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Assess, Don't Assume: The Importance of the Nursing Assessment

Angela Mulcahy-Spence, PhD, RN, CMSRN, CHSE
Editorial Board Member

In today's fast-paced acute care environment, where patient complexity continues to rise and time feels increasingly scarce, it's easy to lose sight of what truly anchors nursing practice. Yet if there's one skill that defines the spirit and the impact of a nurse, it is the nursing assessment.

Nursing assessment is arguably the most essential skill in managing acute care patients. It is not simply about listening to heart and lung sounds. It's about seeing the patient as a whole person. It means asking the right questions, observing behaviors, and recognizing clinical patterns. A thorough, accurate assessment enables nurses to recognize changes in a patient's condition promptly and reduce risk of complications (Burdeu et al., 2020; Wiseman et al., 2024).

Despite their importance, there is growing concern nursing assessments are being overlooked or performed only in part. This issue continues to be a point of discussion in clinical education, highlighting the challenge of reinforcing the value of nursing assessment in today's fast-paced healthcare environment. As clinicians, clinical educators, and leaders, we must ask how we prepare and support nurses to value and prioritize this skill.

Fundamentally, nursing assessment demands we don't make assumptions. Even a familiar person, the patient we cared for yesterday, can be experiencing new complications. Clinical reasoning must be grounded in fresh, objective data obtained through assessment rather than last shift's report or yesterday's assessment. Nurses begin their shift with a report and rounds, but no real care can begin without a focused, intentional assessment. This is even more essential in the acute care setting, where conditions can change rapidly. Nurses not only must understand the pathophysiology of disease or mechanism of injury, but also know how it manifests uniquely in each patient. Interventions and care priorities all emerge from what we learn through our assessments.

In my years at the bedside, assessment was the most powerful skill I possessed as a nurse: not the ability to place an IV or insert a nasogastric tube, but the ability to see, hear, and understand what was happening with my patient. More than once, that understanding made the difference between a poor outcome and a discharge home.

It's time to reaffirm the importance of nursing assessment. We must create clinical cultures that protect the time, space, and expectation for nurses to assess with skill and intention. It's not a task on a checklist. It is the heart of nursing practice. MSN

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Clinical Practice

A Nurse's Role in Collaborative Virtual Hospitalist Encounters

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Bryant, S.G. (2025). A nurse's role in collaborative virtual hospitalist encounters. *MEDSURG Nursing, 34*(4), 163-168. https://doi.org/10.62116/MSJ.2025.34.4.163

Use of virtual medicine has increased access to care and provider availability, but it can present challenges. Nurses can improve quality of virtual care in medical-surgical settings by collaborating with virtual hospitalists to address technical, professional, assessment, and communication issues.

Keywords: telemedicine, telehealth, telehospitalist, virtual hospitalist, nurse, collaboration, interprofessional

Learning Outcome: After completing this education activity, the learner will be able to discuss the impact of collaborative nursing support on virtual hospitalist encounters in the inpatient setting.

Telemedicine, the practice of providing remote medical care through technology, has been in use for over two decades and has increased dramatically since 2010, especially during the COVID-19 pandemic. Also known as *virtual medicine*, telemedicine can address issues related to provider availability by increasing access to care and reducing provider workload. For many medical conditions, it has proven to be a safe and applicable intervention with current standards of practice comparable to conventional in-person care (Barbosa et al., 2021).

Some people could perceive telemedicine as impersonal and mechanized due to the lack of physical presence and limited non-verbal communication during encounters (Mehta & Mathews, 2022). The use of technology and need to troubleshoot technical problems as they arise can present challenges to the patient-provider relationship that are not present during in-person visits (Elliott et al., 2022). Bele and colleagues (2021) found lack of technical skills, dedicated personnel, attention to the physical environment, and professional guidelines were barriers to telemedicine.

Nurses can address many of these challenges by being physically present, optimizing the environment, providing technical support, enhancing communication, and following professional standards of care during virtual encounters (Boni & Tieppo, 2022; Garber et al., 2023; Johnson, 2020; Varghese, 2023). In addition, nurses can provide in-person assessments to assist virtual providers (Boni & Tieppo, 2022). One regional medical center has received positive feedback from patients and providers for virtual encounters when off-site hospitalists are supported by in-person nursing staff.

Selected Literature on Virtual Hospital Care

To explore how virtual hospitalists (VHs) have provided care for inpatients, the author completed a literature search using the terms *telehealth* OR t*elemedicine* OR *telemonitoring* OR *telepractice* OR *telecare* and *hospital* OR *acute setting* OR *inpatient;* and *inpatient rounds* OR *rounding* OR *patient rounds* OR *clinical rounds.* CINAHL Ultimate, Ovid, and PubMed databases were searched for articles published 2019-2024. Sources on subspecialties, such as pediatrics, critical care, and psychiatry, were excluded. Studies from hospitals outside the United States also were excluded.

Guterrez and colleagues (2022) reviewed 20 publications of hospital medicine telehealth, 17 of which were from the United States. Fifteen studies described

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using real-time videoconferencing, four discussed provider-to-patient/care team communication, and two articles (one from the United States) included physician-to-nurse/patient communication. Authors demonstrated nurse practitioners often function in the telehospitalist role. They also listed several relevant articles, including one published before 2019 (Kuperman et al., 2018) that was incorporated into this review.

