

Reawakening Stroke Nursing: Building A Stronger Practice Culture

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Abstract

Nurses with specialized stroke knowledge have long been recognized as essential to both patient care and the success of stroke programs. However, the recent pandemic and ongoing economic pressures in healthcare pose significant challenges to sustaining and supporting stroke nursing teams. While recent data show a decline in nurses planning to leave their positions, workplace satisfaction remains a challenge. This presents an opportunity for stroke program leaders to prioritize healthy work environment efforts to re-engage and empower nursing staff, enhance job satisfaction, and ultimately improve patient outcomes and caregiver experiences. Strategies to foster a more sustainable and fulfilling work environment are discussed.

Keywords: Healthy work environment, acute stroke, nursing.

Introduction

In 2005, the Brain Attack Coalition published recommendations for the design of Comprehensive Stroke Centers.¹ These recommendations emphasized the importance of nursing staff with stroke-related training and necessary expertise to deliver immediate and effective care to this population of patients. Such specialized nurses possess the skills and capacity to provide education and support to patients and their family members on stroke prevention, individualized risk factors, and rehabilitation. While considerable progress was made towards stroke specialization over the past 30 years, the US healthcare system is under

significant strain after the COVID-19 pandemic and continued economic challenges are impacting nursing across the continuum of care. We discuss opportunities and offer ideas to re-engage and retain nurses with stroke specialization in the care of this patient population.

Hospital Context

Hospital-based stroke specialization can be examined in a decadal framework. The 2000s focused on establishing centers capable of addressing the complex needs of patients with acute ischemic stroke who were eligible for intravenous thrombolytic therapy. The



2010s can be divided into the early trial years (e.g., IMS III) and the subsequent evidence-based thrombectomy years (e.g., MR-CLEAN, ESCAPE). The latter half of the 2010s saw the dominance of certified Comprehensive Stroke Centers (CSCs) and incorporated advanced non-traumatic hemorrhage and aneurysmal subarachnoid hemorrhage care. In 2018, The Joint Commission introduced the Thrombectomy-Capable Stroke Center (TSC) certification program, which expanded access to emergent endovascular procedures for patients with acute ischemic stroke.² By the end of 2019, stroke centers and stroke systems of care had become entrenched within healthcare organizations across the United States.³

The 2020s were inaugurated by a global pandemic, which led to the reallocation of many stroke and neurocritical care units to address the needs of the COVID-19 patient population. Many organizations reported an immediate decrease in stroke patient volume (as well as trauma volume) and an increase in COVID-19 positive patients.^{4,5} Acute and critical care units were reoriented to focus on pandemic-related care. At the first author's organization, acute stroke admissions declined and gains in stroke program growth were at best stalled and in many ways declined. During this period, some nurses left the facility, either leaving the bedside completely or, to pursue travel nursing opportunities while others stayed and became adept at caring for high-acuity patients. At a sister facility, the neurocritical care unit (NICU) became even more specialized, with neuro-trained intensivists taking the lead,

while pulmonary trained intensivists moved to manage COVID-19 patients in other critical care units at the facility.⁶

Between 2021 and 2023, nursing turnover and shifts in staffing and experience levels were observed. The National Council on State Boards of Nursing reported in 2023 that 100,000 nurses had left the bedside in the previous 3 years, and another 610,388 reported that they planned to leave the workforce by 2027. Moreover, a majority of the nurses who'd left the workforce, left the hospital setting and were under the age of 35, thereby threatening the future nursing workforce.⁷ Freise and colleagues found a similar trend in nurses' workplace employment, finding that nurses either left the bedside due to exhaustion and burnout, or to take on travel nursing assignments in the pursuit of higher pay.⁸ The authors reported that a 2023 survey demonstrated a reduction in the percentage of nurses who were planning to leave their positions in the next year, but that workplace satisfaction still had room for improvement. These trends suggest an opportunity to re-examine the drivers of dissatisfaction and re-engage nursing staff. As the latter half of the 2020s commences, stroke programs can recapture and invigorate a passion for stroke nursing and return to an ideal foundational state as outlined by Dusenbury and colleagues, particularly for programs that aspire to grow their capabilities.⁹

What's Old Can Be New Again

Whether new to the stroke program leader role or a seasoned stroke coordinator, being



tasked with bringing a new cohort of stroke nurses up to date on hospital stroke care is common.⁹ Given the significant workload associated with training so many new staff, leaders may consider using pre-existing educational presentations, simply by updating them to reflect the most current evidence-based practices. In most cases, it is unnecessary to start from scratch; instead, capitalizing on the resources developed by predecessors. If the facility is part of a larger hospital system, consider standardizing the educational slide decks across similar facilities, making modifications to suit the specific needs of each institution. For those not affiliated with a hospital system, joining statewide stroke coordinator networks or professional organizations, such as the Association of Neurovascular Clinicians (ANVC), can provide valuable resources. Ultimately, the strategies that proved effective in the past are likely to succeed with this new group of nurses. There is no need to reinvent the wheel.

