

4

CHAPTER FOUR

Valuing Nurses and Nursing Care

108	RECOMMENDATION #6 Equip nurses and the public to be strong advocates for nursing and health care improvement
109	Strategy 18: Enhance the ability of nurses to advocate for themselves and their profession
112	Strategy 19: Enhance the ability of the public to advocate for nurses
113	RECOMMENDATION #7: Quantify the value of nursing care
114	Strategy 20: Use value-based payment and develop mechanisms to quantify the importance of nursing in quality care
116	<u>Strategy 21:</u> Explore opportunities for nurses related to National Provider Identifier (NPI) numbers
118	RECOMMENDATION #8: Optimize payment for health care services to support nursing care
119	Strategy 22: Increase funding to support school nursing
122	Strategy 23: Use funding mechanisms to support the long-term care nursing workforce
124	Strategy 24: Promote RN billing in primary care
127	Strategy 25: Expand the state budget in key shortage areas for nursing care

_

Nurses consistently rank as the most trusted professionals, a testament to the vital role they play in health care and society. This trust stems from the unique combination of expertise, compassionate care, and dedication that nurses exhibit. Nurses are often the frontline of patient care, providing not only clinical treatment but also emotional support to patients and their families. Their ability to blend scientific knowledge with empathy and patient advocacy often sets them apart from other members of the health care team. The trust they engender is not only a reflection of their clinical skills but also of their ethical standards and commitment to patient welfare. Nurses' critical role in patient outcomes, their presence during life-altering moments, and their ability to navigate complex health care situations with grace and professionalism underpin the public's profound respect and trust in the profession.

Despite the high levels of trust in nurses and their vital role in patient care, data that demonstrates their value in the delivery of care are limited. Health care billing and quality outcomes measures are two current mechanisms for assigning or determining value in the health care system. Most billing for health care services does not account for nursing time or level of care. One commonly cited example of this is the inclusion of nursing care as part of "room and board" charges in hospital billing (see text box for more).

"Nursing care services are the most intensely used hospital services by acute hospital inpatients yet are poorly economically measured....
The line items on the hospital bill function to capture the value of the care provided throughout the duration of the inpatient stay.... [E]ach physician or specialist visit is billed at a particular rate [and] [a]llied health care professionals who are not employed by the hospital, such as physical and occupational therapists, also independently bill for the time spent providing services to the patient.

Nurses are an anomaly in the current inpatient billing system.

Rather than bill for the actual services provided to the patient or the amount of time spent providing nursing care, the cost of nursing is embedded into the line item for room and board, which is the same fixed cost for every patient receiving the same level of care within a particular institution. In other words, all patients cared for on a given unit are billed the same room and board charge regardless of the actual amount of nursing care the patient utilized during that hospitalization."

- Lasater KB. Invisible economics of nursing: analysis of a hospital bill through a Foucauldian perspective. Nurs Philos. 2014 Jul;15(3):221-4. doi: 10.1111/nup.12040. Epub 2013 Nov 27. PMID: 24279477; PMCID: PMC5887158.

Health care payment models and mechanisms play a pivotal role in shaping the structure, distribution, and practice environment of the nursing workforce. The shift toward value-based care, which emphasizes patient outcomes over the volume of services provided, has led to an increased focus on preventive care and chronic disease management in many health care settings. 1 Nurses are well suited to lead these interventions and can play a crucial role in managing patient care, coordinating among specialists, and providing continuous care. Reimbursement policies from Medicare and Medicaid and private insurance companies can influence the hiring and deployment of nursing staff. Limited reimbursement for certain services may lead to reductions or changes in priorities for staffing and other resources. Financial pressures on health care facilities, often driven by these payment models, can also impact nurse-to-patient ratios, workload, and job satisfaction, subsequently affecting the quality of patient care and nurse retention rates. Furthermore, the increasing trend toward outpatient services and home health care, partly influenced by reimbursement policies, is reshaping the nursing profession, requiring nurses to adapt to more community-based roles.

The Task Force on the Future of the Nursing Workforce has made three overarching recommendations related to valuing nurses and nursing care. Each recommendation includes specific strategies and actions.

RECOMMENDATION #6: Equip nurses and the public to be strong advocates for nursing and health care improvement (Page 108)

RECOMMENDATION #7: Quantify the value of nursing care (Page 113)

RECOMMENDATION #8: Optimize payment for health care services to support nursing care (Page 118)

KEY RESOURCE NEEDS

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







RECOMMENDATION #6

Equip nurses and the public to be strong advocates for nursing and health care improvement

As the largest group of health care professionals, nurses occupy a central role in the health care system, providing essential care that spans from preventive health measures to acute care interventions and long-term support. Despite their critical contributions, nurses often face challenges in having their work appropriately valued, in terms of both professional recognition and financial compensation. This discrepancy highlights the need for nurses to be strong advocates for themselves and underscores the importance of public advocacy in supporting them. Self-advocacy by nurses can contribute to:

- Recognition of expertise Nursing is a profession that requires
 extensive knowledge, specialized skills, and continuous education.
 Nurses must advocate for themselves to ensure their expertise is
 recognized within the health care hierarchy, emphasizing that nursing
 care is not ancillary but central to patient outcomes.
- Professional development and advancement Self-advocacy is crucial
 for nurses seeking opportunities for professional development and career
 advancement. By voicing their needs for further education, specialized
 training, and leadership roles, nurses can break barriers to advancement
 and highlight the value of their contributions to health care.
- Improved working conditions Nurses often work under challenging conditions, including long hours, high patient loads, and emotional stress. Self-advocacy is essential to addressing these issues, and may include demanding safer work environments, adequate staffing ratios, and resources that enable nurses to provide the best care possible.

PUBLIC ADVOCACY: STRENGTHENING SUPPORT

While nurses can advocate for themselves, public support amplifies their voices, making it more likely that policymakers, health care organizations, and society at large will take notice. Public advocacy can drive meaningful changes in how nurses are valued and treated. By rallying behind nurses, the public can help push for reforms that recognize the value of nursing care, such as fair compensation, better working conditions, and stronger representation in health care decision-making.

THE PATH FORWARD

For nursing to be appropriately valued, both self-advocacy by nurses and public advocacy on their behalf are essential. Nurses, equipped with their firsthand experiences and expertise, are uniquely positioned to articulate the challenges they face and the value they provide. These efforts can be significantly bolstered by public support, which can influence systemic changes that recognize and reward the critical work done by nurses.

Together, these forms of advocacy work synergistically to address the undervaluation of nursing care. They can lead to improved working conditions for nurses, better patient care outcomes, and a health care system that truly recognizes the indispensable role of nursing. In a time when health care faces numerous challenges, valuing and supporting nurses is more crucial than ever, requiring concerted efforts from within the profession and from society at large.

The Task Force on the Future of the Nursing Workforce recommends the following strategies to equip nurses and the public to be strong advocates for nursing and health care improvement:

Strategy 18 – Enhance the ability of nurses to advocate for themselves and their profession (Page 109)

Strategy 19 – Enhance the ability of the public to advocate for nurses (Page 112)



Strategy 18

Enhance the ability of nurses to advocate for themselves and their profession

Strategy 18.1 North Carolina nursing associations should continue to provide advocacy training opportunities for nurses and identify ways to increase uptake of these opportunities.

Strategy 18.2 Employers of nurses should encourage nurse participation in nursing associations and coalitions and consider employee benefits that would pay dues and permit work time dedicated to participating in membership activities.

Desired Result

Nurses will be empowered with training, tools, and coordinated efforts to advocate for their profession.

Why does the task force recommend this strategy?

By advocating for the profession, nurses can influence improvements in patient care standards, working conditions, and health care policies, leading to better health outcomes and a more sustainable health care system. Additionally, empowered nurses who actively participate in advocacy efforts contribute to the advancement of the nursing profession, helping to elevate the role of nursing within the health sector and society at large. This not only enhances the professional standing of nurses but also attracts new talent to the profession by showcasing nursing as a dynamic and influential field.

Context

NURSING ASSOCIATIONS IN NORTH CAROLINA

The **North Carolina Nurses Association (NCNA)** is the professional organization for registered nurses in North Carolina. It serves the needs of its members by addressing nursing issues and advocating for nursing and high-quality health care.² In February 2024, the NCNA announced a Diversity in Nursing Leadership Fellowship, in which it will partner with counterparts in Georgia and South Carolina to develop a new leadership program for nurses of color.³ This fellowship aims to provide professional nursing associations with increased access to a diverse pool of talented and engaged members such as board members and other association leaders.³

The **North Carolina Organization of Nurse Leaders (NCONL)** is the state-level affiliate of the American Organization of Nurse Leaders. NCONL works to strengthen nursing leadership through professional development and serves as the catalyst for promoting unity and cohesiveness across the nursing profession in the state.⁴ NCONL also nurtures key relationships, such as those with the North Carolina Board of Nursing, the North Carolina Healthcare Association, and the NCNA, while serving as a partner nursing organization to the North Carolina Future of Nursing Action Coalition.

North Carolina has a state chapter of the **National Association of Licensed Practical/Licensed Vocational Nurses**. The organization
provides continuing education, certifications, scholarships, guidance and
professional advice, and member support and networking.⁵

The **North Carolina Association of Nursing Students** is open to students enrolled in an accredited North Carolina nursing program at all levels, including pre-nursing students. It was chartered as a student branch of the NCNA in 1958 and continues to work with the NCNA to aid nursing students in the transition to nursing practice.

Several associations in the state represent and support specific racial and ethnic groups of nurses. Some of these include:

- Chapters of the National Black Nurses Association, Inc.
- Philippine Nurses Association of North Carolina
- Indian American Nurses Association of North Carolina
- Nigerian Nurses Association of North Carolina
- The North Carolina chapter of the Asian American/Pacific Islander Nurses Association

In addition, there are associations for nurses based on specific areas of practice. Some of these include:

- North Carolina Association of Public Health Nurse Administrators
- School Nurses Association of North Carolina
- The North Carolina chapter of the American Psychiatric Nurses Association
- North Carolina Hospice & Palliative Nurses Association
- The North Carolina chapter of the National Association of Directors of Nursing in Long Term Care
- North Carolina Association of Occupational Health Nurses
- North Carolina Emergency Nurses Association
- North Carolina Association of Nurse Anesthetists
- Regional chapters of the American Association of Critical Care Nurses

Statewide activities that have valuable opportunities for nurse participation are also being led by:

- North Carolina Center on the Workforce for Health
- North Carolina Department of Health and Human Services
- North Carolina Future of Nursing Action Coalition

BENEFITS OF PARTICIPATION IN NURSING ASSOCIATIONS AND COALITIONS

Nursing associations provide opportunities for continuing education, skill development, and access to resources that can enhance nurses' knowledge and expertise. They also allow nurses an opportunity to connect with colleagues, mentors, and leaders in their field, fostering relationships that can provide support, guidance, and possible career development. The skill development and learning provided through nursing associations can ultimately benefit patient care.