Four articles on use of telehealth in hospital medicine included descriptions of technology used in virtual rounding, such as iPads®/tablets or cell phones at the bedside (Becker, Bakshi et al., 2021; Becker, Forman et al., 2021; Bloom-Feshbach et al, 2021; Kuperman et al., 2018). At some facilities, VHs joined in rounds via technology with bedside hospital providers (Becker, Bakshi et al., 2021; Bloom-Feshbach et al., 2021). At other facilities, VHs communicated directly with patients via video (Becker, Forman et al., 2021; Kuperman et al., 2018). All hospitals used videoconferencing for communication between virtual and hospital staff (Becker, Bakshi et al., 2021; Becker, Forman et al., 2021; Bloom-Feshbach et al., 2021; Kuperman et al., 2018). No literature was found describing a role for in-person nursing support for VH encounters.

Telepresence

Telepresence, the feeling of being there during a virtual interaction, has been analyzed as a concept in making video visits effective and engaging (Groom et al., 2021). Groom and colleagues defined telepresence as:

> The patient's, caregiver's, and clinician's experienced realism during a telehealth encounter that is created through connection and collaboration built on trust, support, and the clinician's skill at acting as the technology mediator when the third actor (technology) influences the patient or caregiver and clinician interaction. (p. 714)

Because virtual encounters are conducted over distance and lack a proximate physical connection between providers and patients, communication and connection must be enhanced in other ways. One way of improving the quality and telepresence of a virtual encounter is to provide in-person clinical support for the patient. Staff facilitating the encounter can promote an optimal physical space by preparing the patient's private room to ensure confidentiality, and to determine the room is well-lit for the provider to see the patient and quiet enough so all parties can hear each other. Healthcare workers can help with technical aspects of the visit and facilitate communication between provider and patient. They also can assist with assessments and interventions during encounters (Boni & Tieppo, 2022). Nurses are in an ideal position to participate in this way.

Virtual Hospitalist Service Description

In June 2023, a regional medical center in North Carolina began a project to assign some patients from one medical-surgical unit to a VH working offsite to reduce patient assignments for providers working in the Internal Medicine Section on Hospital Medicine (IM/SHM) service. This intervention also was undertaken to help with an unanticipated staffing shortage and high census. The medical center is one of five hospitals of a regional healthcare system with 351 beds. A census of 155 patients is considered 100% capacity for the hospital medicine team when fully staffed with 10 services. IM/SHM VHs began seeing patients at other system hospitals in December 2021 in response to COVID-19 surges.

Virtual physicians and advanced practice providers may be at a different hospital, at home, or another location, and they usually have assignments from more than one system hospital. If advanced practice providers are working, an attending physician also is assigned to the patient. Only providers who are experienced clinically and have privileges across the system see patients as VHs. At this time, there is not a consistent group of VHs; hospitalists may work extra shifts on their off-weeks to cover VH assignments.

VHs in this healthcare system communicate with and assess patients using a secure videoconferencing program and electronic stethoscope via a computer on a cart operated by support staff. During weekdays, one or two hospital medicine clinical support staff members are available for VH rounds at this medical center. On weekends and holidays, unit nursing staff assist.

The VH assignment for this medical center is usually one to six patients from one 30-bed unit, although it can be as many as eight patients. The assignment depends on the census in other system hospitals, number of hospitalist services, and availability of a VH. Preference is given to patients with low acuity or low complexity. VHs may have up to 14 total patients (or higher with additional staffing) across the five-hospital system.

Patients are excluded from virtual encounters if they are assigned to the general medicine education service with resident teams or are on advanced droplet or enteric isolation requiring bleach wipe sanitization for cleaning equipment (cart, computer,

stethoscope). Also excluded are patients who have continuous IV infusions (insulin/diltiazem/pressors) or communication barriers, such as a hearing impairment, altered mental status, aphasia, or a need for interpreter services.

Support for Virtual Hospitalist Encounters

At the beginning of the project, IM/SHM directors asked administrative support staff for assistance with the planned VH encounters; an inpatient nurse navigator and a patient advocate who is a certified medical assistant (CMA) added new VH responsibilities to their roles. As VH support nurse (VHSN), the nurse navigator usually assumes responsibility for assisting with the encounters. The VHSN has previous experience on medical-surgical units, currently supports the hospital medicine team by arranging follow-up care for uninsured and unassigned patients after discharge, and has some daily schedule flexibility. The CMA has been very helpful in maneuvering the cart into tight spaces and using the stethoscope cord/microphone, troubleshooting the computer system, and working with patients if the VHSN is unavailable.

The CMA, VHSN, and unit charge nurses were given a brief orientation to the computer equipment. Because this was a new program for the medical center and this hospital was the only system facility with designated support staff, no precedent for the process had been identified. The VHSN found nothing in a literature search about in-person VH support and so developed a unique process to support VH encounters.

Role of the Virtual Hospitalist Support Nurse

At the beginning of the project, IM/SHM directors selected patients for VH assignments. After 10 months, the directors asked the VHSN to help screen patients. The VHSN sends the afternoon census to the medical director of hospital medicine who may ask for assistance in screening for the next day's assignment. When needed, the VHSN chooses patients meeting VH criteria and sends the list to the director for final review and assignment.

