/preceptors in clinical settings to attract and train individuals for these positions.
  - iv. Allocate funds to support nursing schools' capacity to integrate evidence-based high-quality simulation experiences for nursing students.
- b) Identifying and increasing incentives for institutions that develop, maintain, and financially aid academic and clinical partnerships in supporting nurse preceptors and the education of undergraduate and graduate nursing students.

#### Desired Result

Continued legislative attention and resources dedicated to addressing the key barriers to increasing enrollment in nursing education programs.

#### Why does the task force recommend this strategy?

The North Carolina General Assembly's (NCGA) continued dedication to increasing enrollment in nursing education programs is essential to addressing the growing shortage of nurses that threatens the state's health care system's capacity to provide high-quality care. Investing in nursing education, along with attention to retention of the current nursing workforce, will help to ensure the long-term sustainability of health care services across North Carolina. By fostering a larger, well-educated nursing workforce, the state can better meet the health care demands of its growing population, improve patient outcomes, and support the overall health and well-being of its communities.

#### Context

##### SALARIES AND INFRASTRUCTURE IN THE STATE BUDGET

As previously mentioned in this report, there are three primary challenges to increasing enrollment in nursing education programs: 1) recruiting and retaining nursing faculty, 2) providing clinical placements with qualified preceptors, and 3) building new educational spaces or renovating existing ones.<sup>23</sup> These findings were also outlined in a 2023 report commissioned by the NCGA to identify strategies to increase graduation rates from nursing education programs. The NCGA's 2023–2024 state budget reflects investment in nursing education, addressing challenges 1 and 3 to increasing student enrollment. The budget allots 10% raises in starting salaries for nursing faculty; other nursing faculty may receive increases in pay of up to 15%.<sup>28,29</sup> There is also allocation of \$87.9 million in funding for the renovation of Carrington Hall at the University of North Carolina at Chapel Hill's School of Nursing to update space that has been unusable due to environmental safety issues and expand simulation and clinical learning spaces.<sup>30</sup> Other investments to support nursing programs across the state and their ability to have sufficient space and facilities and infrastructure are needed to help expand the ability of programs to integrate high-fidelity simulation experiences.

#### Related Recommendations from Other Groups

**North Carolina Caregiving Workforce Strategic Leadership Council Initiative #5:** Increase the number and availability of nurse and faculty loan repayment programs and stipends - North Carolina currently maintains several loan repayment programs relevant to nursing students. This includes the state-funded Nurse Education Scholarship Loan Program (NESLP), Nurse Educators of Tomorrow (NET), and Nurse Scholars Program (NSP/MNSP), in addition to the Health Resources and Services Administration-funded State Loan Repayment Program (SLRP). Loan repayment programs can incentivize and support those unable to dedicate full energy or resources to a traditional education period. Understanding existing programs' utilization, capacity and funding, current advertising strategies, program barriers and constraints, eligibility requirements, and demographic breakdown would give a holistic viewpoint into an important lever for equity and evolve the programs to match the needs of intended users.

**Initiative #6:** Readjust nurse faculty salaries and schedules - The state can retain and attract more faculty to the profession to support the education of future nurses through competitive salaries and flexible schedules, such as evening classes. A compensation study is also needed to understand the gap between clinical and faculty positions. Once the gaps are identified by region, funding could be determined either through setting minimums and/or creating blended funding opportunities for public and private institutions. In addition to raising pay, as a part of receiving funding, institutions will be required to review and report on availability of demand for evening and non-traditional scheduling for classes. Furthermore, consideration for compensation should be extended to adjunct faculty and preceptors who often fill critical gaps within nursing education systems.

<https://www.ncdhhs.gov/investing-north-carolina-caregiving-workforce-recommendations-strengthen-north-carolinas-nursing/download?attachment>

## CHAPTER 2 - PREPARING FUTURE NURSES

### THE ROLE OF PRECEPTORS

Preceptors supervise, guide, and assist with the learning process alongside faculty members. Nurse preceptors are nurses with varying levels of nursing experience, education, and preceptor training. These preceptors work in a variety of clinical settings and hold expertise in specialty areas, such as medical-surgical care, primary care, maternal health, pediatric health, and psychiatric and mental health.

Preceptorships require matching students' needs and abilities with a qualified and trained nurse to facilitate hands-on learning and enhance student clinical experiences, and these experiences are essential for nursing students to hone their clinical judgement and critical thinking skills. Preceptors provide nursing students the opportunity to apply knowledge acquired in academic and classroom settings to the clinical environment. Nurses in a faculty member role serve as the liaison between student and preceptor, "by planning, counseling, and evaluating the preceptorship throughout its entirety".<sup>23</sup>

As previously mentioned in Strategy 3.1, NC AHEC's Clinical Instructor Partner (CIP) program serves as an example of an innovative approach to increasing the number of preceptors available to teach students across the state. Supporting scale-up efforts through additional funding is essential to promoting equitable distribution of this program across North Carolina. NC AHEC's Clinical Site Development Program aims to increase the number of nursing students assigned to new clinical training sites in rural, long-term care, and critical care settings.<sup>31</sup> To date, 59 schools have received clinical site development funds to support 490 clinical sites. This existing program serves as scaffolding to expand the capacity of preceptor training programs and clinical education placements for students at health care institutions.

### FINANCIAL SUPPORT INITIATIVES

In North Carolina, the **NC Teaching Scholars Program** can serve as a model for developing a state-based Nurse Faculty Loan Program. North Carolina previously supported a Nurse Scholars Program and Nursing Faculty Fellows loan replacement for service scholarship, but these initiatives ended in the late 2000s after economic downturns and a temporary slowdown in nursing demand. Re-invigorating programs aimed at incentivizing graduate nursing students can help support future nursing faculty and educators.

Nursing education programs are often constrained by limits to the number of clinical sites and available preceptors. Prospective enrollment growth is contingent on developing and training nurses to precept the next generation. Community partners—often health systems—are relied upon to provide clinical sites and preceptors.<sup>23</sup> Some health systems require nursing schools to provide preceptors for learners, especially in advanced practice programs. Whereas medical education has a sustainable funding model through the General Medical Education program to support preceptors, nursing is often reliant on grants or other one-time funding or these costs are passed on to students. Financially supporting preceptors helps attract nurses to these roles. **East Carolina University** is one of the few public institutions paying preceptors, with rates of \$450 per semester.<sup>23</sup> For some nursing education programs within private institutions, preceptor rates can range from \$600 to \$1,200 per semester.<sup>23</sup>

Tax incentives provide another novel approach to supporting preceptors. In **Georgia**, advanced practice registered nurses (APRNs), physicians, and physician assistants who serve as preceptors can earn tax credits, with APRNs eligible to earn over \$6,000 in credits per year.<sup>32</sup> In **Colorado**, APRNs, RNs, psychiatric nurse specialists, and other providers that facilitate preceptorships in rural or frontier areas of the state are offered \$1,000 of income tax credit. With shortages in clinical placements focused on women's health, behavioral health, and pediatrics, attracting nurses to precepting in these specialties is essential to student clinical training.