Nursing associations advocate for the interests of nurses and the nursing profession, allowing nurses to address issues affecting their practice, health care delivery, and patient outcomes. They are critical for generating ideas and proactive work that is needed to maintain accountability in the profession and address issues affecting workforce capacity.

Supporting involvement in nursing associations allows nurses to build professional networks that can benefit employers through collaborations and access to resources and expertise from other health care organizations. It can also improve retention rates by promoting a sense of belonging, loyalty, and investment in the organization.

A primary deterrent to joining a nursing association can be membership cost, with the average association dues costing approximately \$200 per year. In addition, many new nurses entering the profession may lack information about the organizations that are possible to join.

Employers' payment of employees' professional association dues is an investment in the workforce. Employees feel valued when their employers invest in their growth and development, which can lead to higher levels of engagement and retention within the organization. By subsidizing or fully covering the cost of nursing association memberships, employers demonstrate a commitment to supporting their staff's professional development and providing incentives for joining these organizations.

In addition, providing opportunities for nurses to participate in organization membership activities during work time can bring several benefits to both the employee and the employer. For example, organization activities like meetings, workshops, or conferences allow nurses to enhance their professional knowledge and skills. By encouraging and supporting nurses' participation in organization membership activities, employers encourage a culture of continuous learning and professional growth within the organization.



Strategy 18

Enhance the ability of nurses to advocate for themselves and their profession

Strategy 18.3 The Center on the Workforce for Health should engage an advisory council to provide data, guidance, and best practices concerning efforts to address the nursing workforce crisis, provide critical perspectives from key interested parties, and decrease duplication of efforts. Representatives of the council should include nursing educators from community college and university settings, nurses with experience in a variety of health care settings, employers of nurses, and representatives of nursing associations and the Future of Nursing Action Coalition.

Desired Result

The perspective of nurses will be engaged and prioritized in state activities to address the nursing workforce crisis.

Why does the task force recommend this strategy?

Recommendations from the NCIOM Task Force on the Future of the Nursing Workforce were developed with extensive input and perspective from nurses, employers of nurses, and other health care experts in a variety of roles. These recommendations provide a roadmap to the issues most directly impacting the nursing workforce in North Carolina and present strategies to address them. An advisory council that is focused on the implementation of task force recommendations can provide important perspective and focus to the developing Center on the Workforce for Health's nursing workforce priorities. Furthermore, ongoing guidance allows for the monitoring of progress and effectiveness, as well as timely adjustments to strategies, ensuring that the Center remains responsive to emerging challenges.

Context

In early 2021, NC AHEC, NCIOM, and the Sheps Center Program on Health Workforce Research and Policy began developing a concept for a statewide center focused on the collaborative and comprehensive development of North Carolina's workforce for health. The NC Center on the Workforce for Health (Center) will provide a forum for health employers, workers, educators, regulators, policymakers, and others throughout North Carolina to convene, discuss challenges and opportunities, share best practices and lessons learned, identify potential solutions and metrics for success, and monitor progress toward addressing these challenges. The Center on the Workforce for Health, while still under development, has identified nursing workforce as a priority area of study and action.

The first director of the new Center was named in February 2024 and the team for the Center is being put together as of spring 2024. The goals of the Center are to:

- "Provide a mechanism to ensure that efforts to address health workforce issues persist over time which will ultimately better align the supply of health workers with the demand for those workers.
- Convene employers, educators, workers, regulators, and others to develop, deploy, monitor, and assess efforts to address health workforce issues. Convenings will be at the state and local levels with bi-direction information flow.
- Gather and make available relevant data and policy, analyze, and synthesize that information to make it actionable, and provide technical assistance and guidance to interested parties when acting to address health workforce issues.
- Provide a forum for interested parties to share best practices and lessons learned."9

The Center is partnering with the NC Chamber Foundation to establish the Health Talent Alliance. This alliance will deploy Talent Pipeline Management (TPM) across the state. TPM works to "align employer demand with the workforce system's efforts to supply workers".^a

In 2023, the Secretary of Health and Human Services and Secretary of Commerce, Kody Kinsley and Machelle Baker Sanders, respectively, convened the Caregiving Workforce Strategic Leadership Council. This council developed a series of recommendations to support the nursing, behavioral health, and direct caregiver workforces. The final report from the Council names the Center on the Workforce for Health as the most viable candidate to govern the implementation of health care workforce recommendations. The Council's report states: "The Center on Workforce for Health will provide the platform where leaders can share coordinated state efforts with the private sector. This structure will not only preserve the continuity of these solutions but also guarantee their effectiveness and impact even as administrations change." 10

▶ KEY RESOURCE NEEDS



The Center on the Workforce for Health will need reliable and ongoing funding to support and sustain the important work it is planning to take on to ensure a strong health care workforce for North Carolina.

 $^{^{}a}$ Learn more at https://nciom.org/wp-content/uploads/2022/11/TPM-Health-Care-One-Pager.pdf

Strategy 19

Enhance the ability of the public to advocate for nurses

<u>Strategy 19.1</u> North Carolina nursing associations should expand consumer outreach efforts to help support enhanced understanding of the value of nursing contributions to health care.

Desired Result

Health care consumers will have a better understanding of the variety of nursing roles and the importance of nurses to the health care system. Those interested in advocating for the nursing workforce will have tools to do so.

Why does the task force recommend this strategy?

An informed consumer who recognizes the multifaceted role of nurses can better appreciate the complexities of health care services and the critical nature of nursing work. This understanding fosters respect and effective communication between patients and nurses, enhancing the care experience. Moreover, public advocacy for the nursing workforce—such as supporting policies that improve nurse working conditions and ensure competitive compensation—can directly contribute to the improvement of working conditions, interest in careers in nursing, and ultimately a sufficient and stable nursing workforce. Health care consumers play a vital role in championing the nursing profession, which in turn benefits the broader health care system and its ability to meet the needs of those it serves.

Context

Health care consumers have a powerful voice in advocating for the nursing workforce, leveraging their unique position to initiate change and improve conditions for nurses. These are several ways in which consumers can actively support nurses:

- **Education and awareness:** Consumers can seek information on issues such as workplace safety and the mental health challenges that nurses encounter. Understanding these issues allows consumers to advocate more effectively.
- Support for nursing organizations: Many nursing organizations lead efforts to improve working conditions for nurses and advance the profession. Consumers can support these organizations by participating in their campaigns, donating, or spreading their message.

- Advocacy for policy change: Consumers can advocate for policy changes that benefit the nursing workforce. This could involve supporting legislation that addresses mental health support for health care workers or offers educational incentives for nursing students. Consumers can make their voices heard by engaging with policymakers through writing letters, making phone calls, or participating in advocacy days.
- Public support and recognition: Showing public support and appreciation for nurses can have a profound impact. This could be as simple as thanking nurses for their service or as public as writing opeds, blog posts, or social media content that highlights the importance of nurses and the need to support them.
- Participate in hospital or clinic patient and family advisory
 councils: Many health care facilities have advisory councils that
 include patients and family members. These councils provide feedback
 on patient care experiences and can be a platform to advocate for
 improvements that will benefit the nursing staff and, consequently,
 patient care.
- Encourage workplace safety: Advocating for workplace safety
 measures to protect nurses from violence and injury is crucial.
 Consumers can support policies and practices that ensure a safe
 working environment for nurses, such as adequate security measures
 and protocols for handling aggressive behavior.
- Feedback to health care facilities: Providing positive feedback
 about nurses and nursing care to health care facilities and community
 organizations not only recognizes and validates the hard work of
 nurses but also reinforces to health care administrators the value of
 investing in their nursing workforce.

▶ KEY RESOURCE NEEDS



Nursing associations may need additional financial resources to implement any new outreach to health care consumers.

+

RECOMMENDATION #7

Quantify the value of nursing care

Nurses are indispensable to the health care system, providing patient care that is critical for positive health outcomes and ensuring the smooth operation of health care facilities. Despite their vital contributions, nurses often face challenges in having the financial value of their work appropriately recognized. These challenges permeate various aspects of the health care system, affecting organizational culture, workforce planning, and the overall morale and effectiveness of nursing teams. This is a complex issue rooted in systemic, organizational, and societal factors that undervalue nurses' contributions to quality patient care and community well-being.

One of the root causes of the undervaluation of nursing care is the structure of health care payments. Because nursing services are often not billable to health care payers, they can sometimes be viewed as an organizational expense. Likewise, in value-based care models that evaluate quality measures, there has been less attention given to quantifying the value that nurses add to patient care and outcomes and the consequences of inadequate nursing care.

It is also relevant to note the societal factors influencing how nurses are valued in the health care system. Traditionally nursing has been a female-dominated profession, potentially leading to influences of gender bias. Stereotypes and societal perceptions can contribute to the devaluation of nursing as a "support" rather than a critical, autonomous field within health care.

Some nurses express that they experience being undervalued through a lack of recognition and respect from organizational leadership. Some find that their expertise and insights can be overlooked in clinical decision-making processes, with their contributions minimized or ignored in favor of those of other health care professionals. This has led many nurses to feel marginalized within the health care team, affecting their job satisfaction and sense of professional worth.

Inadequate value placed on nursing care can result in a variety of impacts:

- Organizational decision-making processes that fail to recognize the
 critical role of nurses can result in inadequate staffing levels if leaders
 prioritize cost-saving measures. When nurses are stretched too thin,
 the risk of errors increases, and the ability to provide compassionate,
 patient-centered care decreases.
- Nursing departments may receive less funding for essential equipment, continuing education, and support services compared to other departments. This can hinder nurses' ability to perform their duties effectively and safely, affecting both their job satisfaction and the patient experience.

- Nurses can experience wage discrepancies that do not reflect the complexity, demands, and critical nature of their work.
- Organizational leadership that undervalues nursing can fail to provide adequate opportunities for professional development and career advancement. This lack of investment in nurses' professional growth not only affects individual careers but also the overall quality of patient care.

Demonstrating the direct link between nursing care and patient outcomes can bolster the argument for better financial valuation. Research and case studies that illustrate how nurses contribute to cost savings, reduced readmission rates, and improved health outcomes can support this goal.

The Task Force on the Future of the Nursing Workforce recommends the following strategies to quantify the value of nursing care:

<u>Strategy 20</u> – Use value-based payment and develop mechanisms to quantify the importance of nursing in quality care (Page 114)

<u>Strategy 21</u> – Explore opportunities for nurses related to National Provider Identifier (NPI) numbers (Page 116)

Related Recommendations from Other Groups

Nurse Staffing Task Force. Nurse Staffing Task Force Imperatives, Recommendations, and Actions. American Association of Critical-Care Nurses and American Nurses Association; 2023

- Recommendation: Advocate for the development and utilization of approaches that quantify nursing impact on organizational performance and outcomes
- Recommendation: Advocate for universal adoption and utilization of systems, including a unique nurse identifier, that capture data to quantify nursing value
- Recommendation: Collaborate with payers to explore health system payment models that reflect the value of nursing

Strategy 20

Use value-based payment and develop mechanisms to quantify the importance of nursing in quality care

<u>Strategy 20.1</u> North Carolina health insurance plans and payers and NC Medicaid should incorporate nationally recognized nurse-sensitive indicators for acute and ambulatory settings as part of quality measures for providers engaged in value-based payment arrangements. To start, this should focus on quality measures that are already being measured.