Each morning, the VHSN prints a list of patients as well as individual demographic sheets for the day's assignment. She reviews patient charts and makes brief notes, including room number; name of assigned clinical nurse; patient diagnoses; and anticipated assessments, such as wounds, drains, and edema. At this time, the VHSN may find an assigned patient is now ineligible for the VH service due to a status change (e.g., new isolation, clinical deterioration). The VHSN then updates the VH to request transferring the patient back to an in-person provider.

Because VHs for the hospital also see patients at other locations, no time has been set for rounding. The VHSN and VH communicate at the beginning of the day to plan a time to meet for rounds. Prerounds text communication between the VH and VHSN also establishes cell phone communication if there are problems logging into the VH computer.

The computer cart is kept on the unit where VH patients are seen and is recharged between uses. The VHSN arrives 5-10 minutes before the appointed rounding time and readies the cart and computer, including logging in, changing the stethoscope from its charging cord to the transmission cable, and sanitizing the stethoscope with an alcohol wipe.

Once they are both logged into the system, the VHSN and VH have a brief video discussion of the order in which to see patients and any issues to address (e.g., discharges, assessment needs). The VHSN can ask a provider who is new to the process to practice using the camera, which can rotate in four directions and also zoom. The VHSN maximizes the VH's video window on the computer screen to facilitate viewing by the patient. When the background of the VH's offsite location has pictures on the wall or personal items within view, the VHSN may suggest video settings be changed to blur the background to avoid distracting patients and increase the professionalism of the encounter.

Having a cell phone available is important for times when the computer connection or the sound malfunctions. In one instance, the computer video worked but the audio malfunctioned. The patient and VH were able to use phones to talk to each other's frozen image on the computer screen. A few times, providers have held encounters over cell phone on speaker without video when the entire computer connection was lost. Hospital information technology staff has had to fix more complicated problems, such as a faulty stethoscope cable.

During rounds, the VHSN rolls the cart into a hospital room, greets the patient and performs hand hygiene, and explains the VH is doing virtual rounds from a different location. The VHSN closes the room door to promote privacy, adjusts the speaker volume on the computer, turns on overhead room lights, turns off the television as needed, and positions the cart facing the patient for unobstructed viewing and com-

munication for participants. During the encounter, the VHSN may repeat what the provider or patient says if the other cannot hear clearly. The VHSN also may clarify information in non-medical terms for better patient understanding.

The VHSN collaborates as in-person support for the VH: noting oxygen flow rate, and assessing edema and skin temperature, urine color and clarity, and wounds and dressings. The VHSN assists with auscultation of heart, lung, and bowel sounds when needed by cleaning the electronic stethoscope head, attaching it to the transmission cable, placing it on the patient, and switching computer speakers to the external microphone. If the VH is unable to adjust the camera remotely, the VHSN can move the camera lens manually to allow the VH to view the patient; however, the VHSN cannot operate the zoom feature.

If the VH wishes to refer a patient to the hospitalist-at-home service after discharge, the VHSN also confirms or updates the patient's telephone number and address listed in the chart. The VH usually concludes the encounter by asking what questions the patient has. The VHSN can reinforce discharge teaching, such as emphasizing the importance of picking up new prescriptions as soon as possible and taking them as directed. After the visit, the VHSN returns the TV volume and the overhead light to previous setting, performs hand hygiene, and leaves the room door open or closed according to patient preference. The VHSN also immediately lowers the computer speaker volume so any after-encounter discussion by the VH regarding the patient will not be overheard by others.

The VHSN assists with interprofessional communication with other healthcare team members during rounds by rolling the cart to the appropriate personnel. The VH can talk to the patient's clinical nurse, charge nurse, specialists rounding on the unit, and case managers via the computer screen and camera. During these encounters, the VHSN follows privacy guidelines by controlling the computer location and speaker volume to prevent other patients and visitors from overhearing the conversation.

Because VHs may change assignments more frequently than in-person providers who have 7-day work weeks, continuity of patient care can be a challenge. The VHSN is a valuable source of information for VHs who are new to an assignment. The same nurse sees VH patients during weekdays and can monitor changes in patient condition as well as share information regarding the patient's emotional state, communication style, and family situation.

At the end of the day's VH encounters, the VHSN logs out of the video program, returns the computer cart to the designated parking spot on the unit, and plugs in the stethoscope and cart for recharging. The VHSN shares patient updates with the charge or clinical nurse if applicable. If a patient's status is declining, the VHSN assists in reassignment to an in-person provider on the hospital medicine team.

The VHSN is an accessible contact for unit staff and VHs. Unit staff know they can call the VHSN quickly if they are unable to contact the VH or are passing along the infrequent patient request to see an in-person provider. VHs can ask the VHSN to address a patient issue that may have been missed on rounds or to follow up on a referral. The VHSN also can provide education and reminders to VHs and nursing staff about VH patient exclusion criteria.