Healthy Work Environments

The American Association of Critical-Care Nurses (AACN) has long advocated for healthy work environments (HWE).¹⁰ Table 1 provides a list of AACN's HWE standards. Incorporating the elements with a focus on stroke nursing can enhance the culture in which nurses practice, hopefully leading to enhanced satisfaction and an intent to stay. Using bedside stroke rounds as an example, nurses develop and improve their skills as communicators as they speak with healthcare providers, patients, and their caregivers to

provide detailed information regarding the hospital stay and participate in the groups' conversation. The bedside stroke nurse can collaborate in medical decision-making during stroke rounds discussions, thus

Table 1:
The American Association of Critical-Care Nurses' (AACN) Healthy Work Environment Standards¹⁰

Characteristics of Healthy Work Environments
1. Skilled Communication
2. True Collaboration
3. Effective Decision Making
4. Appropriate Staffing
5. Meaningful Recognition
6. Authentic Leadership

advocating for the needs of the patient and their family. This is well supported by studies from several centers that suggest such engagement in rounds can improve quality metric performance as well as interdisciplinary communication.^{11,12,13} Other opportunities for collaboration include intentional efforts to include nursing representation at stroke program leadership meetings as key stakeholders during discussions on change projects that may impact bedside stroke nurses.

Meaningful recognition may mean one thing to a group of nurses and another to a different subset of staff. One idea is to use a rewards and recognition program to acknowledge outstanding performance. For instance, points could be issued in recognition of excellent performance, and these could be exchanged for goods or gift cards which



some nurses have found to be extremely motivating. By awarding points for excellence in stroke care, such as safely meeting time metrics for door-to-treatment or door-out times, overall metrics may improve. Positive reinforcement is generally more effective than negative feedback or reminders of poor metric performance. Stroke program leaders should engage the nurses they collaborate with to determine what does and does not constitute meaningful recognition for them.

Appropriate staffing and authentic leadership round out AACN's HWE standards. Stroke program leaders can advocate for nurses by speaking up during multidisciplinary meetings about how staffing patterns impact patient care. Leaders can also ensure that nurses caring for complex stroke patients have the skills and ability to provide appropriate care by advocating for enhanced educational opportunities and through assessment of annual stroke-related competencies.

Professional Development

Stroke nursing requires enhanced knowledge and skills.^{1,9} Specialty education for stroke nurses should be comprehensive and ongoing.¹⁴ The nursing education department at the facility should develop a curriculum that meets the minimum standards necessary for the complexity of patients cared for in the stroke unit. Once basic standards are met, annual education efforts should build upon that foundation. Instead of ongoing mandatory education, consider allowing nurses to seek out educational opportunities

at local and regional conferences. Program leaders can encourage a commitment to lifelong learning by role modeling their own continuing education efforts. Stroke treatments are constantly evolving, and education should keep up with trends.

The American Nurses Association in partnership with the ANVC has published the *Neurovascular Nursing Scope and Standards of Practice*¹⁵ which provides a comprehensive framework for nurses to follow as they advance in their own specialty practice. This publication defines neurovascular nursing, delineates essential practice competencies, and describes standards of practice by which all American nurses caring for stroke are legally held accountable.

Specialty certification for nurses working in the field of stroke and neurosciences are available from both the Neurovascular Clinician Certification Corporation¹⁶ and the American Board of Neuroscience Nursing.¹⁷ Certification substantiates a nurse's specialized knowledge and clinical skills while fostering a commitment to continuous professional development within the neuroscience community. Many organizations will reimburse nurses for the cost of certification preparation courses and exams. Interested nurses should check with their employer or human resources department to determine eligibility for reimbursement or learn of other financial incentives offered to certified nurses.



Multidisciplinary Collaboration

Bringing different, yet complimentary disciplines together with a common goal is a strategy successful hospital-based programs use to elevate the level of care provided to patients.⁹ This can be achieved with regularly scheduled meetings, both administratively and at the bedside. The following case studies will explore how multidisciplinary stroke program administrative meetings at the first author's organization have facilitated alignment of goals and strategies across various departments, ensuring a cohesive approach to stroke care. A second example will examine bedside stroke unit rounds, highlighting the importance of real-time collaboration and communication among healthcare professionals to address the immediate needs of stroke patients. These case studies illustrate the practical application of interdisciplinary teamwork in enhancing patient outcomes and fostering a culture of excellence in stroke nursing.

Case Study 1: Creating Engaging Stroke Program Meetings

Stroke programs typically hold regularly scheduled meetings to share quality metrics and work towards common team goals. One facility established a routine meeting that engaged leaders from various disciplines by incorporating case reviews highlighting excellent outcomes, celebrating team achievements, and identifying areas for improvement. These discussions during meetings catalyzed quality improvement

projects with the support of key stakeholders, including physicians, nurses, administrators, and ancillary staff leaders. Often, solutions to problems emerged from these meetings, with physician and nurse leaders developing strategies for improvement and plans to assess the process.