### SIMULATION

Simulation centers in nursing education can be immersive learning environments where students can practice and refine their clinical and decision-making skills without risk to real patients. These learning labs use high-fidelity manikins, trained actors (standardized patients), interactive screen-based programs, and virtual reality technology to replicate real-world health care settings, allowing students to experience a wide range of clinical scenarios. This hands-on approach helps to build critically important skills in many areas including, but not limited to: psychomotor procedures, critical thinking, communication, conflict resolution, team building, confronting racism and bias, and leadership development.<sup>33,34</sup> Experiential training that incorporates simulation modalities improves patient care skills prior to nurses entering clinical practice, reduces medical errors, and enhances patient safety. Interprofessional simulation training incorporating the Interprofessional Education Collaborative (IPEC) Core Competencies for Interprofessional Collaborative Practice can be implemented with practicing clinicians for just in time training on clinical units and has been demonstrated to be highly effective in improving patient care outcomes.<sup>35,36</sup>

The NCBON allows up to 50% of clinical training to be replaced by evidence-based simulation if these experiences are implemented with appropriate resources and in accordance with the Healthcare Simulation Standards of Best Practice (HSSOBP).<sup>37</sup> Because of infrastructure constraints, training provided through simulation labs is often limited by size and numbers of students that can be feasibly accommodated in these spaces. To support enrollment growth and training within simulation labs, these spaces would require expansion of the physical lab space, more updated equipment, resources to support standardized patients, robust faculty development initiatives, and additional support personnel, such as simulation facilitators and technicians. Collaborative partnerships could be developed between various educational institutions (community colleges and universities) and health care systems that would allow for sharing of the simulation lab resources. Funding to support simulation labs is essential to the education and skills training of nursing students and can offset the number of clinical sites, instructors, and preceptors needed.

In the **Florida College System**, the **Linking Industry to Nursing Education (LINE) Fund** provides matched funding to participating agencies that partner with health care institutions in the state.<sup>38</sup> These dollar-to-dollar funding matches are used to award scholarships to students for tuition, recruit faculty, and support simulation centers to advance nursing education.





## Strategy 4

### Improve retention and graduation rates of nursing students by supporting economic and material needs and enhancing academic supports

**Strategy 4.1** University and community college nursing programs should develop connections to NCCARE360 and other resources specific to addressing nursing student material supports and needs.

#### Desired Result

Nursing students will have the material supports they need to maintain good health and reduce stress to successfully graduate, thereby increasing graduation rates from nursing education programs.

#### Why does the task force recommend this strategy?

Nursing students grappling with inadequate financial and material supports such as insufficient access to food, stable housing, and affordable child care face significant barriers to their academic success and mental well-being. These challenges can lead to increased stress, decreased focus on studies, and higher dropout rates. The lack of essential supports not only affects students' ability to concentrate and perform academically but also undermines their capacity to complete their education, thereby impacting graduation rates and contributing to the broader issue of nursing shortages in the health care workforce. Nursing education programs can capitalize on existing services in North Carolina to help connect students to needed resources.

#### Related Recommendations from Other Groups

**North Carolina Caregiving Workforce Strategic Leadership Council Initiative #4:** Invest in social resources and NCCARE360 expansion - To support nursing students both at community colleges and 4-year institutions, additional investment is needed for social services such as transportation, child care, food security, and housing. The state should invest in the expansion of unmet social needs. In addition, to deliver these services in a more streamlined and effective manner, the state should invest in a tool such as NCCARE360, which is the nation's first statewide coordinated care network that connects individuals to local services and resources through a shared technology platform. This closed loop referral system tracks the outcome of that referral and connection to resources.

<https://www.ncdhhs.gov/investing-north-carolinas-caregiving-workforce-recommendations-strengthen-north-carolinas-nursing/download?attachment>

#### Context

##### FINANCIAL NEEDS IMPACT GRADUATION RATES

Financial circumstances can be a barrier for students in North Carolina nursing education programs. Financial barriers to remaining in programs range from inadequate tuition support to financial commitments related to family and household needs. For many students pursuing their degree, working full-time is a necessity to meet these various financial obligations. Working long hours while enrolled in an intensive nursing program creates

challenges to balancing both academic and employment responsibilities. Students from underrepresented racial and ethnic minority groups have cited lack of financial support as a major barrier to not only retention and graduation in nursing education programs, but also initial enrollment.<sup>39</sup> Students working while pursuing their degrees have higher drop-out rates compared to those who are not working.

Child care, housing, transportation, utilities, groceries, and educational equipment needs place significant strains on students who are in nursing education programs full time. Nursing students need a sustainable and comprehensive safety net with early access to financial support.

#### ADDRESSING NEEDS

Nursing education programs have addressed financial factors through pilot projects that paid direct stipends to students, from \$200 per month to \$3,000 per semester. Other programs provide scholarship options for students, while some support material needs through the purchase of laptop computers and required course textbooks. Examples of efforts to address needs in North Carolina's nursing programs include:

- University of North Carolina at Chapel Hill's School of Nursing hosts a food pantry and student-led clinical uniform donation drive.
- University of North Carolina at Wilmington has the Student Success Center for students interested in health and human services careers. Assistance is provided to prospective and current nursing students. Admissions counseling, academic advising, scholarship support, and career planning are offered by the Student Success Center.<sup>40</sup>

Nursing students in community college and university settings can use accessibility resources as well as counseling and psychological services through their institutions. These services meet some needs of students, but not all. To improve retention and graduation rates, students of nursing education programs require robust academic support, mentoring, and success coaching as well as resources dedicated to addressing issues such as food security, housing stability, child care services, and financial assistance. NCCARE360 is a resource platform that was developed for health care professionals and social service organizations to connect North Carolinians with local community resources needed to maintain well-being and promote healthy living. It also serves as a web-based resource and referral platform for North Carolinians struggling with food insecurity, housing instability, transportation, and interpersonal safety needs. Currently, all 100 counties in North Carolina have been activated in NCCARE360, and over 2,800 organizations and over 49,000 users have been onboarded.<sup>41</sup>

#### KEY RESOURCE NEEDS



An investment of around \$122,500 per year would allow for a pilot program with Unite Us to provide resource coordination services tailored to the needs of nursing students. This investment could be made by the North Carolina General Assembly or a health care philanthropy.

### Strategy 4

#### Improve retention and graduation rates of nursing students by supporting economic and material needs and enhancing academic supports

**Strategy 4.2** North Carolina’s community college and university nursing programs, employers of nurses, and state trade associations should partner to develop more opportunities for immersive experiences or internships in nursing during the learning process that provide financial compensation for participating students.

#### Desired Result

More students with financial need will be able to access paid employment that contributes to their successful completion of nursing school and provides important experiences in health care settings.

#### Why does the task force recommend this strategy?

Providing paid internship or employment opportunities to nursing students—especially those needing to work during their studies—enables students to gain valuable hands-on experience in their field, enhancing their clinical skills and professional readiness while also alleviating financial pressures that can distract from academic and clinical training. Such opportunities can significantly improve students’ academic success and retention rates by reducing the need to seek unrelated part-time work, thus allowing them to focus more on their studies and clinical experiences. This approach supports a more seamless transition into the nursing workforce, addressing the critical demand for well-prepared nursing professionals.