Patient and Virtual Hospitalist Satisfaction

Patients at this regional medical center have expressed verbal satisfaction with the collaborative VH encounters. In only a very few instances has a patient refused to have a VH or asked to be switched to an in-person hospitalist after a VH encounter; these patients were reassigned quickly to in-person providers. Most patients have been very happy with VH encounters, including some older patients who have demonstrated genuine curiosity and reported they are impressed with the technology. One patient remarked after the encounter, "This is just like Star Trek!" Another stated she wished she could take the VH home with her. These anecdotal responses correlate with a review by Nguyen and co-authors (2020), who found a 95%-100% patient satisfaction rate with telemedicine compared to face-to-face appointments. A systematic review by Pogorzelska and Chlabicz (2022) similarly found a high rate of patient satisfaction with telehealth during the COVID-19 pandemic for all medical specialties, although the review did not include any hospital medicine studies.

The literature also supports provider satisfaction with virtual encounters. More than 72% were satisfied with a virtual rounding program in a Boston medical center (Becker, Bakshi et al., 2021), and a review by Nguyen and colleagues (2020) also described a high rate of provider satisfaction with telemedicine. VHs at this medical center have expressed appreciation for the collaborative rounding model with designated staff compared to other system hospitals. The VH medical program director also has reported VHs enjoy rounding at this facility. Working with a single support person for all VH patients at this

location is simpler and more efficient than having to coordinate availability and rounding times with different unit nurses.

Advantages of Designated Staff for Collaborative Virtual Hospitalist Encounters

This medical center is the only one of five system hospitals currently using designated weekday clinical staff to support VH encounters. Advantages of having hospitalist team in-person support staff include consistency of knowledge of the VH process and equipment, facility, and nursing unit staff, especially for providers new to virtual rounding and those who have not worked in this hospital. In addition, because VH support staff are onsite, the nursing unit staff are familiar with them and can contact them with questions if there is any delay in reaching an off-site provider. Although they have clinical backgrounds, VH support staff are from the hospital medicine administrative support team and do not have patient assignments of their own. This allows them more flexibility to work with the VH's schedule compared to clinical nurses. The VHSN usually is available during the week and the CMA serves as a second layer of support. The VHSN knows many of the providers and usually is comfortable making suggestions for improvement when it will enhance the professionalism and effectiveness of the VH encounter.

Video Etiquette

While medical students and residents learn to care for patients during their medical education and may be comfortable with technology, synchronous telemedicine requires a specific set of communication skills (Samuels et al., 2022) that go beyond traditional medical instruction. The VHSN has noted a wide range of VH experience and comfort with the technology. Some more experienced VHs narrate their actions by telling the patient when they are looking away from the camera to review the chart on another screen, a habit that demonstrates respect for the patient. Some VHs know to minimize distractions and promote professionalism on the computer screen while others may need gentle reminding that patients can sometimes see more than providers think they do. The VHSN has made some suggestions to VHs to improve their encounters, such as blurring the video background to mask personal items, asking them to consider changing their attire to a more professional outfit, and giving a VH time to finish eating a snack before wheeling the computer to a patient's room. Although a few VHs have expressed mild irritation, most providers' reactions to these recommendations have been positive.

Nursing Implications

As in-person support for the off-site provider, the VHSN needs to have good nursing assessment skills to monitor patient condition and supplement the VH video exam. Being prepared to check for quality of catheter drainage, oxygen settings, wounds, and odors, for example, has been very helpful in calling the VH's attention to abnormal findings during encounters. The VHSN highly recommends developing and maintaining open lines of communication with unit nursing staff and providers to coordinate healthcare plans. Having positive relationships with providers also has made it easier for the VHSN to make suggestions to improve the professionalism of encounters.

As in-person staff during virtual encounters, the VHSN is involved closely in education and communication with patients and their families. Johnson (2020) suggested communication during virtual visits may be correlated directly with patient satisfaction; following best practices of video etiquette can facilitate patient-centered encounters. Multiple sources address webside manner (American Medical Association, n.d.; Comagine Health, n.d.; Elliott et al., 2022; Garber et al., 2023; Samuels et al., 2022), identifying best practice behaviors and communication skills to promote high-quality telehealth encounters.

After seeing a range of telehealth behaviors and attire that included a casual tee shirt worn by one VH, the VHSN wanted to standardize expectations to no longer function as VH behavior supervisor. The VHSN approached the VH medical director and offered to help develop video etiquette guidelines for the program. The VHSN drafted a short list of professional VH guidelines addressing the four areas of physical presentation/attire, physical environment, communication, and session closure. This draft is being reviewed by the VH medical director for use across the five hospitals of the medical system. Having written VH professional standards with clear expectations for encounters can enhance the nurse-provider relationship and improve the patient's experience.

The VHSN role currently does not have a formal job description but is included in the IM/SHM inpatient nurse navigator's responsibilities. If the VH program expands to increase patient assignments or begins collaboration with other hospital specialty consulting teams in providing virtual care, the VHSN role could grow into a full-time position based on the number of patient

encounters. Meanwhile, the VHSN is developing VH support checklists for unit clinical nurses who assist with weekend VH encounters.

Future study of patient and provider satisfaction with VH encounters in this medical center and possibly across the hospital system is warranted. The VHSN wants to collaborate with the VH medical director on any research involving collecting patient data related to virtual visits. Evaluating patient health outcomes could be helpful in documenting the impact and worth of the VH program in caring for patients on medical-surgical units.