Strategy 20.2 The North Carolina Department of Health and Human Services, in partnership with nursing workforce researchers, should evaluate nurse-sensitive quality indicator data across providers to identify trends in staffing policies and team-based care approaches that are most supportive of higher quality.

Desired Result

Data on quality of care will reflect the value that nurses bring to patient care.

Why does the task force recommend this strategy?

Nurse-sensitive indicators (NSI) can directly reflect the quality and safety of patient care, which are core to value-based health care. Measuring and monitoring these indicators can help health care providers identify areas for improvement in patient care and mechanisms to reduce the cost of care. More to the point of the task force's recommendation, monitoring NSIs can highlight the critical role of nursing in patient care, acknowledging that nurses are integral to achieving positive health outcomes. Integrating these indicators supports a holistic approach to patient care, emphasizing the importance of teamwork, patient-centeredness, and the contribution of each health care professional.

Context

NSIs are metrics that gauge the quality and effectiveness of nursing care and its impact on patient outcomes. These indicators include health complications, staffing levels, nursing satisfaction, and patient satisfaction. NSIs can be used in value-based payment arrangements, which prioritize outcomes, quality, and efficiency over the volume of services provided.

Research suggests that improving nurse-sensitive indicators can enhance patient experiences and outcomes, leading to higher performance scores and potentially greater reimbursements under value-based care arrangements. ¹¹ Thus, investing in nursing care by focusing on these indicators not only improves patient care but also aligns with the financial objectives of health care organizations transitioning to value-based payment models.

NSIs are most commonly attributed to acute care settings as these measures can be difficult to identify for ambulatory care settings. This is in part because of the nature of practice and nursing roles not being standardized in ambulatory care. However, in 2013, a task force commissioned by the American Academy of Ambulatory Care Nursing produced a report that describes:

- The evidence behind NSIs in ambulatory care.
- Existing NSIs with recommended changes for more meaningful use in ambulatory care.
- 13 newly proposed measures that uniquely reflect the role of the RN in the ambulatory care setting. 12

Examples of Nurse-Sensitive Indicators

Structure

- Nurse turnover
- · Patient volume and flow
- Patient contacts
- RN education/specialty certification
- Staffing and skill mix
- Workforce characteristics

Process

- · Advance care planning
- Body mass index screening and follow-up
- Care coordination
- Depression screening and follow-up
- Diabetes care
- · Hypertension screening and follow-up
- Restraints
- · Suicide risk screening and follow-up

Outcome

- Assaults
- Catheter-associated urinary tract infections
- Multidrug-resistant organisms
- · Pain impairing function
- Patient falls
- Pediatric peripheral intravenous infiltrations
- Pressure injuries
- · Ventilator-associated events

Source: PressGaney. Your comprehensive guide to the Press Ganey National Database of Nursing Quality Indicators (NDNQI). https://info.pressganey.com/press-ganey-blog-healthcare-experience-insights/your-comprehensive-guide-to-the-press-ganey-national-database-of-nursing-quality-indicators-ndnqi

Many NSIs are already tracked as standard quality metrics. This is important to note, as documentation burden can be a significant challenge for nurses and there is little interest in adding additional data collection or documentation. Health care institutions can also use data analytics tools to extract and analyze information related to NSIs from existing datasets. By doing so, organizations can identify trends, areas for improvement, and the impact of nursing care on patient outcomes without needing extra documentation. Another approach is to align NSIs with already mandated quality measures and reporting systems. This alignment ensures that data collection serves multiple purposes, including regulatory compliance and quality improvement. For example, if a quality measure focuses on patient falls, the same data can be used to analyze the relationship to nurse-sensitive aspects such as staffing levels and nursing interventions.

USING NSIS TO INDICATE THE VALUE OF NURSING CARE

Data from nurse-sensitive indicators can be powerful in showcasing the value that nurses bring to health care, since they can directly reflect the quality of care and patient outcomes influenced by nursing activities. By analyzing trends and outcomes associated with these indicators, researchers can:

- Demonstrate Nursing Impact on Patient Outcomes: Data showing improvements or stability in areas such as reduced infection rates or enhanced patient recovery times can directly correlate to the quality of nursing care.
- 2. Identify Optimal Staffing Models: By linking patient outcomes to staffing levels and skill mix, organizations can make data-driven decisions about staffing needs. This can help justify the allocation of resources toward nursing and support the implementation of staffing models that optimize patient care and nurse well-being.
- **3. Highlight Areas for Improvement:** Data from NSIs can identify areas where nursing care can be enhanced, guiding targeted interventions and training programs.
- **4. Support Advocacy and Policymaking:** Evidence from NSIs can be used to advocate for policy changes at both the institutional and governmental levels.
- **5. Financial Implications:** Data linking nursing care to cost savings, such as through reduced hospital readmissions or shorter lengths of stay, can highlight the economic value nurses bring to health care institutions.

Strategy 21

Explore opportunities for nurses related to National Provider Identifier (NPI) numbers

Strategy 21.1 All NC RNs should obtain an NPI to elevate and recognize them as clinicians providing vital services to patients.

Desired Result

Elevate the recognition and visibility of RNs within the health care system by enabling accurate tracking of their contributions to patient care.

Why does the task force recommend this strategy?

Increased use of National Provider Identifier (NPI) numbers for RNs could facilitate more direct billing for nursing services, potentially opening new avenues for nurses to contribute to patient care. While possession of an NPI number would not change reimbursement within the current system, it is an important first step. Having an NPI number could streamline the process of documentation and communication across health care systems, improving efficiency and reducing administrative burdens. Ultimately, this recognition supports the professionalization of nursing, acknowledges nurses' critical role in patient care, and can lead to broader opportunities for nurses in various health care settings, enhancing workforce flexibility and the overall quality of patient care.

Context

NPI numbers serve as unique identifiers for health care providers, facilitating efficient data transmission and tracking across health care systems. These 10-digit numbers are utilized by a wide range of relevant parties, including health care organizations, insurance companies, and government agencies. NPIs are available for registered nurses, advanced practice registered nurses (APRNs), physicians, dentists, chiropractors, and psychologists, among others. They are crucial for billing, claims processing, and maintaining accurate patient records. Importantly, NPIs are standardized across health care professionals and are transferable across state lines, ensuring seamless integration into national databases. Currently, very few RNs have an NPI, however participation in this data system "would enhance our understanding of the nurse workforce and its contributions to safe, effective, high-quality care". 14

"In the current healthcare climate, invisibility in data equals invisibility, period."

-Chan et al. An overview and policy implications of national nurse identifier systems: A call for unity and integration. Nursing Outlook. 71(2), March 2023. https://doi.org/10.1016/j.outlook.2022.10.005

Applying for an NPI is a straightforward process that is free, fast, and easily accessible. Nurses can either apply individually or have their organization apply on their behalf. The Centers for Medicare and Medicaid Services (CMS) oversees the enrollment process through the National Plan and Provider Enumeration System (NPPES), and applications are typically processed within 1 to 20 days. Additionally, nurses can begin the application process while still students, streamlining the transition to professional practice.

In a health care landscape where data visibility is paramount, obtaining an NPI can be an effective way for nurses' contributions to be recognized and valued. By having unique identifiers, nurses' individual and collective contributions to patient care outcomes can be accurately tracked and acknowledged. This aligns with the recommendations of the **National Academies of Sciences, Engineering, and Medicine,** which underscore the importance of tracking nurses' contributions for achieving health equity.

"[H]ospitals and health systems need the ability to identify nurses in the EHR [electronic health record] enterprise resource planning system (ERP), and other health IT systems for documentation, education, research and training purposes; nursing documentation in the EHR, ERP, and other health IT systems can demonstrate nurses' value as healthcare transitions to a value-based reimbursement model; nursing documentation can demonstrate nurses' value and impact on improving patient/population outcomes, patient safety, operational efficiency and clinical effectiveness; nurses and employers need a mechanism to track nursing licensure across job and location changes; institutions need the ability to verify licensure status for their nurse employees."

-University of Minnesota. Nursing knowledge: 2018 big data science. Conference conducted at the University of Minnesota, June 13–15, 2018. https://www.nursing.umn.edu/sites/nursing.umn.edu/files/nkbds_proceedings_2018.pdf

While specific examples may vary, numerous nurses across different specialties and settings have successfully obtained NPIs. For instance, nurses working in federally funded programs, home health, long-term care, and research within health care systems are among those who benefit from NPI enrollment. The following are some possible use case scenarios for RNs with NPIs.

Attribution of work to understand quality of care, the value and contributions of nursing, and reimbursement models

"Any of the services nurses can provide in ambulatory, community, and primary care settings are billable if nurses have an NPI. There is a growing body of evidence highlighting the potential roles of RNs in primary care, including preventive care, chronic illness management, practice operations, care management, and hospital transition care.
 Needleman, 2017 points out that RNs practicing in primary care can bring significant income into this practice setting, far above the cost of RN employment. Further, RNs in the outpatient community, and primary care settings are practicing more autonomously, leading case management, managing patient panels, and coordinating complex care." 15-17



"[A] nurse identifier would allow the nursing profession to expand
its impact in the context of interdisciplinary teams in various types of
practice settings. Using common, consistent, and accessible identifiers
across provider types allows employers, researchers, and policymakers
to understand specific team configurations in relation to specific
types of population needs and could lead to greater efficiency and
effectiveness. The NPI allows nursing to join an interprofessional
identifier system, one that would enhance visibility in healthcare and
health services research and increase the likelihood of future models of
interprofessional care optimizing the scope of nursing practice."14

Credentials and privileges to understand scope of services and scope of practice

 "Attribution data cross-referenced with workforce data can help articulate the scope of services and scope of practice of nurses and advanced practice registered nurses to inform policy and education in various types of practice settings."¹⁴

Evaluation of the impact of federal dollars, grants, scholarships, and loans on the nursing workforce to support future funding

 "The Health Resources and Services Administration (HRSA) is supportive of the expansion of NPIs to nurses because it would allow them to track clinicians over time and assess the impact of grants/ loan/scholarship programs. This would help them build links between education, training, and healthcare service in various types of practice settings. Such linkages would empower HRSA and the nursing community to demonstrate the value and reach of these workforce programs and support future funding."14

KEY RESOURCE NEEDS



Employers of nurses can help increase awareness of RNs about how to obtain an NPI.



This effort may require organizations such as the Board of Nursing, nursing associations, schools of nursing, and NC AHEC to partner in a campaign encouraging RNs to obtain NPIs.