#### Context

**Internships** are focused, hands-on learning experiences. For nursing students, these opportunities are essential to developing clinical judgment and learning the roles and responsibilities of a nurse. Two nursing internship examples come from the Mayo Clinic:

- The Summer III Student Nurse Internship is a 10-week full-time paid program that is skills-based. Junior nursing students at Mayo Clinic’s campus in Rochester, Minnesota, are provided with the opportunity to gain clinical experience while working alongside nurses in a variety of settings. The Rochester, MN, campus is home to 60 different specialties, two hospitals, 10 intensive care units, and approximately 130 operating rooms.
- In Wisconsin, the Mayo Clinic Health System Nurse Internship Programs also serve as paid full-time clinical opportunities for nursing students. Lasting 11 weeks, these programs are skills-based and focus on students gaining clinical experience by working alongside nurses.<sup>42</sup>

**Externships** are clinical programs where nursing students work in a health care setting under the supervision of an experienced nurse. Externships typically occur toward the end of a nursing program, offering students the opportunity to enhance their competencies and prepare for their future roles as nurses. In North Carolina, UNC Health offers a 10-week program for rising senior ADN and BSN nursing students.<sup>43</sup> The Student Nurse Externship provides students with an opportunity to work with a preceptor to practice physical assessments and engage in hands-on learning. Nurse Externship Units include emergency care, intensive care, step-down, and acute-care units, as well as psychiatric and mental health care, women’s health, and pediatric care.

Nursing **apprenticeships** have been described as the “earn while you learn” model. Nursing students in both practical and registered nurse programs can start their careers working in various health care facilities while simultaneously completing their respective nursing education programs.

#### Example from North Carolina

In 2020, Davidson-Davie Community College partnered with Atrium Health Wake Forest Baptist to develop and launch a nursing apprenticeship program. Staffing shortages at Lexington Medical Center (Davidson County) and Davie Medical Center (Davie County) prompted development of the apprenticeship program. As of fall 2023, the program had admitted 11 students. Five students graduated with their RN license, with four earning employments in the Atrium Health Wake Forest Baptist System. The program anticipates seven students to be admitted to the next fall cohort of apprenticeships.

Source: EdNC. Case study: A community college and health care system partnered to launch the first registered nursing apprenticeship program in North Carolina. <https://www.ednc.org/case-study-a-community-college-and-health-care-system-partnered-to-launch-the-first-registered-nursing-apprenticeship-program-in-north-carolina/>

#### KEY RESOURCE NEEDS



Financial support will be needed to sustain the administration and staffing of these programs.



The NC Board of Nursing should be consulted as a resource in the interpretation of rules and knowledge of how others have successfully implemented internship programs.



### Strategy 4

#### Improve retention and graduation rates of nursing students by supporting economic and material needs and enhancing academic supports

**Strategy 4.3** The North Carolina General Assembly should allocate resources for university and community college nursing programs to “provide nursing students with better access to counseling and tutoring, additional faculty to provide remediation services and sessions, and academic services to develop math, writing skills, and test taking skills would likely lead to increase retention”.\*

\*University of North Carolina System and North Carolina Community College System. *Recommendations on Increasing Nursing Graduates: In Response to SL 2022-74 (HB 103), Section 8.3.* <https://nciom.org/wp-content/uploads/2022/11/UNC-System-Nursing-Report-Section.pdf>

#### Desired Result

Graduation rates for nursing students will improve as a result of more students having access to academic support services.

#### Why does the task force recommend this strategy?

The second most common reason for nursing program attrition in North Carolina is “academic issues/nursing course failure.”<sup>23</sup> Access to services that focus on developing academic skills is crucial to helping more students be successful in their program of study and to increase the number of nurses practicing in North Carolina. Services targeting pre-nursing students may also be beneficial, as “pre-nursing students must successfully complete a series of prerequisite science courses before gaining admission into a nursing program.... [and] Students must pass these courses in the first attempt to increase their chances of admission to a nursing program and to avoid additional tuition costs because they must retake the course”.<sup>23</sup> Test-taking skills are fundamental to successfully navigating licensing examinations, such as the NCLEX-RN, which is known for its challenging and comprehensive format. Enhancing these skills not only improves students’ academic performance but also prepares them for the rigors of professional practice, ensuring they are competent, confident, and capable of delivering high-quality health care services.

#### Related Recommendations from Other Groups

**North Carolina Caregiving Workforce Strategic Leadership Council Initiative #1:** Establish academic coaches for community college students. The Departments [of Commerce and Health and Human Services] can create a network of North Carolina nurses to serve as coaches to mentor community college students over the course of one to two years, providing needed academic support and mentoring. Community colleges will identify at-risk students early on and employ support strategies including tutoring, instruction on study and test taking skills, time management, and work/life balance. Coaches will serve as a resource and tailor support strategies specific to their student. Coaches will guide nursing students throughout their journey to graduation as well as act as a collaborator with faculty on academic performance.

<https://www.ncdhhs.gov/investing-north-carolinas-caregiving-workforce-recommendations-strengthen-north-carolinas-nursing/download?attachment>

#### Context

A key strategy of a report commissioned by the North Carolina General Assembly to understand how the state can graduate more nurses focuses on the retention of students across nursing education programs. Efforts to improve retention include increased access to counseling services and tutoring as well as academic services to support math and writing skills and test-taking abilities.<sup>23</sup>

Contributing factors that have improved student success and retention include academic mentoring and support and student success programs.<sup>44</sup> Mentorship can be a critical component to success in nursing education and comes in many forms.

#### North Carolina Spotlight – Nursing Student Retention

“**Six rural nursing programs** initiated a pilot program to improve student retention and student outcomes. The program identifies at-risk students early in their program of study and implements strategies to support the student including individual and group tutoring, instruction on study and test taking skills, time management, and work/life balance. A success coach mentors students throughout their program of study, tailoring services to meet the student needs. The coach collaborates with faculty and acts as the first point of contact for concerns about student performance issues. The success coach serves as a subject matter expert in program curriculum process and tracks metrics relevant to student progression. This coaching process provides a trusting environment where students can share their thoughts, aspirations, concerns, and interests. In preliminary reports, success coaching dedicated to nursing programs increased retention. Similar programs scaled throughout the Systems would also have a likelihood of success.”

-The University of North Carolina System and North Carolina Community College System. *Recommendations on Increasing Nursing Graduates: In Response to SL 2022-74 (HB 103), Section 8.3.* January 19, 2023. <https://nciom.org/wp-content/uploads/2022/11/UNC-System-Nursing-Report-Section.pdf>

The **UNC-Chapel Hill School of Nursing** has provided academic coaches for all pre-licensure students. This involves devoting a portion of workload for three faculty to academic coaching. This has led to higher graduation rates and NCLEX pass rates.

**Student success programs** have also been implemented to improve academic success. One example is the individualized pathway programs that target students at higher risk for attrition.<sup>44</sup> Success coaches and/or academic coaches have also been noted as improving outcomes. Coaches mentor and support students throughout their program of study, tailoring services to meet academic needs, such as remediation and skill-building, for example having course-specific success coaches for more difficult courses with higher rates of attrition.<sup>45</sup> Coaches work in collaboration with faculty and serve as the initial contact person for concerns about student performance issues.