The multidisciplinary nature of these meetings was key to their success, fostering a collaborative environment where interesting cases were discussed, positive outcomes were celebrated, and continuing education credits were offered for attendance. This cohesive leadership approach not only advanced stroke nursing practice culture but also created an environment where nurses felt valued and supported. As a result, the facility became a place where nurses were motivated to remain, thus reducing turnover rates and ensuring continuity of care.

Case Study: Multidisciplinary Stroke Rounds

Stroke program leadership at one facility identified a gap in the nursing staff's understanding of patients' individualized risk factors and stroke etiology. To address this, the leaders engaged the nurses in development of Stroke Rounds.¹⁸ The specifics, including the time of day and elements presented, were determined during planning meetings, and a go-live date was established. Each day, the stroke team provided the charge nurse with a list of patients scheduled for rounds. The bedside nurse was then notified and prepared necessary details on a handwritten template. At the designated time, the stroke team and



charge nurse convened, with the charge nurse managing the schedule and notifying the bedside nurse as the team approached patient rooms. During these rounds, the entire team, including the patient and their family members, participated in discussions, allowing for questions and updates on the previous day's events and discharge planning.

As Stroke Rounds became a regular practice, additional team members, such as case managers, physicians, and rehabilitation therapists, joined, further enhancing the collaborative nature of the experience. This interdisciplinary approach not only improved communication and satisfaction among families but also led to better patient outcomes. Over time, Stroke Rounds significantly enhanced nurses' job satisfaction by fostering closer relationships with providers and addressing their questions promptly. Patient families reported improved communication between team members, leading to higher satisfaction scores. To maintain efficiency, rounds were limited to five minutes per patient, with the stroke team offering one-on-one discussions if additional needs arose. For new stroke leaders, Stroke Rounds can be an effective way to become familiar with the stroke floor nurses and become integrated into the team. Initiating the process involves gathering a team of stakeholders to secure buy-in, selecting a suitable time for the staff, appointing a timekeeper, and maintaining focus during bedside discussions. Efficient discussions are key to a successful rounding process.

Getting Started

Whether new to stroke program management or an experienced leader, it is essential to begin with the end in mind. Consider the specific characteristics of the facility, taking inventory of its strengths and weaknesses. Assess the available resources, such as clinical nurse specialists, nurse practitioners, or nurse educators assigned to these specialty areas. Determine the planning schedules for the upcoming year and ensure stroke program members inclusion in these meetings. Engage in discussions on regulatory requirements and identified gaps in practice. Integrate stroke-related education into required annual training modules.¹⁹

Conduct regular rounds on nursing units and seek opportunities for on-the-spot, real-time education. By becoming a familiar and consistent presence, the stroke coordinator or program leader will be recognized as a valuable resource by the nursing staff.

Individuals drawn to stroke program roles often have a deep commitment to this patient population, and their longevity is indicative of their passion. These leaders possess the ability to motivate and mentor their colleagues, thereby enhancing the stroke nursing culture. Positive role models can significantly influence unit dynamics, fostering engagement and empowerment among staff.

Utilize nurse-led multidisciplinary rounds to enhance patient care and involve staff, stroke survivors, and families. As a stroke leader, advocate for the stroke nurse in staffing and recognition discussions. Leverage



publications such as the American Heart Association/American Stroke Association Scientific Statement, *Ideal Foundational Requirements for Stroke Program Development and Growth* to justify the need for additional resources.⁹

Leaders may find it helpful to develop a growth plan for stroke nurses. This may include identifying opportunities for medical-surgical nurses or other departments who are interested in transitioning to neuroscience practice. Additional ideas include implementing specialized mentorship programs with nurse preceptors and providing additional training from medical staff members. Weekly case studies and educational sessions can further engage nurses and enhance their stroke knowledge. As nurses gain experience on the stroke unit, consider pathways to practice in the neurocritical care unit or the emergency department. Recognize that nurses may pursue advanced degrees, so creating

pathways to retain these nurses within the community will benefit all. While some may move to other communities or facilities, being known as a place for professional growth will attract new talent and fresh ideas.

Conclusions

While nurses with specialized knowledge were identified as central to the care of stroke patients as well as stroke program success decades ago, recent pandemic and ongoing healthcare economic challenges pose new threats to stroke programs. However, this offers stroke program leadership the opportunity to re-engage nursing staff using strategies informed by stroke guidelines, statements and pivotal publications, as well as the growing body of evidence supporting healthy work environments. Doing so may offer a pathway to stabilize the nursing workforce caring for patients with stroke, ultimately improving outcomes for both patients and caregivers alike.

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