Conclusion

Literature is lacking on collaborative nursing support for VHs providing direct care to patients. One regional medical center in North Carolina received positive verbal feedback from patients and providers for collaborative VH encounters. The VHSN facilitates VH involvement before, during, and after seeing the patient. These collaborative efforts can increase effectiveness of VH encounters and contribute to improved communication, experience, and care for patients who have virtual visits in the hospital. MSN

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Nursing Interventions Key to Successful Extubation in Mechanically Ventilated Patients

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Ul Husna, A.D., Setyawati, A., & Kombong, S. (2025). Nursing interventions key to successful extubation in mechanically ventilated patients. *MEDSURG Nursing, 34*(4), 169-174. https://doi.org/10.62116/MSJ.2025.34.4.169

Extubation success relies on structured nursing care and seamless transitions from critical care to medical-surgical units. Evidence-based interventions, such as spontaneous breathing trials and arterial blood gas monitoring, highlight the essential role of medical-surgical nurses in optimizing post-extubation recovery and outcomes.

Keywords: mechanical ventilation, extubation, post-extubation care, medical-surgical nursing, interprofessional collaboration

Mechanical ventilation is a critical life-saving intervention in the intensive care unit (ICU) used for patients with severe respiratory failure. According to the Society of Critical Care Medicine (2024), 20%-40% of ICU-admitted patients in the United States require mechanical ventilation. However, there can be variability among nations. The process of weaning patients from mechanical ventilation is a complex and gradual procedure that requires careful monitoring to ensure successful extubation and prevent reintubation.

As the patient's clinical condition improves, the extubation process begins with a gradual reduction in ventilatory support until the patient is ready for weaning. At this stage, a spontaneous breathing test (SBT) is conducted to evaluate the patient's ability to breathe independently without mechanical assistance. Once the patient demonstrates reliable independent breathing, the extubation process can proceed (Vetrugno et al., 2020). SBT technique with pressure support ventilation (PSV) is completed without disconnecting the patient from the ventilator but using pressure support in the low limit of 5-8 cm H2O, positive end-expiratory pressure (PEEP) less than or equal to 5 cm H2O (490.33 Pa), and fraction of inspired oxygen (FiO2) less than or equal to 40%-50% (Akella et al., 2022). Successful weaning can be achieved when the patient meets the following criteria: respiratory rate (RR) less than 35 breaths per minute, no increased accessory muscle activity, oxygen saturation (SaO2) above 90% with minimal oxygen support (FiO2 <40%), stable hemodynamics with heart rate (HR) below 140 beats per minute, absence of hypoperfusion sign, and stable mental status (Thille et al., 2022). In addition, sedation cessation has an important role in assessing the patient's weaning readiness (Akella et al., 2022). Extubation

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can be carried out after assessing the patient's ability to breathe spontaneously, maintain level of consciousness with a Glascow Coma Scale score above 8, and demonstrate cough response (Osman Elew et al., 2022).

This case report focuses on the impact of nurse monitoring interventions on successful extubation in a patient with a prolonged need for mechanical ventilation. Given the complexity and critical nature of weaning patients from mechanical ventilation, nurses must understand the intricacies of monitoring and interventions that can ensure successful extubation. This case study offers valuable insights into best practices and reinforces the pivotal role nurses play in optimizing patient outcomes during the weaning process.

Case Description

A 43-year-old female was admitted to the ICU on July 6, 2024, with a diagnosis of uterine myoma, chronic kidney disease on hemodialysis, and suspected peptic ulcer perforation. She presented with acute respiratory failure (type 2), requiring mechanical ventilation in synchronized intermittent mandatory ventilation mode due to hypercapnia (PCO2 28.5 mm Hg). The patient's condition prompted insertion of a central venous catheter and continued hemodialysis. After 5 days of ventilation, the patient showed signs of spontaneous breathing effort, prompting an evaluation for potential extubation.

During the pre-extubation process, nursing interventions included building a therapeutic relationship with the patient to establish trust and reduce anxiety, monitoring signs of weaning such as spontaneous breathing efforts, and assessing reflexes and consciousness (Glasgow Coma Scale score). The patient's sedation was managed using the Richmond Agitation-Sedation Scale, and her readiness for extubation was monitored carefully through SBT and frequent assessments of vital signs and arterial blood gas (ABG) values. Nursing staff also provided communication tools for the patient, who was intubated and unable to speak, to express any needs or discomfort.

Weaning was conducted using the SBT with minimal PSV. The nursing team played a crucial role in monitoring the patient's response to the weaning process, including RR, HR, blood pressure (BP), and SaO2. Adjustments to ventilator settings were made based on the patient's physiological responses to ensure she was supported adequately while dependence on mechanical ventilation was reduced gradually.

After successful extubation, the patient was transitioned to high-flow nasal cannula to maintain oxygenation. Nursing care included continuous monitoring of vital signs, respiratory function, and ABG parameters. The patient's oral intake was restricted for 48 hours after extubation to prevent aspiration, and oral hygiene was maintained to reduce risk of infection. The patient's progress was observed closely, with interventions aimed at ensuring hemodynamic stability and preventing complications such as reintubation.

Structured nursing interventions and close monitoring significantly contributed to the patient's successful weaning from mechanical ventilation and subsequent extubation. The patient's respiratory function stabilized, and no reintubation was required. The nursing team's efforts in monitoring and adjusting care plans according to the patient's evolving condition were pivotal in achieving a positive outcome.