Similar to success coaches, **retention coaches** are responsible for supporting students by helping with building a network, strengthening test-taking skills, and providing remediation. At the **University of Texas at El Paso**, four coaches were hired to provide both group and one-on-one academic counseling.<sup>45</sup> Other nursing education programs have focused on providing tutoring services to improve study skills and academic outcomes. One example of this is hiring practicing nurse experts to tutor students in specialty-area nursing courses, such as maternal-child health, medical-surgical nursing, and psychiatric and mental health.<sup>46</sup>



## Strategy 5

### Enhance the preparation of nursing students through more inclusive educational environments and curriculum

**Strategy 5.1** The North Carolina General Assembly should commit to a data-driven approach to prioritizing investments in institutions that have a proven record of admitting, retaining, and graduating a diverse cohort of nurses that serve the communities with the highest health care nursing workforce needs.

#### Desired Result

Areas of the state and specialties with the highest nursing workforce needs will see a reduction in the gap between demand and supply of nurses.

#### Why does the task force recommend this strategy

Focusing limited state financial resources on areas and specialties most in need of nursing workforce can help promote equitable access to quality health care services for all North Carolinians. Regions and practice settings with acute nursing shortages often face higher patient-to-nurse ratios, which can lead to increased workloads and stress levels among existing staff and potentially compromise patient care quality. By prioritizing support for nursing programs that graduate nurses who serve in these areas, the state can help improve health outcomes, reduce wait times for medical services, and enhance overall patient satisfaction. Additionally, investing in nursing education, training, and recruitment in underserved areas not only helps with immediate staffing needs but also contributes to the long-term sustainability of health care systems in these regions. Such targeted investments can also stimulate local economies by creating jobs and supporting ancillary services. Ultimately, focusing resources on areas and specialties most in need helps to build a resilient, responsive, and equitable health care system that can meet the challenges of today and the future.

#### Context

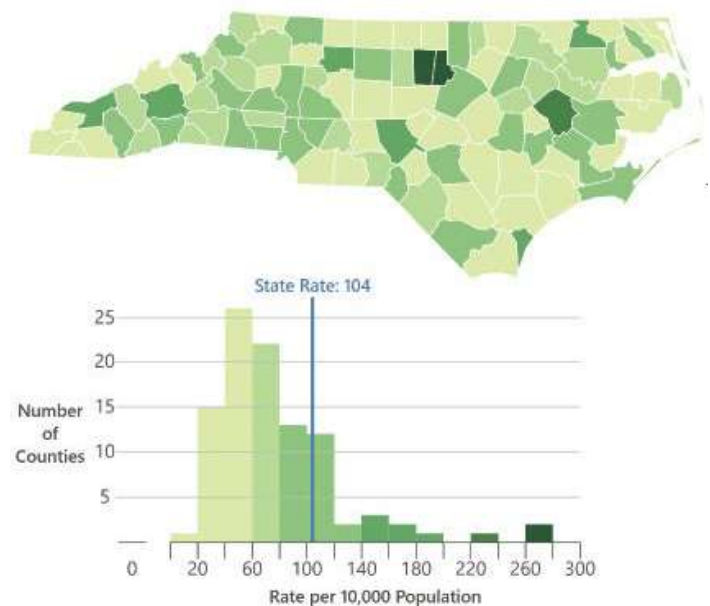
North Carolina is home to a uniquely robust health workforce data system through the Program on Health Workforce Research and Policy at the Cecil G. Sheps Center for Health Services Research. This program's website hosts an interactive data visualization of health care workforce in the state, which details provider-to-population ratios in each county for RNs, LPNs, and many other licensed health care providers. Figure 7 shows an example of this data visualization, which can highlight counties of the state with significantly low or high ratios.<sup>47</sup>

These data can be compared with information about where new nurses are practicing in North Carolina. NC Nursecast details graduate diffusion throughout the state and provides the following information on graduates from RN-ADN, RN-BSN, RN-Diploma, and LPN programs:<sup>9</sup>

- Where in the state graduates are practicing, with a visualization of the most concentrated areas
- Number and percentage of graduates by specialty (e.g., hospital, ambulatory, home health)
- Number and percentage of graduates practicing in a rural area
- Institutional retention rates<sup>48</sup>

Figures 8-10 on the next page provide examples of these data visualizations. Data spreadsheets can be downloaded from the NC Nursecast website for detailed information.

**Figure 7. Example of Data Detailing Provider Ratios in North Carolina Counties – RNs per 10,000 Population, 2022**



Source: North Carolina Health Professions Data System, Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created April 29, 2024 at <https://nchealthworkforce.unc.edu/interactive/supply/>.

**“Although increasing nursing program enrollment alone will not solve workforce shortages, increasing funding of nursing programs, raising faculty wages so they can better compete with clinical salaries, and addressing the shortage of preceptors in the state can help increase supply. The good news is that investments in nursing programs yield a high return on investment.... LPN and ADN programs retain 92% of their graduates and BSN programs retain 86% of graduates in North Carolina. By comparison, medical schools in North Carolina retain 38% of their graduates in the state.”**

- The Program on Health Workforce Research and Policy at the Cecil G Sheps Center. “NC Nursecast: A Supply and Demand Model for Nurses in North

<sup>9</sup> NC Nursecast operates using static data and therefore does not capture programs approved since 2021 or any resulting adjustments in modeling outcomes since that time.