RECOMMENDATION #8

Optimize payment for health care services to support nursing care

Optimizing payment for health care services such as school health, primary care, long-term care, and public health is crucial to supporting the nursing workforce and ensuring the delivery of high-quality care. This optimization is important for several reasons:

- Attracting and Retaining Nursing Talent Competitive
 compensation is essential for attracting and retaining skilled nurses.
 Adequate payment structures reflect the value and importance of
 nursing services, encouraging professionals to enter and remain in the
 field. This is particularly vital in settings outside of acute care, where
 the demand for nursing services is high but the pay has traditionally
 been lower.
- Supporting Expanded Roles Nurses increasingly take on expanded roles in health care delivery, including preventive care, chronic disease management, and community health initiatives. Optimizing payment for services in primary care, school health, and public health acknowledges these expanded roles and provides the necessary resources for nurses to effectively contribute to these areas.
- Improving Access to Care Adequate payment for health care services can help health care facilities, including long-term care and school health programs, staff their operations sufficiently with qualified nurses. This directly impacts patient access to care, ensuring that individuals receive timely and appropriate services, which is especially important in underserved and rural areas.
- Facilitating Professional Development Optimal payment structures
 can provide resources for ongoing professional development and
 education for nurses. This is essential for keeping the nursing
 workforce up to date with the latest health care practices and
 technologies.

Adequate payment for health care services across various settings is essential for supporting the nursing workforce. The employment of nurses is an important component of how payments for services are allocated, directly affecting competitive compensation and staffing priorities, retention of skilled and experienced nurses, and ultimately access to quality of care for patients. The Task Force on the Future of the Nursing Workforce recommends the following strategies for optimizing payment for health care services to support nursing care:

<u>Strategy 22</u> – Increase funding to support school nursing (Page 119)

<u>Strategy 23</u> – Use funding mechanisms to support the long-term care nursing workforce (Page 122)

Strategy 24 – Promote RN billing in primary care (Page 124)

<u>Strategy 25</u> – Expand the state budget in key shortage areas for nursing care (Page 127)



Strategy 22

Increase funding to support school nursing

<u>Strategy 22.1</u> Implement state policies and practices that support schools in billing Medicaid to provide additional funding for school nurses.

Strategy 22.2 The North Carolina Department of Health and Human Services, North Carolina Department of Public Instruction, and North Carolina Department of Insurance should partner to produce a report exploring additional methods of funding school nursing, such as private health insurance and tax revenue. The North Carolina General Assembly should consider these additional options.

Desired Result

Increased financial support for school nurses in North Carolina through:

- Reduction in administrative burdens, enabling schools and public health departments to optimize Medicaid reimbursement for nursing services, and
- Identification of additional avenues to supplement current funding for school nurse salaries and other support to make these positions more competitive.

Why does the task force recommend this strategy?

Currently, school nurses face significant funding challenges and are often overwhelmed by the demands of serving large populations of students. There is an opportunity to help address this challenge with new guidance from the Centers for Medicare & Medicaid Services (CMS), which offers a streamlined approach to Medicaid funding for school health services, reducing administrative burdens while increasing financial support. By prioritizing improvements to the Medicaid reimbursement process for school nurses, North Carolina can improve access to quality health care services for students across the state. In addition, exploring supplementary funding sources is imperative given the indispensable role school nurses play in promoting the health and well-being of students.

Context

IMPORTANCE OF SCHOOL HEALTH SERVICES AND SCHOOL NURSES

School health services are vital for ensuring the health and well-being of students, especially considering the significant amount of time students spend in educational settings. School nurses operate as integral members of a broader interdisciplinary team that includes counselors, social workers, and psychologists. Their role encompasses identifying and addressing acute health needs, managing chronic health conditions, providing health education, and developing policies to cultivate healthy school environments. School nurses serve as key agents in identifying and addressing unmet health needs that can negatively impact a child's mental health, behavior, and academic attendance and performance. Hey can also contribute to savings on health care costs by managing conditions from within the school, which can help avoid unnecessarily sending children home or to the hospital. School health services can also bridge the gap for lower-resourced populations, such as those in rural settings where health care provider availability, transportation, and

time off from work present barriers to accessing health care services. 24,25 Notably, a cost-benefit analysis estimated that for every dollar invested into school nursing, there was a \$2.20 gain in savings through reduced medical care costs and parent and teacher productivity costs. 26 Similarly, a Brown University survey indicates that teachers prioritize increased access to school counselors and nurses over salary raises or reduced class sizes, recognizing the invaluable contribution of health care professionals in mitigating teacher burnout and improving overall student well-being. 27 However, despite the many important contributions of school nurses, including improving access to health services for students and reducing teacher burnout, only 66% of schools nationally have access to a full-time school nurse. 28

A Brown University survey indicates that teachers prioritize increased access to school counselors and nurses over salary raises or reduced class sizes, recognizing the invaluable contribution of health care professionals in mitigating teacher burnout and improving overall student well-being.

-Lovison VS, Mo CH. Investing in the Teacher Workforce: Experimental Evidence on Teachers'
 Preferences. Brown University. https://edworkingpapers.com/sites/default/files/ai22-528.pdf



17%-19% of students in NC receive services related to chronic health conditions like asthma or diabetes while at school



48% of school nurses serve more than one school;

12% serve more than two schools



60% of schools in NC do not meet the recommended standard* of one school nurse for every 750 students

*Recommended standard adopted by the General Assembly in 2004 as a goal for the state. Source: North Carolina Department of Health and Human Services. North Carolina Annual School Health Services Report Brochure 2020-2021. https://www.ncdhhs.gov/20-21annualshsbrochurepdf/open; Hoban, R. What is The Right Number of School Nurses for North Carolina? NC Health News. https://www.northcarolinahealthnews.org/2018/02/16/school-nurses-number-story/

EMPLOYMENT DYNAMICS AND CHALLENGES

Despite their crucial role in promoting the well-being and academic success of students, school nurses encounter significant challenges in their profession. One of the primary hurdles is recruiting an adequate number of nurses. Budgetary limitations lead to comparatively low pay, with one estimate of a median annual wage of \$58,530 for a nurse employed in a public school versus \$75,030 for their peers employed by hospitals.^{29,30}

In North Carolina, 52% of school nurses are directly employed by the local public school unit (PSU) and another 43% are contracted through the local health department. The remaining 5% of school nurses are employed by a hospital or health alliance.³¹ This decentralization results in salary disparities across districts, with wealthier areas having the ability to supplement salaries, making school nurse positions in those regions more competitive.

The role of school nurse requires a significant level of confidence, autonomy, and skill.²⁸ School nurses may feel stretched thin and overworked as they manage high caseloads of students, often traveling between multiple schools, without coverage to take time off work. Additionally, misconceptions surrounding the role persist, with many unaware that school nurses have specialized training and certifications and must possess a diverse skill set encompassing chronic disease management, health education, and population health monitoring.

CURRENT MEDICAID REIMBURSEMENT FOR SCHOOL HEALTH SERVICES

The process of receiving Medicaid reimbursement for school health services is complex and nursing services are often not included. However, many school nurses are already performing many services that could be reimbursed by Medicaid, such as helping families enroll in Medicaid, coordinating services with community providers for students, vision and hearing screenings, and diabetes and asthma management.³² While Medicaid currently reimburses for some school health services, administrative challenges related to billing systems create barriers for PSUs and local public health departments to contract with Medicaid, which can be a disincentive to accessing these funds, especially for smaller or rural entities.³² In one survey, a quarter of rural school districts indicated they no longer participate in the Medicaid program because they lost money due to the cost of complying with paperwork. Even though nurses often provide reimbursable services, PSUs and health departments rarely submit claims for nursing services and instead receive funding from the state. In contrast, other providers of school health services, such as psychologists and occupational therapists, do submit claims to Medicaid to help fund their positions, though their process is also complex and underused.³³

THE TIME IS NOW: NEW CMS GUIDANCE AND STATE SCHOOL ELECTRONIC HEALTH RECORD

In May 2023, CMS released new guidance related to school health services and Medicaid billing with the goal of decreasing administrative burden and increasing reimbursement levels, especially for rural and under-resourced schools. The additional Medicaid funds are estimated to bring in millions of additional federal dollars for school-based services. Ecause school Medicaid is carved out of the regular Medicaid program, current state school funding contributions count as the needed matching dollars, meaning North Carolina will not have to contribute additional Medicaid funds. North Carolina will need to pass a state plan amendment (SPA) to comply with the new rules regardless, presenting an opportunity to examine billing processes to make meaningful and thoughtful changes in support of those who provide school health services. Because schools and public health departments rarely receive Medicaid reimbursement for nursing services, they will need more support to develop billing processes that do not add additional burden to the nurses.

This funding also has the potential to help schools with the students most in need by reducing the administrative burden for them to participate in Medicaid reimbursement. Schools with more students enrolled in the Medicaid program could also receive more funding as reimbursement is partially based on the percentage of students who are Medicaid eligible. Additionally, the Medicaid funding that supports one school nurse can benefit the entire school district, not just the students eligible for Medicaid.

In 2023, North Carolina released a new statewide electronic health record (EHR) for schools. This EHR has the potential to improve care by making information more accessible for students who transfer schools and by streamlining billing. Ideally, nurses should be able to chart students' care as they normally would in the EHR, and billing professionals who are submitting claims on behalf of other professionals should be able to pull data from the EHR for nurses as well.

SPECIFIC RECOMMENDATIONS

When NC Medicaid submits a SPA to reflect the new CMS rules, they should adopt the flexibilities allowed in CMS guidance from May 2023^b regarding Medicaid funding for school-based services.^c Components of the SPA should include:

- More types of providers reimbursed for services
- Coverage for all services within a given provider's scope of practice
- Removal of requirement for physician authorization for medical necessity and defer to scope of practice to authorize services
- Presence of a plan of care by a school nurse, but no formal IEP/504/BIP is required
- Methods to reduce the administrative burden associated with billing
- A small portion of the anticipated increase in federal reimbursement should go toward technical assistance to support administrative costs of billing. (Possible partner for technical assistance is NC AHEC.)

 $[^]b \ \textit{The CMS guidance from May 2023 can be found at https://www.manatt.com/Manatt/media/Documents/Articles/CMS-SBHC-Guidance_2023-08_b.pdf}$

Examples of SPAs related to Medicaid and school-based services can be found at https://www.medicaid.gov/resources-for-states/medicaid-state-technical-assistance/medicaid-and-school-based-services/technical-assistance-materials/index.html



IDENTIFYING ADDITIONAL FUNDING SOURCES FOR SCHOOL HEALTH

There is an opportunity for private/commercial insurance payers to reimburse for school health services, especially if Medicaid billing can be streamlined as outlined in Strategy 22.1. For instance, in 2023 New York Governor Kathy Hochul pursued legislation requiring commercial insurance providers to reimburse for school-based services at rates comparable to Medicaid.³⁹

Moreover, since state budgets are typically the primary funders of educational services, including school nurses, states such as Colorado, Nevada, California, and Oregon have bolstered educational funding through additional tax revenue, from sources such as recreational marijuana sales, property taxes, and state income tax. 40-45

Considerations should be made for equitable distribution of funds to districts with the greatest need. These could include the number of students receiving free or reduced lunch, number of children with medically complex needs, types of interventions needed, experience level, number of students and distance between school buildings, public health needs assessment, etc.