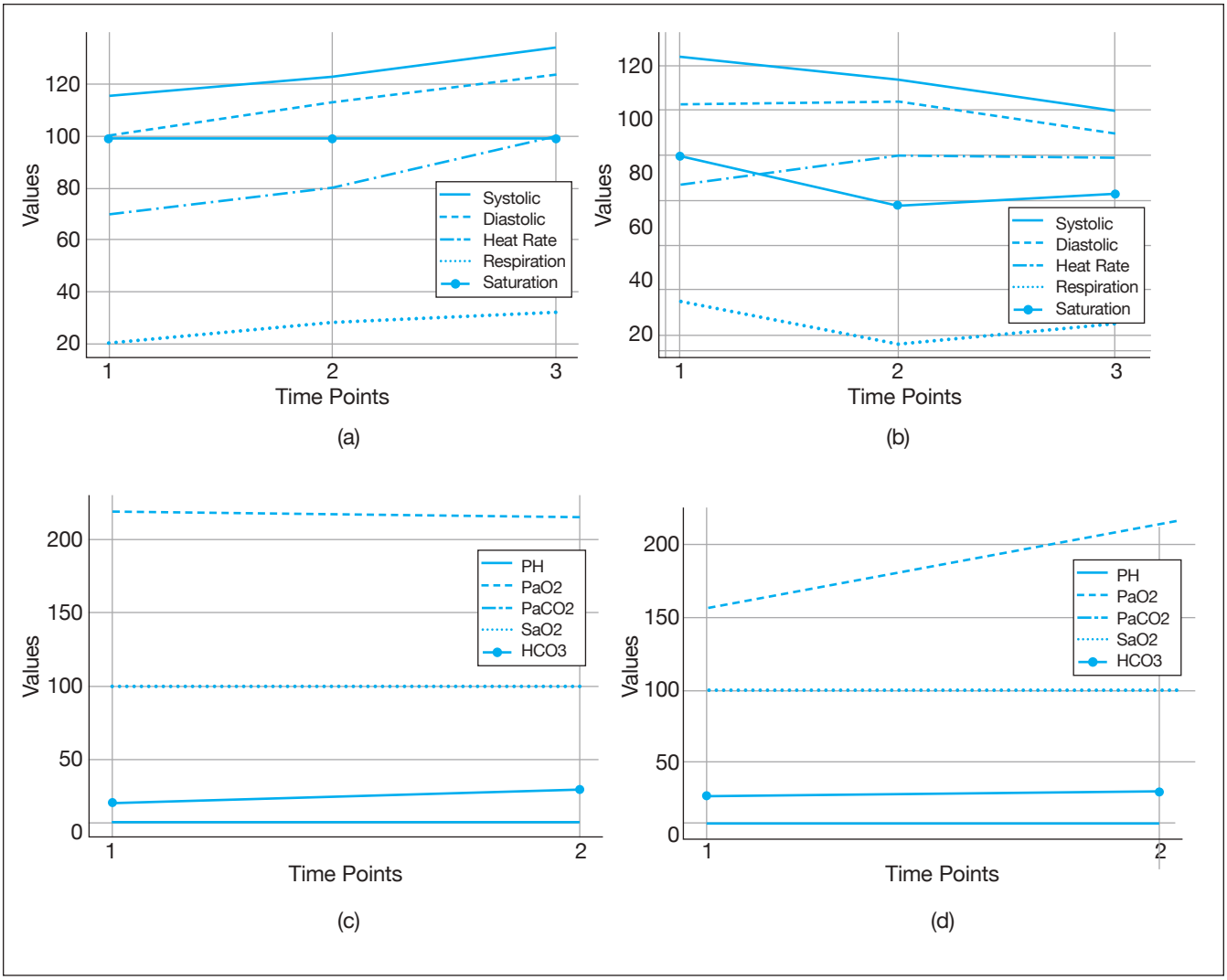
During the weaning process, the patient's RR was monitored carefully, showing a slight increase from 20 breaths per minute on July 11 to 32 breaths per minute by July 13 (see Figure 1). This increase indicated the patient was taking more spontaneous breaths, a positive sign of respiratory recovery, but also necessitated close monitoring to prevent respiratory fatigue.

HR similarly increased from 103 beats per minute on July 11 to a peak of 134 beats per minute on July 13, reflecting the patient's effort in spontaneous breathing. HR elevation is a common physiological response as the body works harder to meet the oxygen demand during weaning from mechanical ventilation, when the respiratory muscles are engaged more actively. BP remained relatively stable, with readings of 115/70 mm Hg on July 11 and 123/83 mm Hg on July 13; this suggested stable hemodynamic conditions during the weaning process (see Figure 1a).

ABG analysis revealed the patient's pH remained slightly alkalotic, with values of 7.532 on July 11 and 7.525 on July 12. These readings indicated a partially compensated respiratory alkalosis, which is a typical response during the weaning process as the patient adjusts to decreased ventilatory support. PaCO2 values, which were recorded as 21.3 mm Hg on July 11 and 23.5 mm Hg on July 12, reflected an adequate removal of carbon dioxide, further supporting the patient's readiness for extubation (see Figure 1c).