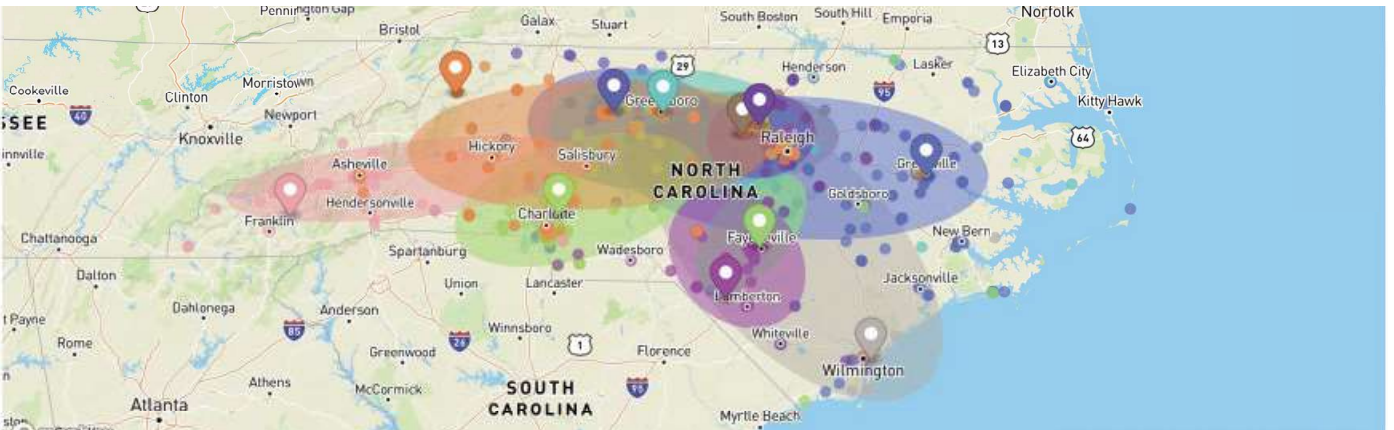


**Figure 8. Example of Diffusion of RN-ADN Graduates from Select North Carolina Institutions**



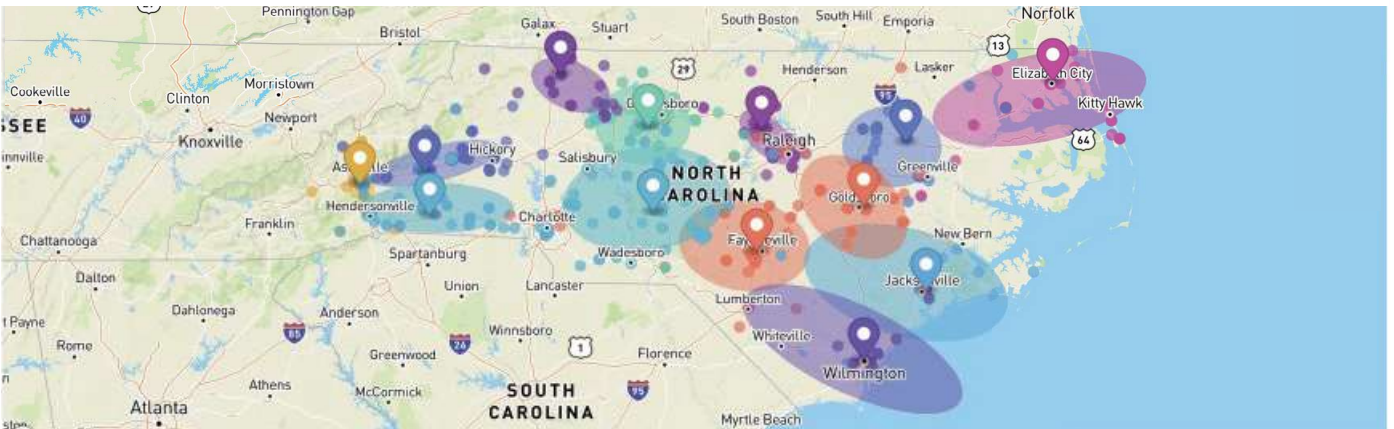
Source: The Program on Health Workforce Research and Policy at the Cecil G Sheps Center. "NC Nursecast: A Supply and Demand Model for Nurses in North Carolina." November 1, 2021. <https://ncnursecast.unc.edu/diffusion/>

**Figure 9. Example of Diffusion of RN-BSN Graduates from Select North Carolina Institutions**



Source: The Program on Health Workforce Research and Policy at the Cecil G Sheps Center. "NC Nursecast: A Supply and Demand Model for Nurses in North Carolina." November 1, 2021. <https://ncnursecast.unc.edu/diffusion/>

**Figure 10. Example of Diffusion of LPN Graduates from Select North Carolina Institutions**



Source: The Program on Health Workforce Research and Policy at the Cecil G Sheps Center. "NC Nursecast: A Supply and Demand Model for Nurses in North Carolina." November 1, 2021. <https://ncnursecast.unc.edu/diffusion/>

### Strategy 5

#### Enhance the preparation of nursing students through more inclusive educational environments and curriculum

**Strategy 5.2** The collaborative of North Carolina’s community college and university nursing programs [see Strategy 2.1] should identify evidence-based holistic admissions practices that have been shown to be effective at enrolling a diverse student body and share experiences and lessons learned with each other to support admission of diverse nursing student cohorts.

#### Desired Result

North Carolina’s nursing education programs will graduate cohorts of new nurses who represent the diversity of the communities they serve.

#### Why does the task force recommend this strategy?

Incorporating holistic admissions processes for nursing programs can help to cultivate a diverse nursing workforce. This approach evaluates applicants based on their experiences, attributes, and academic metrics, rather than solely on grades and test scores. It recognizes the value of a variety of perspectives in enhancing health care delivery, promoting cultural humility, and addressing health disparities. This not only enriches the profession but also contributes to improving the overall quality of patient care.

#### Context

Holistic admissions, also called holistic review, in higher education considers various factors beyond GPA and test scores, including “experiences, attributes, potential contributions, and the fit between the applicant and the institutional mission.”<sup>49</sup> The goal is to gain a comprehensive understanding of the applicant to foster a diverse and inclusive student body that can benefit from and contribute to the educational environment in unique ways. Schools that have implemented holistic admissions have seen an increase in the diversity of their student body, kept academic standards steady or improved (e.g., graduation and exam pass rates), and reported increases in student engagement, cooperation and teamwork, and openness to different perspectives<sup>50</sup>

Recommended practice for holistic admissions is to include components that evaluate experiences, attributes, and metrics that are traditionally considered part of admissions criteria. This is known as an E-A-M model, and examples include:

- Experiences – “health care or leadership experiences or experiences with adversity or barriers to educational opportunity”
- Attributes – “oral and written communication skills, resiliency, race/ethnicity, first generation college student and gender”
- Metrics – “grade point averages, SAT scores, and/or the Test of Essential Academic Skills (TEAS®).”<sup>51</sup>

North Carolina’s 2021–2022 academic year nursing school enrollment by gender and race/ethnicity are presented in Figures 11 and 12. Although academic diversity can often be thought of strictly in terms of race and ethnicity, a wide variety of characteristics should be considered part of developing a diverse student body (see text box, “Examples of Holistic Review and Diversity Considerations”).

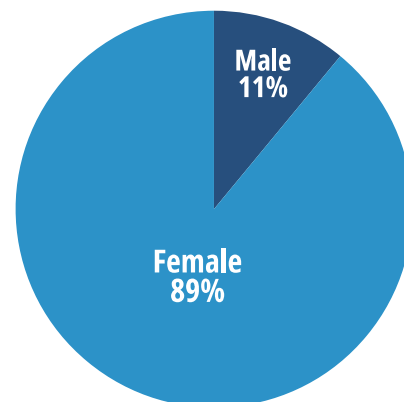
#### Is holistic review legal?

“In general, the use of holistic review is legal under federal and state law. However, when race or ethnicity is used as a consideration in the holistic review process (or other enrollment decisions such as financial aid that provide tangible benefits), federal legal requirements will apply. In some cases, state law may place additional requirements upon the school. In essence, federal legal requirements for nursing schools using race or ethnicity-conscious admission policies are:

1. The policy must be grounded in the nursing school’s evidence-based “compelling interest” in the educational benefits of diversity; and
2. The policy must be “narrowly tailored” to achieve that interest. In order to do so, policies must be necessary and flexible, and must not place an undue burden on students who do not benefit from the consideration of race or ethnicity. To meet this requirement, policies must also be subject to periodic review.”