ADDITIONAL OPPORTUNITIES TO SUPPORT SCHOOL NURSES

- Creating a position specifically dedicated to school Medicaid and/or additional positions in the School Health Nurse Consultant Team.⁴⁶
- Support programs such as Every Student Counts, which is working to quantify the unique contributions of school nurses through a robust school health data set (of school-nurse-sensitive indicators) to support school nursing policy decisions.⁴⁷
- Support innovations that can free up time for the existing school nurses so they can help more students. For example, in one California district, school nurses established a telephone triage help line. Nurses rotate the on-call position, typically receiving between 30 and 50 calls per day. 48,49

▶ CONTRIBITION ★ CONTRIBITION CONTRIBITION ★ CONTRIBITION CONTRIBITION CONTRIBITION CONTRIBITION CONTRIBITION CONTRIBITION CONTRIBITION CONTRIBITION



Funding for personnel and technical assistance for research is needed for drafting the SPA, rolling out new billing systems, and ensuring the EHR functions as intended.



Technical assistance is needed for local public school units, public health departments, and school nurses (and other school-based providers) regarding implementation of the new rules.

Strategy 23

Use funding mechanisms to support the long-term care nursing workforce

Strategy 23.1 NC Medicaid should consider and/or implement policies that help address the long-term care nursing workforce shortage to ensure quality of care, by:

- a) Considering the impact that transitioning to Medicaid managed care for dual eligibles would have on the nursing workforce and making efforts to ensure any transition does no harm to that workforce nor makes it harder to grow that workforce.
- b) Piloting a proposal-based incentive program directed at improving the workforce.
- c) Evaluating the overall funding and reimbursement levels for long-term services and supports (LTSS) (e.g., nursing facilities, homeand community-based services, etc.) to ensure they are adequate to support and attract a sufficiently sized nursing workforce to provide high-quality LTSS to North Carolinians who need those services.

Desired Result

Ensure quality of care for long-term services and supports (LTSS) by addressing the nursing workforce shortage through policy considerations and incentive programs.

Why does the task force recommend this strategy?

The task force advocates for this strategy due to the critical role nurses play in providing LTSS, particularly in long-term care (LTC) facilities, the growing need for LTSS, and the persistent challenges of recruitment and retention in the nursing workforce. Additionally, the strategy aligns with the goal of keeping an eye on high-quality LTSS amidst demographic shifts and health care transformations.

Context

NURSES IN LONG-TERM CARE

Nurses are central to LTC facilities, providing comprehensive care that includes assessment, medication administration, wound care, emotional support, and coordination with other health care professionals. Nationally, nurses comprise about 16% to 34% of the workforce in LTC and function as the leaders of day-to-day care, supervise direct care workers, and ensure the quality of care and residents' quality of life. ⁵⁰ In LTC settings, staff are disproportionately women, people of color, and immigrants. ⁵¹ Nurses with an associate degree are more likely to work in LTC and home care/hospice, with around half of LPNs and 8% of RNs in North Carolina working in these settings. ⁵²

GROWING NEED FOR LONG-TERM CARE WITH AGING POPULATION

North Carolina, like many states, faces an increasing demand for LTC services due to an aging population. North Carolina ranks 9th nationally for the number of people aged 65 years and older. With advancements in medical care prolonging life expectancy, the oldest age group (85+ years) is expected to grow by over 114% in the next two decades. Additionally, LTC facilities are increasingly providing a higher level of care, which requires adequate nursing staff to meet patients' complex needs. For older adults who are not in residential long-term care, many will require some form of LTSS in a home or community setting.

FUNDING MECHANISMS IMPACTING NURSING WORKFORCE

State Medicaid programs are the primary payers for LTC. Adequate funding is essential to ensuring sufficient staffing levels and competitive salaries. However, current payment rates for LTC services can be a limiting factor for competitive wages and other recruitment and retention strategies outlined elsewhere in this report. As a result, LTC facilities with a higher proportion of residents paying through Medicaid may have more challenges with quality, and research has shown that residents of color are more likely to live in those facilities.⁵³ Other states, such as Illinois, have passed legislation to improve Medicaid rates and determine payment according to performance across key quality metrics, including staffing measures.⁵⁴

EXPLANATION OF CMS PROPOSAL FOR STAFFING STANDARDS IN NURSING FACILITIES

The Centers for Medicare & Medicaid Services (CMS) has proposed guidelines for staffing ratios in nursing facilities to enhance resident safety and improve quality of care, which are based on the CMS Nursing Home Staffing Study, published in 2023. 55,56 The proposed CMS staffing standards were discussed earlier in the report, see Page 99 for more information.



Possible LTC Models to Support Workforce

The Institutional Special Needs Plan (I-SNP) model, tailored for long-stay nursing home residents within Medicare Advantage programs, integrates on-site nurse practitioners supervised by medical directors. I-SNPs are a possible model for reducing costs and improving care, with one study showing a 51% reduction in emergency department visits and a 38% reduction in hospitalizations.*.** Reports from people within the industry also indicate higher job satisfaction among nurses and greater satisfaction with care among residents. Provider-led I-SNPs can also generate an additional source of income for LTC companies, allowing them to have more revenue to invest in maintaining staffing levels and quality of care.***

As North Carolina progresses through ongoing health care transformation efforts that aim to align incentives and enhance care for individuals who are eligible for both Medicare and Medicaid (dual-eligibles), the effective components of the I-SNP model should be considered.**** Piloting an Aligned I-SNP model tailored to serve the needs of nursing home residents is one approach for integrating Medicare and Medicaid. Such an approach may also yield benefits for the nursing home workforce.

*Schotland, et al. Medicare Payment Policy for Post-Acute Care in Nursing Homes. Penn Leonard Davis Institute of Health Economics. https://ldi.upenn.edu/wp-content/uploads/2023/09/Penn-LDI-Issue-Brief-September-2023_FINAL.pdf

**McGarry BE, Grabowski, DC. Managed Care for Long-Stay Nursing Home Residents: An Evaluation of Institutional Special Needs Plans. Am J Manag Care. 2019;25(9):438-44. https://ajmc.s3.amazonaws.com/_media/_pdf/AJMC_09_2019_McGarry%20final.pdf

***Stubbs, F. (2023, February 9). Revenue-boosting strategies for a struggling SNF industry. McKnight's Long-Term Care News, NA. https://link.gale.com/apps/doc/A737059182/AONE?u=anon~cfa8216d&sid=googleScholar&xid=092bf16c

****Duke Margolis Center for Health Policy. North Carolina Medicare-Medicaid Integration: Advancing Whole-Person Care. October 2022. https://healthpolicy.duke.edu/sites/default/files/2022-10/ NC%20Medicare-Medicaid%20Integration%20Advancing%20Whole-Person%20Care_2.pdf

KEY RESOURCE NEEDS



In 2024, CMS and the Health Resources and Services Administration (HRSA) will be investing over \$75 million to bolster the LTC workforce through financial incentives like scholarships and tuition reimbursement. North Carolina should leverage these funds once the mechanisms for doing so are announced, potentially applying for state participation and/or assisting individuals and nursing facilities in effectively accessing these resources.

Strategy 24

Promote RN billing in primary care

<u>Strategy 24.1</u> The North Carolina Area Health Education Centers (NC AHEC) should develop and disseminate a course related to inclusion of RNs on primary care practice care teams, with information about scope of practice, patient outcomes, and revenue generation.

Desired Result

More primary care practices in North Carolina will employ the services of registered nurses (RNs) to provide care that is within their standard scope of practice and billable to insurance payers.

Why does the task force recommend this strategy?

Integrating RNs into more primary care settings can improve access to care and care quality for patients. Barriers to increasing the use of nursing services in primary care may include a lack of awareness of RN scope of practice and related opportunities to bill for services. The task force seeks to encourage primary care practices to capitalize on the full scope of practice that RNs are capable of providing. In addition, billing for RN services can generate additional revenue for their practice. This financial compensation recognizes RNs' expertise and contributions and elevates the status of nursing within the health care team. NC AHEC is a natural partner in this work as it currently engages in a variety of practice supports.

Role of RNs in Primary Care

"BSN-RNs represent an untapped resource in primary care, and the holistic approach that nursing practice provides can contribute to improved patient outcomes. For example, BSN-RNs use critical clinical judgement skills to help the medical team address patientcentered health goals, identify and address social determinants of health, ameliorate health literacy issues, and support the medical treatment plan. In addition, they perform patient education, population health data analytics, telephone triage, quality improvement, patient coaching, care coordination, and advocacy to support client self-management and care management. One of the most valuable ways in which the role can support practice viability and outcomes is through Medicare Annual Wellness Visits, which are within the RN scope of practice. BSN-RNs also contribute to behavioral health integration using health assessments and other interventions, and they serve as leaders to promote teamwork and collaboration via relational and communication skills that guide the team in coordinated care delivery."

-Dolansky MA & Livsey KR. Preparing RNs for emerging roles in primary care. American Nurse Journal. October 2021. https://www.myamericannurse.com/wp-content/uploads/2021/10/an10-Primary-Care-4-924.pdf

Context

Fee-for-service is the primary payment mechanism for primary care practices, with only 6.7% of total revenue in primary care practices coming from value-based contracts in 2021.⁵⁷ Much of the payment for services is centered on care provided by a physician or other qualified health provider

(QHP) who can independently diagnose, treat, and bill. For purposes of billing, RNs, LPNs, and other licensed and non-licensed staff are considered clinical or auxiliary staff.⁵⁷ Under this model, licensed nurses have not been specifically identified as qualified providers of services, and instead are considered support staff. There are a variety of opportunities for ambulatory practices to bill for services that fall within the independent scope of practice for RNs.

A Business Case for RNs in Primary Care

"An expanded role for RNs in primary care may require more RN staff. The business case question is whether the additional costs of staffing can be offset either with higher revenues or cost reductions in other areas. The answer to these questions will differ depending on whether the practice is operating under a FFS revenue model, a capitated model, or other value-based purchasing model. Practices increasingly operate under multiple models of payment and may tailor services provided depending on the financial incentives. For example, they may offer case management services to all patients, but aggressively promote these for patients seen under risk contracts. Similarly, they may focus hospital transition services intended to reduce readmissions on patients under capitation or shared savings contracts such as ACO agreements."