Following the successful extubation on July 14, the patient was monitored closely to ensure respiratory and hemodynamic stability and to prevent potential complications (see Figure 2). The chest x-rays taken on July 11 and July 14

FIGURE 1.
Vital Signs and Blood Gas Analysis: Pre- and Post-Extubation Phases



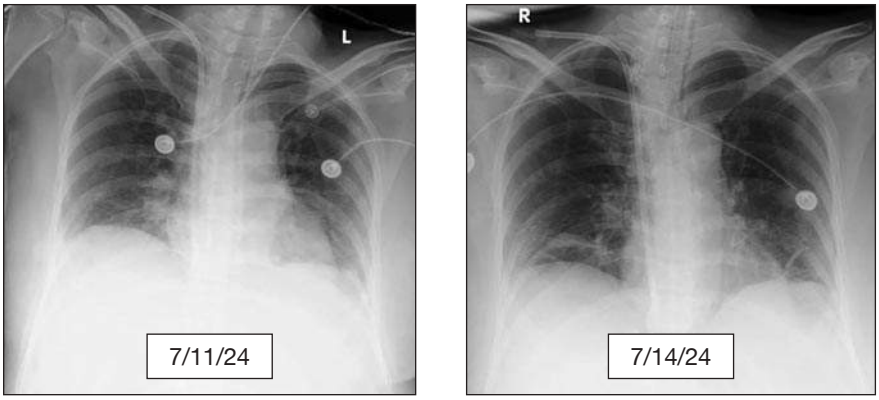
(a) vital signs pre-extubation, (b) vital signs post-extubation, (c) blood gas analysis pre-extubation, (d) blood gas analysis post-extubation

revealed a notable improvement in pulmonary status. The pre-extubation x-ray (July 11) showed mild pulmonary congestion, which was resolved in the post-extubation x-ray (July 14), indicating effective weaning and respiratory recovery. These findings validate the success of the extubation process and highlight the importance of continuous monitoring to identify and address any emerging complications promptly. The RR initially increased to 35 breaths per minute on July 15 but normalized to 16 breaths per minute by July 16, indicating the patient was gradually adapting to breathing without ventilatory support. HR also stabilized from 144 beats per minute post-extubation on July 15 to 120 beats per minute by July 17, demonstrating improved cardiovascular stability (see Figure 1b).

The patient's SaO2 remained high throughout the post-extubation period, with levels ranging from 97% to 100%, indicating effective oxygenation despite cessation of mechanical ventilation. BP remained stable with slight variations, showing readings of 123/89 mmHg on July 15 and decreasing to 117/83 mmHg by July 17. This stability suggested the patient maintained adequate hemodynamic function post-extubation (see Figure 1b).

ABG results post-extubation included pH 7.357 on July 15 (normal) and 7.525 on July 16, reflect-

Figure 2.
Serial Chest X-Rays Pre- and Post-Extubation



ing worsening respiratory alkalosis. This progression highlights the need for close monitoring to address potential underlying causes and ensure continued recovery during weaning. PaCO2 post-extubation was 47.3 mm Hg on July 15, which is slightly above normal range (35-45 mmHg) and likely reflects the body's adjustment to loss of mechanical support. By July 16, values had decreased to 23.5 mm Hg, below the normal range and indicating respiratory alkalosis, potentially explaining the shift from normal pH observed the previous day (see Figure 1d).

Clinical parameters monitored throughout the weaning and post-extubation period indicated a successful transition from mechanical ventilation to spontaneous breathing. While the patient demonstrated stability in respiratory and cardiovascular functions, respiratory parameters such as RR of 25 breaths per minute suggested mild tachypnea. This may have contributed to the loss of CO2 and the re-onset of respiratory alkalosis, as reflected in the ABG values. Despite this, the absence of reintubation and the patient's ability to sustain spontaneous breathing highlight the effectiveness of the nursing interventions in supporting recovery during the extubation process.

Discussion

The successful extubation of the patient can be attributed largely to the structured, comprehensive nursing interventions implemented throughout the weaning and post-extubation periods. The ICU is a newly established unit in the facility where the patient was hospitalized, and the care was provided predominantly by medical-surgical nurses who had not yet received official specialized training in critical care. Despite this limitation, collaboration between medical-surgical nurses and other healthcare professionals ensured continuity of care during the ICU phase. The patient demonstrated increasing respiratory independence during the weaning process as evidenced by the gradual increase in RR rate and HR, which were monitored carefully to prevent overexertion.

Following extubation, the patient was transferred to a high care unit (HCU), where the focus shifted to post-extubation monitoring and support. Collaborative efforts between ICU staff and medical-surgical nurses in the HCU ensured a seamless transition. These efforts included thorough handovers, joint assessments, and continuous monitoring of oxygen saturation, respiratory function, and cardiovascular stability. A study in Iran (Sepahyar et al., 2021) evaluated implementation of systematic, comprehensive nursing interventions and highlighted their critical role in successful weaning from mechanical ventilation. Research demonstrated designing nursing care based on criteria, such as lung function monitoring, physiological status, gas exchange, and patient psychological status, significantly influenced the success of extubation. Similarly, Elbana and co-authors (2023) emphasized the importance of structured nursing interventions in optimizing weaning outcomes. These authors' research in Egypt demonstrated selected nursing interventions for patients extubated after mechanical ventilation led to significant improvements in oxygenation and ventilation parameters. Findings were consistent with previous studies, emphasizing the importance of structured nursing care in optimizing outcomes during the weaning process.