-American Association of Colleges of Nursing. <https://www.aacnursing.org/our-initiatives/diversity-equity-inclusion/holistic-admissions/holistic-admissions-tool-kit/legality-of-holistic-review>

**Figure 11. Percent of Student Enrollment by Gender in North Carolina Pre-Licensure Nursing Programs by Program Type, Academic Year 2022-2023.**

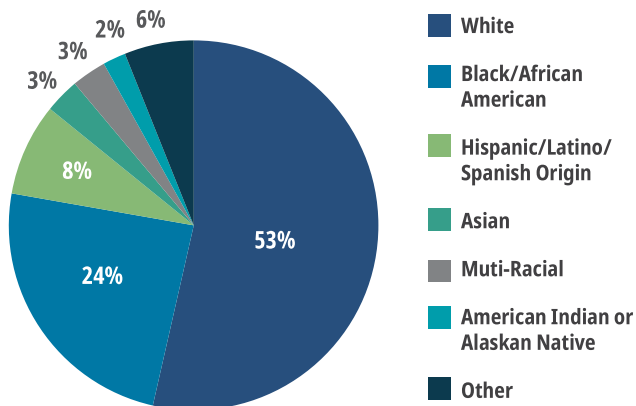


Source: North Carolina Board of Nursing. 2022-2023 Nursing Education Summary report.





**Figure 12. Percent of Student Enrollment by Race/Ethnicity in North Carolina Pre-Licensure Nursing Programs by Program Type, Academic Year 2022-2023**



Source: North Carolina Board of Nursing. 2022-2023 Nursing Education Summary report.

**Examples of Holistic Review and Diversity Considerations**

“Examples of holistic review practices that schools are using and that other institutions might consider include:

- Developing a mission statement for admissions that includes a commitment to diversity and inclusion;
- Providing admissions committees with training related to the school’s mission, including diversity;
- Including non-academic as well as academic criteria such as GPA and test scores in the initial screening process;
- Balancing the weight of non-academic and academic criteria during the initial screening process;
- Adding essay questions to the admission application that address the school’s mission and goals, and desired experiences and attributes including diversity;
- Evaluating additional criteria related to the school’s mission and goals and values (e.g., global health, research mission).

-Artinian NT, Drees BM, Glazer G, Harris K, Kaufman LS, Lopez N, Danek JC, Michaels J. Holistic Admissions in the Health Professions: Strategies for Leaders. *Coll Univ.* 2017 Spring;92(2):65-68. Epub 2017 Jun 12. PMID: 29200468; PMCID: PMC5708588.

**KEY RESOURCE NEEDS**



Implementation of holistic review requires additional investment in resources like training and systems change, as well as staff support and time.

### Strategy 5

Enhance the preparation of nursing students through more inclusive educational environments and curriculum

**Strategy 5.3** University and community college nursing programs should:

- a) Implement plans to create nursing education environments and curriculum offerings that support inclusive excellence. Implementation should include ongoing evaluation and adjustment based on outcomes and feedback from students and faculty.
- b) Work with the North Carolina Organization of Nurse Leaders and the North Carolina Nurses Association to identify best practices in nurse leadership development in the academic and employer settings and opportunities to equitably identify the strengths and skills of current and future nurses that can be harnessed to encourage them to explore roles, additional education, etc., related to health care informatics, health care payment (e.g., value-based care), technology, and business.

#### Desired Result

Nursing students of all backgrounds and identities will be welcomed and included in their nursing program. Nursing students will have the opportunity to identify and explore their strengths and interests that can contribute to nursing beyond direct patient care. Nursing programs will prioritize the development and implementation of best practices to create inclusive programs that meet the needs of a diverse student population.

#### Why does the task force recommend this strategy?

Creating welcoming and inclusive educational environments in nursing education is crucial for cultivating a diverse and competent nursing workforce. Such environments not only support students and faculty from various backgrounds and identities in feeling valued and understood but also enrich the learning experience for all students by exposing them to diverse perspectives and ideas. Many nursing programs have begun this work and will continue to do so, while others may be in the early stages of identifying best practices and needed changes. Furthermore, offering opportunities for students to identify and develop their strengths in specialized areas like health care business and informatics is essential in an increasingly complex and technologically driven health care landscape. By identifying nursing students with interests in these areas and equipping them with knowledge, educational programs can prepare them to navigate the evolving health care system effectively, contribute to innovations, and take on leadership roles.

#### Context

##### INEQUITIES IN NURSING PROGRAMS AND INSTRUCTION

Nursing education, like many fields in the United States, has a long history of segregation and racial gatekeeping.<sup>52</sup> The professional organizations and related scholarship that shaped contemporary nursing practice and research were homogenous in race and sex. While there have been great strides made in the field's dedication to diversity and inclusion, nursing students of color still face persistent barriers to equitable education, training, and opportunities for advancement.

#### Related Recommendations from Other Groups

##### *The Future of Nursing 2020-2030*

Conclusion 7-4: Successfully diversifying the nursing workforce will depend on holistic efforts to support and mentor/sponsor students and faculty from a wide range of backgrounds, including cultivating an inclusive environment; providing economic, social, professional, and academic supports; ensuring access to information on school quality; and minimizing inequities.

<https://nap.nationalacademies.org/read/25982/chapter/9#190>

##### *National Commission to Address Racism in Nursing*

1. Assess all organizational policies for diversity, equity, and inclusion best practices.
2. Build an organizational anti-racist climate by routinely assessing the perceived racial climate as well as the cultural competence of faculty, staff, and students, and promote cultural competence of faculty, staff, and students. Assess student bias against faculty of color.
3. Provide anti-racism training resources and create open and safe spaces for action-oriented conversations.
4. Build the infrastructure and allocate resources to support underrepresented and disadvantaged students, faculty, and staff. An example of structural resources is the existence of departmental groups and clubs that are inclusive of people of color. These groups could include faculty, staff, and students.

<https://www.nursingworld.org/~49b97e/globalassets/practiceandpolicy/workforce/commission-to-address-racism/3racismintheeducationspace.pdf>

***“Racial, structural, and institutional inequities that are embedded in nursing programs and schools have the most profound impact on the profession because of the expanded reach they have into the future of students who progress and those who fail, the nursing workforce, future nurse educators (NEs), and the health and well-being of our nation.”***

-National Commission to Address Racism in Nursing. *How Does Racism in Nursing Show Up in the Education Space?* <https://www.nursingworld.org/~49b97e/globalassets/practiceandpolicy/workforce/commission-to-address-racism/3racismintheeducationspace.pdf>



## Nursing faculty do not reflect the diversity of their students

### Baccalaureate Nursing Students (2022):



### Full-time Nursing Faculty (2021):



Source: American Association of Colleges of Nursing. *Enhancing Diversity in the Nursing Workforce*. <https://www.aacnnursing.org/Portals/0/PDFs/Fact-Sheets/Enhancing-Diversity-Factsheet.pdf>

Lack of diversity in nursing faculty, as shown in the figure above, may be a microcosm of the disproportionate representation of White registered nurses (81%) relative to the population (59%).<sup>53,54</sup> As the nursing workforce moves to reflect a diverse patient population, nursing students would benefit from faculty that represent diverse backgrounds and experiences.