Source: Preparing Registered Nurses for Enhanced Roles in Primary Care - Expanding The Role Of Registered Nurses In Primary Care: A Business Case Analysis. Jack Needleman, PhD. June 2016. Pages 113-139. https://macyfoundation.org/assets/reports/publications/macy_monograph_ nurses_2016_webpdf.pdf

BASICS OF BILLING IN PRIMARY CARE

There are detailed specifications for how services are billed in primary care and who can bill for different types of services.^d Some basics of these billing details include:

- Healthcare Common Procedure Coding System (HCPCS) codes are used in conjunction with Current Procedural Terminology (CPT) codes to describe and report medical procedures and some other medical services.
- Evaluation and Management (E/M) codes are used to bill for services in outpatient or ambulatory care settings.
- Coding based on number and complexity of patient issues assessed during a visit, medical decision-making, or total time required for the service.
- Distinctions are made between new and established patients.
- There are requirements that must be met for nurses and other clinical staff to provide billable E/M services.⁵⁷

d For a useful resource about billing specifications, access: Witwer SG, Mattson A, Jessie AT. Registered Nurse Billing in Primary Care. Nursing Economics. July/August 2023. 41(4):200-207. https://www.aaacn.org/sites/default/files/documents/RNBilling.pdf



EXAMPLES OF BILLABLE NURSING SERVICES IN PRIMARY CARE

CPT and/or HCPCS codes commonly billed by nurses in primary care include:57

- Code 99211 The only CPT code "that allows RNs and clinical staff
 to bill for direct services without the presence of a QHP" and can be
 used for evaluation or management of established patients; this code
 includes a requirement for assessment, which would be appropriate
 for an RN but not for other non-licensed staff. Practices should
 consult CMS guidance on requirements for billing under this code.
- **Minor Procedures** Procedural codes can be used for minor procedures like injections, ear washes, and catheterizations that "occur either as part of a QHP visit or at a separate nurse visit".
- Care Management Services These services can include "communication, coordination of care with community or other specialty care, assessment, education, counseling, brief intervention, management of care transitions, and development, evaluation, and review of a comprehensive plan of care". Because of the holistic approach and broad education that nurses possess, they are well suited to lead care management teams to support patients between clinic visits.
- **Chronic Care Management** Clinical staff may use CPT code 99487, 99489, or 99490 to bill for services related to care for patients with "two or more chronic conditions expected to last at least 12 months or the lifespan of the patient".
- Principal Care Management Clinical staff may use CPT code 99426, 99427, or 99439 for services lasting at least 30 minutes that are "for patients with a single chronic condition or when services are focused on one high-risk condition".
- Behavioral Health Integration Clinical staff may use CPT code 99492, 99493, 99494, or HCPCS code G2214 when providing services "for patients who continue to be treated by their primary provider, but their behavioral health diagnosis would benefit from a team approach".
- Transitional Care Management Clinical staff may use CPT code 99495 or 99496 (depending on the complexity of service) to help address issues around transitions of care and prevention of unnecessary readmission.

- Initial Preventive Physical Examination Clinical staff may use code G0402, G0403, G0404, or G0405 for the "Welcome to Medicare Preventive Visit"; visits "cannot be billed by RNs without a face-to-face component from the QHP".
- Annual Wellness Visit Clinical staff may use codes G0438 or G0439 for the Medicare beneficiary wellness visits. Other than ordering of medical tests, the screening and education included in these visits fall within the scope of the RN's practice.

Cost-Effectiveness of RN-Led Annual Wellness Visits

With the exception of ordering tests or specialty referrals, the assessment, patient education, and development of a health promotion plan involved in an Annual Wellness Visit (AWV) all fall within the licensed scope of an RN. Under current Medicare rules, all billing is submitted incident to the provider.

For each AWV completed (and correctly billed), the practice is reimbursed roughly \$227 per visit. Based on 28 AWVs completed each month, a practice would receive around \$6,356 in reimbursement with a net additional revenue of \$5,222 per month after RN costs:

- Estimated RN time spent (including pre-visit planning) of 1.5 hours per AWV
- · Estimated RN salary of \$27 per hour
- RN costs for AWVs = \$1,134 per month

Effort cost for a physician to conduct an AWV is substantially higher, thus reducing net revenue gained. Additionally, RN-led AWVs can provide enhanced access for walk-in or other appointments by eliminating the provider time that would be spent for a 40- to 60-minute AWV.

Medical providers at rural health clinics and federally qualified health centers are required to have some time spent in a face-to-face encounter with the patient due to billing rules.

Source: Personal communication with task force member.

₩ KEY RESOURCE NEEDS



NC AHEC and its affiliated program sites will need financial resources to expand programming around practice supports for primary care.



Nursing students would benefit from more preparation to serve in primary care settings. In addition, nurses need better education about billing and payment models in primary care and other settings to effectively advocate and educate about the value they can bring to these settings.

Trade associations serving physicians and administrators in primary care settings can help to advocate for opportunities to integrate nurses into private practice and connect providers to AHEC supports.

1

Strategy 24

Promote RN billing in primary care

Strategy 24.2 North Carolina Medicaid and private payers should pilot coding processes that allow optimal use of RN services within primary care.

Desired Result

There will be more opportunities to financially support the inclusion of RNs on the primary care team to support value-based reimbursement goals and improve care coordination.

Why does the task force recommend this strategy?

The integration of RN-led services in primary care settings presents a valuable opportunity for Medicaid and private payers to enhance patient care while potentially reducing overall health care costs. Nurses can play a crucial role in supporting primary care services, such as enhanced care coordination and care management, especially among patients with chronic conditions. Increasing the opportunities to integrate RN-led services in these roles can present a positive business case for the practice and maximizes their ability to function to the fullest extent of their scope of practice.

Related Recommendations from Other Groups

Proceedings of a Conference on Preparing Registered Nurses for Enhanced Roles in Primary Care:

"Payers should develop alternative payment models—such as shared savings for reducing expensive hospital admissions, re-admissions, and emergency department visits—so that the work of all primary care team members, including RNs, adds value rather than simply increases expenses. In fee-for-service systems, specific RN-visit types, such as Medicare wellness visits and care coordination, should be reimbursed at a higher level. RNs should be encouraged to acquire a National Practitioner Identifier (through the National Plan and Provider Enumeration System) for both payment and tracking purposes."

-https://macyfoundation.org/assets/reports/publications/macy_monograph_nurses_2016_ webpdf.pdf

Context

Medicaid and private payers can test opportunities to acknowledge services provided by RNs through the following mechanisms:

Value-Based Care Initiatives - Nurses are well-positioned to
manage chronic diseases, deliver preventive care, and coordinate care
services, which are key components of value-based care. By financially
incentivizing nursing contributions to these outcomes, payers can
promote a more efficient, patient-centered approach to primary care
that aligns with the goals of reducing hospital readmissions, improving
health outcomes, and lowering costs.

- Telehealth and Remote Care Services Nurses can effectively manage a wide range of primary care needs via telehealth, from chronic disease monitoring to providing mental health support. By reimbursing for these services, payers can increase access to care for populations that may face barriers to traditional in-office visits, such as those in rural areas or with mobility challenges. NC Medicaid should consider creating nurse-led intervention codes to capture RN inputs to care delivery.
- Preventive and Wellness Services Nurses play a key role in delivering preventive services such as screenings, vaccinations, and health education, which can prevent more costly health care interventions down the line. By covering these services, payers can invest in the overall health of their members, reducing the incidence of preventable diseases and conditions.
- Collaborative Care Models By reimbursing for services provided within team-based care models, Medicaid and private payers can leverage the unique skills and perspectives of nurses, physicians, and other health care professionals. This collaboration can lead to more comprehensive care plans, improved patient satisfaction, and better health outcomes.

"[M]uch of the work that RNs and other primary care team members currently perform is not directly reimbursable under the traditional fee-for-service payment model, meaning that new payment models are needed to facilitate the growth of primary care teams that include RNs."

 Proceedings of a conference on Preparing Registered Nurses for Enhanced Roles in Primary Care. June 2016. https://macyfoundation.org/assets/reports/publications/macy_monograph_ nurses_2016_webpdf.pdf



Strategy 25

Expand the state budget in key shortage areas for nursing care

<u>Strategy 25.1</u> The North Carolina General Assembly and other key funding entities should expand funding in areas of the state budget that will support nurses who make important contributions to keeping the state's population healthy. Increased funding is needed to create additional jobs in some places, and to increase wages in many areas to make roles more competitive and help fill current vacancies. In these areas, the General Assembly is the primary funding agency and adequacy of services is directly correlated to adequacy of funding. This would include increased funding with the following goals:

- a) Ensure that a school nurse can be in every school and every Head Start program.
- b) Increase access to home- and community-based nurse services, such as hospice, palliative care, home health, home care, and the Program for All-Inclusive Care for the Elderly (PACE).
- c) Increase the number of public health nurses, especially in rural and lower-income communities.
- d) Increase Medicaid reimbursement rates for long-term care.
- e) Increase access to mental and behavioral health care in state facilities.

Desired Result

Health services supported through state funding will pay nurses a competitive wage, allowing them to provide effective care and services to the intended community or patient population.

Why does the task force recommend this strategy?

The North Carolina General Assembly plays a critical role in funding services that impact the nursing workforce, particularly in areas such as school health, public health, and long-term care. Inadequate funding for services results in the inability to pay competitive wages and maintain full staffing, which creates a cyclical challenge for recruitment and retention of qualified nurses.

Related Recommendations from Other Groups

The Future of Nursing 2020-30 Report:

Conclusion 6-2: Underfunding limits the ability of school and public health nurses to extend health care services and create a bridge between health care and community health. Adequate funding would enable these nurses to expand their reach and help improve population health and health equity.

https://nap.nationalacade mies.org/catalog/25982/the-future-of-nursing-2020-2030-charting-a-path-to-

North Carolina Caregiving Workforce Strategic Leadership Council:

<u>Initiative #3</u>: Improve employee retention and engagement - To increase the retention of the nursing workforce in North Carolina, two strategic approaches should be considered. In the short term, adjusting public sector nursing salaries to match inflation rates would help address immediate concerns and provide an incentive for nurses to remain in the workforce. Adjustments would also serve as an example for the private sector to follow.

https://www.ncdhhs.gov/investing-north-carolinas-caregiving-workforce-recommendationsstrengthen-north-carolinas-nursing/download?attachment

Context

SCHOOL HEALTH

See Strategy 22 on Page 119 for details about school health and the role of school nurses.

There were 128 school nurse positions vacant for longer than six months in North Carolina during the 2022–2023 school year.⁵⁸ School nurse salaries are an average of \$20,000 less than those of nurses working in hospitals, making recruitment and retention a challenge.⁵⁹

In 2021, members of the North Carolina House of Representatives proposed, though did not pass, legislation that would require at least one full-time, permanent school nurse in every school in the state. ^{60,61} The additional cost of employing a school nurse in all public schools was calculated by the General Assembly's fiscal research division to be \$102 million per year, or around 1.5% of the total K-12 education budget in North Carolina. ⁶²

The 2023–2024 state budget includes an allotment of \$347.4 million per year for the biennium to add about 120 nurses, counselors, social workers, and psychologists in schools across the state.⁶³ This is nearly equivalent to one new professional—though not necessarily a nurse—per school district.

HOME- AND COMMUNITY-BASED SERVICES

North Carolina's state budget provides funding to enhance, expand, or strengthen home- and community-based services (HCBS) through Medicaid. The goal of HCBS is to promote the health and well-being of individuals with functional limitations while also enabling them to live at home and alongside other community members. Nurses help provide these services through hospice, palliative care, home health, home care, and the Program for All-Inclusive Care for the Elderly (PACE).

Low payment levels for these services have an impact on the ability to adequately staff agencies with the workforce to provide them, including nurses. For example, the 2023–2024 state budget raised Medicaid reimbursement rates for private duty nurses from \$45 to \$52, however, administrative costs for employers take up much of that payment. False leaves HCBS nurses making somewhere around \$22.50 per hour, a rate that is much lower than wages available to nurses working in a hospital setting.

PUBLIC HEALTH

Public health nurses "provide screenings for chronic disease, cancer, sexually transmitted disease, wellness assessments for children, prenatal, post-partum and newborn home visits, case management, nutrition education, and an array of other educational and prevention services". ⁶⁵ Local public health is decentralized in North Carolina, with staff such as public health nurses being employed at the county level. The average salary for registered nurses in North Carolina in 2022 was \$89,555, but health departments are not able to offer competitive salaries, with an average public health nurse salary of \$63,835. ^{66,67}

In 2021–2022, state and federal funding for all public health in North Carolina was \$137 per capita, placing North Carolina 44th in the nation compared to the national average of \$183 per capita, and lowest in the South. 68 Local health departments in North Carolina are funded through a combination of federal, state, and local government appropriations, with the remaining portion of budgets covered through grants and fees for health care services. In 2019–2020, the state budget appropriated \$49.9 million for local public health with only \$11.3 million per year in state funds allocated for General Aid to Counties. 69 Limited funding continues to be a serious challenge to local health departments seeking to hire and retain staff. Total state funding to local health departments in North Carolina in General Aid to Counties is \$15.6 million in FY 2023–2024 and FY 2024–2025 to be spread across the 86 health departments that serve the state's 100 counties.70

More information about the challenges faced by local public health in North Carolina can be found in the final report of the NCIOM Task Force on the Future of Local Public Health.⁶

LONG-TERM CARE REIMBURSEMENT

The North Carolina Medicaid reimbursement rate for long-term care has a significant impact on the nursing workforce. About two-thirds of all nursing home residents in the state have their care paid through Medicaid, which has the lowest rate of any payer. 71 Rates for Medicaid reimbursement are set by the state, with state dollars paying about one-third of the costs and federal funds making up the difference.

Low reimbursement rates have led to a shortage of skilled nursing staff, which has been a persistent problem in the state. NC Nursecast projects the greatest shortfall in the nursing workforce in the next 10 years will be in long-term care, which could see as much as a 38% shortfall in RN supply and 32% shortfall in LPN supply by 2033.⁷²

See Strategy 23 - Use funding mechanisms to support the long-term care nursing workforce on Page 122 for additional discussion of reimbursement for long-term care.

MENTAL AND BEHAVIORAL HEALTH SERVICES

Psychiatric hospitals that responded to the North Carolina Sentinel Network survey in spring 2022 said they faced challenges with exceptionally long vacancies for RNs.⁷³ Unfilled positions have a direct impact on the ability to serve patients. For example, in 2022, 44% of RN positions with the Department of Health and Human Services were unfilled (411 vacancies), contributing to 2,341 fewer patients receiving care at state-run facilities in 2022 than in 2019.⁷⁴ Mental health facilities are often at full capacity because of the staff vacancies, despite having more beds available.⁷⁵

The 2023–2024 state budget allocations related to improving access to mental health treatment in state facilities include:

- "\$20 million in bonuses and incentive pay for workers in state psychiatric hospitals,
- Increased rates paid to mental health and substance abuse services providers, to the sum of \$130 million over the next 2 years, and
- The construction of a \$50 million regional children's behavioral health hospital, to be built somewhere in the Triangle area."⁷⁵

e Find the final report from the NCIOM Task Force on the Future of Local Public Health at https://nciom.org/wp-content/uploads/2022/12/FLPH-Final-Report_12.30.2022.pdf

4

Additional Resources

Strategy 20 – Use value-based payment and develop mechanisms to quantify the importance of nursing in quality care

- National Database of Nursing Quality Indicators PressGaney
- Your comprehensive guide to the Press Ganey National Database of Nursing Quality Indicators (NDNQI) PressGaney
- Ambulatory Care Nurse-Sensitive Indicator Industry Report American Academy of Ambulatory Care Nursing

Strategy 22 – Increase funding to support school nursing

- CMS Issues Guidance on Medicaid and CHIP Services in School-Based Settings Manatt
- Report to the Joint Legislative Oversight Committee: School Nurse Services NC Department of Public Instruction
- Healthy Students, Promising Futures Learning Collaborative Healthy Schools Campaign

Strategy 24 – Promote RN billing in primary care

• Registered Nurse Billing in Primary Care – Nursing Economics

CHAPTER 4 - REFERENCES

- 1. Myers V. The Power of Value-Based Care: Transforming Patient Outcomes and Quality Standards. May 24, 2023. https://www.linkedin.com/pulse/power-value-based-care-transforming-patient-outcomes-quality-myers/
- 2. North Carolina Nurses Association. Home. Accessed April 8, 2024. https://www.ncnurses.org/
- 3. North Carolina Nurses Association. NCNA Launches Diversity in Nursing Leadership Fellowship. February 6, 2024. https://ncnurses.org/about-ncna/latest-news/ncna-launches-diversity-in-nursing-leadership-fellowship/
- 4. North Carolina Organization of Nurse Leaders. Home. Accessed April 8, 2024. https://www.nconl.org/
- 5. National Association of Licensed Practical Nurses. Home. Accessed April 8, 2024. https://nalpn.org/
- 6. University at Buffalo School of Nursing. Five Reasons to Join A Professional Nursing Organization. Accessed April 8, 2024. https://nursing.buffalo.edu/news-events/nurses-report.host.html/content/shared/nursing/articles/nurses-report/posts/professional-nurse-organization-benefits.detail.html
- 7. Matthews JH. Role of professional organizations in advocating for the nursing profession. Online J Issues Nurs. 2012;17(1):3. doi:10.3912/OJIN.VOL17N001MAN03
- 8. Mlambo M, Silén C, McGrath C. Lifelong learning and nurses' continuing professional development, a metasynthesis of the literature. BMC Nurs. 2021;20(1):1-13. doi:10.1186/S12912-021-00579-2/TABLES/4
- 9. North Carolina Institute of Medicine. NC Center on the Workforce for Health. Accessed April 8, 2024. https://nciom.org/nc-center-workforce-for-health/
- 10. North Carolina Department of Health and Human Services and North Carolina Department of Commerce. Investing in North Carolina's Caregiving Workforce: Recommendations to strengthen North Carolina's nursing, direct care, and behavioral health workforce. January 2024. https://www.ncdhhs.gov/investing-north-carolinas-caregiving-workforce-recommendations-strengthen-north-carolinas-nursing/download?attachment
- 11. Montalvo I. The National Database of Nursing Quality IndicatorsTM (NDNQI®). Online J Issues Nurs. 2008;12(3). doi:10.3912/OJIN.VOL12N003MAN02
- 12. American Academy of Ambulatory Care Nursing. Nurse-Sensitive Indicators. Accessed April 8, 2024. https://www.aaacn.org/practice-resources/role-rn/nurse-sensitive-indicators#nsireport-report
- 13. CMS.gov. Administrative Simplification. Accessed April 8, 2024. https://www.cms.gov/priorities/key-initiatives/burden-reduction/administrative-simplification
- 14. Chan GK, Cummins MR, Taylor CS, et al. An overview and policy implications of national nurse identifier systems: A call for unity and integration. Nurs Outlook. 2023;71(2). doi:10.1016/j.outlook.2022.10.005
- 15. Needleman J. Expanding the Role of Registered Nurses in Primary Care: A Business Case Analysis. J Med Pract Manage. 2017 Mar; 32(5):343-351. PMID: 30047709
- 16. The Macy Foundation. Registered Nurses: Partners in Transforming Primary Care. March 17, 2017. https://macyfoundation.org/publications/registered-nurses-partners-in-transforming-primary-care
- 17. Flinter M, Hsu C, Cromp D, Ladden MD, Wagner EH. Registered Nurses in Primary Care: Emerging New Roles and Contributions to Team-Based Care in High-Performing Practices. Journal of Ambulatory Care Management. 2017;40(4):287-296. doi:10.1097/JAC.000000000000193
- 18. North Carolina Department of Health and Human Services. North Carolina School Health Program Manual. September 2023. https://www.ncdhhs.gov/c1standardsofpractice2pdf/open
- 19. Stein REK. Mental health concerns and childhood chronic physical health conditions: a narrative review. Pediatric Medicine. 2022;5(0). doi:10.21037/PM-20-107/COIF
- 20. Samji H, Wu J, Ladak A, et al. Review: Mental health impacts of the COVID-19 pandemic on children and youth a systematic review. Child Adolesc Ment Health. 2022;27(2):173-189. doi:10.1111/CAMH.12501
- 21. North Carolina Department of Public Instruction. After COVID, Report Shows School Crime, Suspensions Rose in 2021-22. March 1, 2023. https://content.govdelivery.com/accounts/NCSBE/bulletins/34bf1af
- 22. Allen CW, Diamond-Myrsten S, Rollins LK. School Absenteeism in Children and Adolescents. Am Fam Physician. 2018 Dec 15;98(12):738-744. PMID: 30525360
- 23. Holmes BW, Allison M, Ancona R, et al. Role of the school nurse in providing school health services. Pediatrics. 2016;137(6). doi:10.1542/PEDS.2016-0852/52405
- 24. So M, McCord RF, Kaminski JW. Policy Levers to Promote Access to and Utilization of Children's Mental Health Services: A Systematic Review. Adm Policy Ment Health. 2019;46(3):334-351. doi:10.1007/S10488-018-00916-9
- 25. Centers for Disease Control and Prevention. Mental Health Services for Children Policy Brief. Accessed April 8, 2024. https://www.cdc.gov/ruralhealth/child-health/policybrief.html
- 26. Wang LY, Vernon-Smiley M, Gapinski MA, Desisto M, Maughan E, Sheetz A. Cost-Benefit Study of School Nursing Services. JAMA Pediatr. 2014;168(7):642-648. doi:10.1001/JAMAPEDIATRICS.2013.5441