Because people of color were historically excluded from early formative nursing scholarship, certain aspects of nursing curriculum and instruction have reproduced misinformation about non-White patients. Although we know that race is a social category and an insufficient proxy for genetic ancestry, many clinicians maintain false beliefs about perceived biological differences by race. For instance, a 2016 study of White medical students and residents demonstrated that almost a quarter of participants believed false statements about race, including that Black people's skin is thicker than White people's skin and that Black people's blood coagulates faster than White people's blood.<sup>55</sup> Additionally, nursing textbooks that seek to educate students on culture have often been more harmful than helpful. In 2017, Pearson pledged to remove content in a nursing textbook that offered a list of stereotypes about responses to pain by racial/ethnic group, including statements like, "Native Americans may prefer to receive medications that have been blessed by a tribal shaman" and "Blacks often report higher pain intensity than other cultures."<sup>56</sup> Curriculum is also often plagued by a disproportionate use of White bodies in the classroom and other instructional materials and the minimization of racial inequality in classroom teaching.<sup>57</sup> These paradigms do not prepare students to work with diverse patient populations and to understand the social drivers of inequity, including inequity in health status and outcomes.

Due to inadequate inclusion within nursing programs, nursing students of color can experience a hostile learning environment. A Robert Wood Johnson Foundation survey found that 4 in 10 nurses believe that "racism and/or discrimination was a part of their nursing school's culture."<sup>58</sup> These experiences are more than an inconvenience—they contribute to the isolation and alienation that students of color feel in the classroom and hamper their ability to learn and engage with lessons.<sup>59-61</sup> This environment can also adversely affect student health and well-being.<sup>61</sup>

*"As faculty advocating for Black and Brown students, [a focus group participant] described how she was seen as 'a problem'. This same nurse faculty spoke of students experiencing posttraumatic stress because of false accusations brought against their character and integrity, such as false accusations of cheating, and the harm the lack of action taken against racism is causing overall."*

-National Commission to Address Racism in Nursing. *Summary Report: Listening Sessions on Racism in Nursing*. <https://www.nursingworld.org/~49be5d/globalassets/practiceandpolicy/workforce/commission-to-address-racism/final-racism-in-nursing-listening-session-report-june-2021.pdf>



### Racism/Discrimination was experienced in nursing school by:



Source: Robert Wood Johnson Foundation. *Insights Into Nurses' Experiences and Perceptions of Discrimination*. 2023. <https://www.statnews.com/wp-content/uploads/2023/05/rwjf473632.pdf>

### SUPPORTING FUTURE NURSING LEADERS

The American Association of Colleges of Nursing (AACN) supports advancing diversity, equity, and inclusion as central to the success of nursing schools in the 21st century. These interests reflect the need to improve the quality of education, address pervasive inequities in health care, and enhance the civic readiness and engagement potential of nursing students. In their **"Building a Culture of Belonging in Academic Nursing"** report, the AACN promotes strategies that include and go beyond representational diversity to support the recruitment and retention of students and faculty of color. Organizational culture change requires the integration of equity into all facets of nursing education, including a program's mission and core values, hiring practices, student recruitment and retention strategies, learning objectives and curriculum, ongoing education, and evaluation.

*"Nursing schools must be intentional and committed to cultivating an equitable and inclusive environment that affords students access to culturally proficient faculty, staff, and opportunities to achieve superior academic outcomes, reinforced by anti-racist policies and pedagogies. There should be access and opportunities for students to engage with nursing faculty with diverse experiences and role preparation such as nurse researcher and nurse executive/leader."*

-National Commission to Address Racism in Nursing. *How Does Racism in Nursing Show Up in the Education Space?* <https://www.nursingworld.org/~49b97e/globalassets/practiceandpolicy/workforce/commission-to-address-racism/3racismintheeducationspace.pdf>



## CHAPTER 2 - PREPARING FUTURE NURSES

The National League for Nursing (NLN) “serves as the leading voice for nurse faculty and leaders in nursing education.... [and] offers professional development, networking opportunities, assessment services, nursing research grants, and public policy advocacy”.<sup>62</sup> NLN’s Taking Aim Initiative aims to “enhance the preparation of nursing graduates at all levels of higher education to provide safe, equal, high-quality care to patients, families, and communities at risk”.<sup>63</sup> To that end, the program provides a variety of free resources and toolkits to improve understanding and address race, racism, bias, and diversity, equity, inclusion, and belonging.

Primarily White institutions can learn from universities and colleges that have demonstrated a commitment to students of color. In North Carolina, historically Black colleges and universities (HBCUs) have been educating and supporting nurses from diverse backgrounds for decades. These programs are consistently recognized for their NCLEX passage rates, job placements, and support for Black nursing students.<sup>64,65</sup> Additionally, community colleges have a long history of offering low-cost pathways to careers in nursing for students from underserved backgrounds.

Health care students and professionals, especially those who pursue leadership opportunities, are increasingly interested in developing skills related to health informatics, health care payment, technology, and business. Programs like the UNC Center for the Business of Health formalize this education by offering a health care-focused MBA and dual-degree programs with the School of Pharmacy, School of Public Health, School of Medicine, and School of Dentistry. Similar offerings in partnership with nursing programs can build the capacity of future nursing leaders.

Professional nursing organizations like the American Nurses Association (ANA) and the American Organization for Nursing Leadership (AONL) are working to create nursing scope of practice recommendations and identify the competencies necessary to meet contemporary expectations of nursing professionals.<sup>66,67</sup> Given that these discussions are taking place at a national level, it is important for state nursing leaders to integrate these national recommendations into the standards set by the NCBON and competencies in our state’s nursing education.

### Spotlight on North Carolina

**UNC-Chapel Hill School of Nursing** offers a master’s degree program in health care leadership and administration that is fully online and is partnered with the UNC Center for the Business of Health through the UNC-Chapel Hill School of Business. This program helps nursing leaders “develop a robust foundation in systems-thinking, organization theory, human resource management, health care policy and advocacy, and leadership development”.

-Carolina Nursing, MSN Health Care Leadership & Administration. <https://nursing.unc.edu/programs/master-of-science-in-nursing/health-care-leadership-administration>

### KEY RESOURCE NEEDS



Nursing education programs will need financial support, as well as tools and best practices, in the continued work to improve the educational environment and expand opportunities for students to learn skills in health informatics, health care payment, technology, and business.



## Strategy 5

Enhance the preparation of nursing students through more inclusive educational environments and curriculum

**Strategy 5.4** NC AHEC should contribute to the advancement of mentorship programs by:

- a) Completing an environmental scan to identify effective mentorship programs that support the development of underrepresented groups in nursing.
- b) Partnering with North Carolina's community college and university nursing programs, employers of nurses, and state trade associations to identify opportunities and strategies to replicate or tailor programs to different schools/communities.

### Desired Result

Nursing education programs will have a resource to learn from existing mentorship programs and will have tools to help replicate or tailor mentorship programs for their student population. Serving as a nurse mentor will be considered a valuable and necessary role for a professional nurse.