CHAPTER 4 - REFERENCES

- 27. Lovison VS, Hyunjung Mo C. Investing in the Teacher Workforce: Experimental Evidence on Teachers' Preferences. The American Educational Research Journal. 2023;61(1):108-144. doi:10.3102/00028312231208956
- 28. National Association of School Nurses. Public School Nurses in the U.S. Published online 2021. Accessed April 8, 2024. https://higherlogicdownload.s3.amazonaws. com/NASN/8575d1b7-94ad-45ab-808e-d45019cc5c08/UploadedImages/PDFs/Advocacy/2023-08-03-Public_School_Nurses-Final.pdf
- 29. Frontline Education. The School Nurse Shortage: Covid-19 Impact & Moving Forward. Accessed April 8, 2024. https://www.frontlineeducation.com/blog/school-nurse-shortage/
- 30. National Association of School Nurses. School Nurse Workforce Characteristics & Compensation. Published online 2021. https://higherlogicdownload.s3.amazonaws.com/NASN/8575d1b7-94ad-45ab-808e-d45019cc5c08/UploadedImages/PDFs/Advocacy/2023-08-22-SchoolNurseWorkforce-final.pdf
- 31. North Carolina Department of Health and Human Services Division of Public Health and North Carolina Healthy Schools. North Carolina Annual School Health Services Report Brochure 2019-2020. Published online 2020. https://www.ncdhhs.gov/19-20annualshsbrochurepdf/open#:~:text=By%20working%20with%20multiple%20 partners%20in%20health%20and,achieve%20at%20levels%20they%20miqht%20not%20otherwise%20reach
- 32. Pudelski S. Understanding the Medicaid In Schools Program. AASA presentation. March 24, 2022. https://www.aasa.org/docs/default-source/advocacy/understanding-medicaid-in-schools-webinar-deck.pdf
- 33. Fofaria R. Medicaid helps school fund mental health support. EdNC. March 8, 2022. https://www.ednc.org/medicaid-fund-mental-health-supports-social-workers-counselors-schools/
- 34. CMS.gov. Delivering Service in School-based Settings: A Comprehensive Guide to Medicaid Services and Administrative Claiming. May 18, 2023. https://www.cms.gov/newsroom/fact-sheets/delivering-service-school-based-settings-comprehensive-quide-medicaid-services-and-administrative
- 35. Medicaid.gov. Technical Assistance Materials. Accessed April 8, 2024. https://www.medicaid.gov/resources-for-states/medicaid-state-technical-assistance/medicaid-and-school-based-services/technical-assistance-materials/index.html
- 36. KFF. Medicaid in Michigan. June 2023. http://files.kff.org/attachment/fact-sheet-medicaid-state-MI
- 37. Healthy Students, Promising Futures. Helping states and school districts expand access to Medicaid-funded school health services. Accessed April 8, 2024. www. healthystudentspromisingfutures.org
- 38. CMS.gov. Delivering Services in School-Based Settings: A Comprehensive Guide to Medicaid Services and Administrative Claiming. May 18, 2023. https://www.cms. gov/newsroom/fact-sheets/delivering-service-school-based-settings-comprehensive-guide-medicaid-services-and-administrative
- 39. Office of Governor Kathy Hochul. Governor Hochul Announces Details of \$1 Billion Plan to Overhaul New York State's Continuum of Mental Health Care. February 2, 2023. https://www.governor.ny.gov/news/governor-hochul-announces-details-1-billion-plan-overhaul-new-york-states-continuum-mental
- 40. Police1. How to use marijuana sales revenue to fund youth programs. September 29, 2020. https://www.police1.com/policing-era-legal-marijuana/articles/the-impact-of-legalizing-marijuana-utilizing-grant-funding-to-support-youth-programs-CLR0F6aqOdkOaG8A/
- WXYZ Detroit. How taxes collected from marijuana sales benefits communities. March 25, 2022. https://www.wxyz.com/news/how-taxes-collected-from-1-1b-in-recreational-marijuana-sales-benefits-communities
- 42. Corbin Girnus A. What funds education in Nevada? Mostly sales tax. Nevada Current. March 12, 2020. https://nevadacurrent.com/2020/03/12/what-funds-education-in-nevada-mostly-sales-tax/
- 43. Colorado Department of Education. Marijuana Tax Revenue and Education. Accessed April 8, 2024. https://www.cde.state.co.us/communications/2021marijuanarevenue
- 44. Education Commission of the States. Response to information request. October 5, 2018. https://www.ecs.org/wp-content/uploads/State_Inf_Req_Marijuana-adminstration_school-safety.pdf
- 45. Education Commission of the States. How States Use Recreational Marijuana Revenue to Fund K-12 Education. January 30, 2019. https://www.ecs.org/how-states-use-recreational-marijuana-revenue-to-fund-k-12-education/
- 46. North Carolina Department of Health and Human Services. School Nursing Support. Accessed April 8, 2024. https://www.ncdhhs.gov/divisions/child-and-family-well-being/whole-child-health-section/school-adolescent-and-child-health/school-nursing-support#Contacts-4321
- 47. National Association of School Nurses. Every Student Counts. Accessed April 8, 2024. https://www.nasn.org/research/everystudentcounts
- 48. California Teachers Association. School Nurses' Vital Roles. Accessed April 8, 2024. https://www.cta.org/educator/posts/vital-roles
- 49. Vestal C. School Nurse Deficit Deepens as States Seek Relief. Stateline. October 26, 2021. https://stateline.org/2021/10/26/school-nurse-deficit-deepens-as-states-seek-relief/
- 50. Harris-Kojetin LD, Sengupta M, Lendon JP, Rome V, Valverde R, Caffrey C. Long-term care providers and services users in the United States, 2015–2016. February 2019. https://stacks.cdc.gov/view/cdc/76253
- 51. Ritchie K. Women, people of color, immigrants make up long-term care workers, face workforce inequities. KJZZ. February 8, 2022. https://kjzz.org/content/1754314/women-people-color-immigrants-make-long-term-care-workers-face-workforce-inequities
- 52. North Carolina Board of Nursing. Licensure Statistics. Accessed April 8, 2024. https://portal.ncbon.com/LicensureStatistics.aspx?ID=103
- 53. Weech-Maldonado R, Lord J, Pradhan R, et al. High Medicaid Nursing Homes: Organizational and Market Factors Associated With Financial Performance. https://doi.org/101177/0046958018825061. 2019;56. doi:10.1177/0046958018825061
- 54. Illinois.gov. Gov. Pritzker Signs Landmark Equity-Driven Nursing Home Rate Reform Legislation to Improve Care for Seniors. May 31, 2022. https://www.illinois.gov/news/press-release.24981.html
- 55. White AJ, Olsho LEW, et al. Nursing Home Staffing Study Comprehensive Report. June 2023. https://www.cms.gov/files/document/nursing-home-staffing-study-final-report-appendix-june-2023.pdf
- 56. CMS.gov. Medicare and Medicaid Programs: Minimum Staffing Standards for Long-Term Care Facilities and Medicaid Institutional Payment Transparency Reporting (CMS 3442-P). September 1, 2023. https://www.cms.gov/newsroom/fact-sheets/medicare-and-medicaid-programs-minimum-staffing-standards-long-term-care-facilities-and-medicaid
- 57. Witwer S, Mattson A, Jessie AT. Registered Nurse Billing in Primary Care. Nurs Econ. 2023;41(4). https://www.aaacn.org/sites/default/files/documents/RNBilling.pdf
- 58. North Carolina Department of Health and Human Services Division of Child and Family Well-Being and North Carolina Healthy Schools. North Carolina Annual School Health Services Report Brochure 2022-2023. November 2023. https://www.ncdhhs.gov/sn-annual-report-2022-2023/download?attachment

CHAPTER 4 - REFERENCES

- 4
- 59. Jean JY. Why School Nurses Are Leaving the Career. NurseJournal.org. November 9, 2022. https://nursejournal.org/articles/why-school-nurses-are-leaving/
- 60. North Carolina General Assembly. House Bill 348 Add School Nurses for Healthier Students. March 2021. https://www.ncleg.gov/Sessions/2021/Bills/House/PDF/H348v1.pdf
- 61. North Carolina General Assembly. House Bill 347 Healthy Students Nurses in Every School. March 2021. https://www.ncleg.gov/Sessions/2021/Bills/House/PDF/H347v1.pdf
- 62. Schlemmer L. Most North Carolina Schools Don't Have A Full-Time Nurse, Even In A Pandemic. WUNC. March 31, 2021. https://www.wunc.org/education/2021-03-31/north-carolina-schools-full-nurse-pandemic-covid-cost-house-bills
- 63. Vinueza McClellan H. A guide to education items in North Carolina's new budget. EducationNC. September 28, 2023. https://www.ednc.org/a-guide-to-education-items-in-north-carolinas-new-budget/
- 64. Baxley J. Will increased pay solve North Carolina's home nursing shortage?. WFAE 90.7. October 6, 2023. https://www.wfae.org/health/2023-10-06/will-increased-pay-solve-north-carolinas-home-nursing-shortage
- 65. Public Health Nursing. About. Accessed April 8, 2024. https://ncpublichealthnursing.org/about/
- 66. indeed. Public health nurse salary in North Carolina. Accessed April 8, 2024. https://www.indeed.com/career/public-health-nurse/salaries/NC?from=top_sb
- 67. indeed. Registered nurse salary in North Carolina. Accessed April 8, 2024. https://www.indeed.com/career/registered-nurse/salaries/NC?from=top_sb
- 68. America's Health Rankings. Explore Public Health Funding in the United States. Accessed April 8, 2024. https://www.americashealthrankings.org/explore/measures/PH_funding
- 69. North Carolina Institute of Medicine. Foundations of Health and Opportunity: Investing in the Future of Local Public Health in North Carolina. December 2022. https://nciom.org/wp-content/uploads/2022/12/FLPH-Final-Report_12.30.2022.pdf
- 70. North Carolina General Assembly. Joint Conference Committee Report on the Current Operations Appropriations Act of 2023 House Bill 259. September 20, 2023. https://webservices.ncleg.gov/ViewNewsFile/81/CommitteeReport_2023_09_20_Final
- 71. Dougani M. Proposed bills would bump up pay for people caring for NC's most vulnerable. NC Health News. June 9, 2021. https://www.northcarolinahealthnews.org/2021/06/09/proposed-bills-would-bump-up-pay-for-people-caring-for-ncs-most-vulnerable/
- 72. 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/model/
- 73. North Carolina Sentinel Network. Findings by Facility Type. Accessed April 8, 2024. https://nc.sentinelnetwork.org/findings/facility/
- 74. Blythe A. Workforce shortages in DHHS creating wider problems. NC Health News. October 13, 2022. https://www.northcarolinahealthnews.org/2022/10/13/workforce-shortages-in-dhhs-creating-wider-problems/
- 75. NAMI Wilmington. New North Carolina State Budget Includes Millions for Mental Health. Accessed April 8, 2024. https://namiwilmington.org/new-north-carolina-state-budget-includes-millions-for-mental-health/