### Why does the task force recommend this strategy?

Mentorship programs within nursing education are pivotal for the professional development and retention of nurses, especially for those from underrepresented populations. These programs offer guidance, support, and opportunities for personal and professional growth. For underrepresented groups in nursing—including people of color, Spanish speakers, males, and people with disabilities—mentorship can be particularly empowering, providing role models who share similar backgrounds and experiences. This representation helps in breaking down barriers to advancement and fosters a sense of belonging and inclusion within the nursing community. While many mentoring relationships are informal, effective mentorship requires organization and effort. Nursing programs in North Carolina offer a spectrum of mentorship experiences for their students. However, there has not been a comprehensive description and evaluation of existing formal mentorship programs. NC AHEC can contribute to the advancement of nursing mentorship by conducting an environmental scan of mentorship programs, especially those that support the development of underrepresented groups, and by partnering with colleges and universities, nursing employers, and state trade associations to develop tailored mentorship programs for nursing education.

### Context

#### BENEFITS OF MENTORSHIP IN NURSING EDUCATION

Mentorship is defined as “the support provided by a mentor, who offers a nurturing relationship that involves sharing knowledge and experience, providing emotional support, advice, feedback, role-modeling, and guidance that extends over time” and has been shown to improve student success and retention.<sup>68,69</sup> Nursing mentorship is often beneficial to both the mentee and the mentor:

- **Student mentees** receive guidance from someone currently working in the nursing field, discover diverse nursing roles and specialties, refine their problem-solving skills, and expand their professional network.<sup>70,71</sup>
- **Nurse mentors** can enhance their communication skills, acquire a fresh perspective on the latest nursing education trends, gain personal fulfillment through service, and re-energize their own passion for the nursing profession.<sup>72</sup>

Mentoring is also an important strategy to support the professional development of underrepresented groups in nursing, increasing student retention, academic success, satisfaction, and NCLEX passage rates among students of color. A lack of mentorship has been consistently cited as a barrier for male nursing students.<sup>73–75</sup> Male students and students of color may be more likely than other students to:

- Balance work and family commitments during their education.<sup>75–78</sup>
- Experience isolation due to having fewer faculty and peers with whom they can relate.<sup>74,79</sup>

#### MENTORSHIP PROGRAMS AND TRAINING

Effective mentorship programs are developed and implemented with intentionality. **The Robert Wood Johnson Foundation New Careers in Nursing Scholarship Program** provides a comprehensive mentorship toolkit that includes guides to assessing existing mentorship, if any, within nursing programs and designing a new mentorship program that offers core components, including a:

- Definition of mentoring
- Clear mentoring process
- Identification of learning goals
- Opportunities for ongoing reflection and evaluation
- Guidance on closing the mentoring relationship.<sup>80</sup>

### Related Recommendations from Other Groups

#### North Carolina Caregiving Workforce Strategic Leadership Council Action Areas

**Initiative #1:** Establish academic coaches for community college students.

<https://www.ncdhhs.gov/investing-north-carolinas-caregiving-workforce-recommendations-strengthen-north-carolinas-nursing/download?attachment>

## CHAPTER 2 - PREPARING FUTURE NURSES

**Mentorship is a skillset.** In addition to having the requisite professional experience, mentors are often expected to actively listen, express clear written and verbal communication, manage professional boundaries, and provide emotional support. Professionals and advanced students will approach the mentor role with a diverse array of previous experiences. Thus, organized mentorship programs will **clearly outline responsibilities for both mentors and mentees**, while also allowing the parties in each mentoring relationship to set their own expectations related to communication and learning goals.<sup>80</sup> Programs may even train mentors prior to connecting them with student mentees. For example, **Campaign for Action**, a national campaign to transform health and health care through nursing, hosted mentor trainings for representatives from over 100 nursing programs across the country and convenes monthly mentorship learning collaborative meetings.<sup>81</sup> Additionally, as the profession strives to diversify its workforce, it is imperative that nurse mentors are trained to guide students from a variety of backgrounds and experiences.<sup>82</sup> This may include education about racial equity, implicit bias, and cultural humility—concepts that are also necessary for advancing health equity.<sup>82,83</sup>

### MODELS FOR MENTORSHIP IN NURSING EDUCATION IN NORTH CAROLINA

Some programs in the state are tailored to underrepresented groups.

**Duke University School of Nursing Office of Diversity, Equity, Inclusion, and Belonging** offers three mentorship programs. The Mentoring to Increase Access to Health Professions (MAP) program is designed to provide ongoing mentorship by faculty and health professionals to facilitate undergraduate students' integration and completion of a health profession program.<sup>84</sup> The Mentoring Black Nurses Towards Success program matches undergraduate Black nursing students with Black clinical staff nurses employed by the Duke University Health System.<sup>85</sup> The Leading to Equitable Access to Health Professions (LEAHP) seeks to increase undergraduate nursing students' readiness for successful entry into advanced practice nursing programs through mentorship relationships with advanced practice nursing faculty and students.<sup>86</sup>

Some programs offer mentoring as part of wraparound student support services. For example, the **Western Carolina University School of Nursing PEN Scholars program** provides a learning cohort, tailored academic advising, mentoring, and coaching for undergraduate nursing students from disadvantaged groups.<sup>87</sup> **North Carolina Agricultural and Technical State University (NC A&T)** offers a residential learning community for first-year nursing students, assigning each student a junior-level peer mentor.<sup>88</sup>

State community colleges have also created opportunities for students to be mentored by nurses. For instance, **Durham Technical Community College (Durham Tech)** and the **Duke University Health System (DUHS)** have partnered in support of a nursing talent pipeline, with DUHS providing clinical instruction and mentorship for Durham Tech nursing students.<sup>89</sup> Additionally, **Carteret Community College and Carteret Health Care** have partnered to create a certified nursing assistant apprenticeship program, offering paid training for four to six weeks while connecting nurse assistants with a nursing mentor in a comprehensive acute care setting.<sup>90</sup> These opportunities align with the North Carolina Caregiving Workforce Strategic Council recommendation to provide academic coaches for community college students.

### KEY RESOURCE NEEDS



NC AHEC will need additional financial resources to complete the environmental scan.



North Carolina's community college and university nursing programs, employers of nurses, and state trade associations can partner to replicate programs and develop communications strategies and dissemination plans to help target audiences to learn about these programs.



### Additional Resources

**Strategy 3** - Increase the number of North Carolinians graduating with nursing degrees by addressing faculty shortages

- Recommendations on Increasing Nursing Graduates: In Response to SL 2022-74 (HB 103), Section 8.3
- Are You Paying Your Nursing Faculty and Leaders Enough? – Synergis Education

**Strategy 5** - Enhance the preparation of nursing students through more inclusive education environments and curriculum

- How Does Racism in Nursing Show Up in the Education Space? – National Commission to Address Racism in Nursing
- Interactive data visualizations of North Carolina's supply of health professionals - Program on Health Workforce Research and Policy at the Cecil G. Sheps Center for Health Services Research
- Building a Culture of Belonging in Academic Nursing: Assessing Culture, Climate, and Belonging Using LAMPSM – American Association of Colleges of Nursing
- Holistic Admissions Tool Kit - American Association of Colleges of Nursing
- Enhancing Diversity in the Nursing Workforce - American Association of Colleges of Nursing
- Taking Aim Resources – National League for Nursing
- Mentorship: A Student Success Strategy Mentoring Program Toolkit - Robert Wood Johnson Foundation

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