ABG results were particularly valuable in assessing the patient's readiness for extubation. Observed partially compensated respiratory alkalosis indicated the patient was adapting well to the decreased ventilatory support, providing a solid basis for the decision to proceed with extubation. These findings are consistent with previous research that emphasized the importance of ABG monitoring in guiding extubation decisions (Keyal et al., 2020). In another study, Hazarika and colleagues (2023) demonstrated blood gas analysis parameters (including p/f ratio value, PaO2, FiO2, HCO3, and PaCO2) serve as critical benchmarks for assessing respiratory failure and determining an extubation plan. This is consistent with the findings of another study that assessed ABG values as an indicator of successful extubation in intensive care

patients. Assessment was based on normal values for PaO2, PCO2, and SaO2, indicating the patient did not experience gas exchange problems in the lungs (Virfa et al., 2023).

Post-extubation, the patient's ability to maintain stable oxygen saturation and normalize respiratory and cardiovascular functions without mechanical support underscored the success of the extubation process. The absence of reintubation and the patient's steady recovery further validated the effectiveness of the pre-extubation preparations and the post-extubation care provided.

This case highlights the importance of comprehensive nurse monitoring to the success of extubation for patients on mechanical ventilation. The use of SBT and careful monitoring of sedation, respiratory function, and ABG parameters were essential in determining the patient's readiness for extubation. The collaborative approach between nurses and other healthcare professionals ensured the patient received timely, appropriate care throughout the weaning process. Interprofessional teams in intensive care provide increased transmission of important information and insights that result in superior treatment. Patient care benefits from dynamic interprofessional monitoring and communication throughout the treatment process (Al Khalfan et al., 2021). In addition, collaboration among health professionals can help reduce the risk of unplanned extubation by providing specific nursing care to intubated patients, monitoring the endotracheal tube, and using sedation strategies and exercises to reduce physical restraints (Anis et al., 2024).

Studies have shown effective weaning strategies, such as those involving SBT and minimal PS, can reduce the risk of extubation failure and the need for reintubation significantly. In this case, nursing interventions played a key role in identifying optimal timing for extubation and providing necessary support to the patient during the critical transition from mechanical ventilation to spontaneous breathing. PSV generally is recommended in the mechanical ventilation weaning process. PSV values are reduced gradually by setting the minimum PSV and positive-end expiratory pressure, while monitoring ventilator alarms to indicate the need for ventilation assistance if weaning with SBT fails. This helps to reduce risk of re-intubation (Roberts et al., 2024). This finding is consistent with a systematic review comparing the SBT pressure support method with the SBT T-Piece method in terms of extubation success rates (Burns et al., 2024). The review found pressure support had a higher extubation success rate and was not associated with an increased risk of reintubation.

Nursing Implications

Findings of this case report underscore the significant role of medical-surgical nurses in managing care of patients undergoing extubation. In this ICU, medical-surgical nurses provided care during the patient's transition to spontaneous breathing. Unlike critical care settings, where continuous mechanical ventilation is common, medical-surgical nurses frequently manage patients in various stages of recovery who may require less intensive but highly vigilant monitoring (Jahrsdoerfer, 2019). This case emphasizes the importance of specific nursing interventions that can be applied directly within medical-surgical units to optimize patient outcomes during and after extubation.

Medical-surgical nurses are pivotal in monitoring patients' readiness for extubation, which involves assessing respiratory function, evaluating ABG results, and observing for any signs of respiratory distress (Serena et al., 2019). By carefully monitoring these parameters, nurses can identify early indicators of complications and intervene promptly to prevent reintubation and promote patient recovery. Maintaining stable hemodynamic parameters, such as HR and BP, also is essential in medical-surgical settings, where patients often have multiple comorbidities (Pinsky et al., 2022).

Post-extubation, medical-surgical nurses focus on maintaining airway patency, preventing aspiration, and managing oxygen therapy effectively. Nurses must be adept at performing ongoing assessments, such as auscultation for abnormal breath sounds, monitoring oxygen saturation, and implementing protocols to prevent common post-extubation complications, including pneumonia and airway obstruction. Providing patient education on breathing exercises and use of incentive spirometry also falls within the scope of medical-surgical nursing practice, aiding in the prevention of atelectasis and other pulmonary complications (Elbana et al., 2023).

This case highlights the importance of communication and collaboration among members of the healthcare team, particularly in facilitating effective transitions of care. While this case primarily focuses on the role of medical-surgical nurses, incorporating input from other disciplines (e.g., respiratory therapists and critical care physicians) is essential in managing complex cases and ensuring any changes in the patient's condition are addressed swiftly. Regular interprofessional rounds, effective handovers, and coordi-

nated care plans remain crucial to enhancing patient outcomes.

Ultimately, application of evidence-based nursing practices, continuous education, and skill development for medical-surgical nurses in areas such as respiratory management and patient assessment can contribute greatly to reducing adverse events and promoting successful patient recovery following extubation (Abdelazeem et al., 2019).

Conclusion

The success of extubation in mechanically ventilated patients is influenced heavily by the quality of nursing care and monitoring across different phases of care. The structured nursing interventions in this case, including pre-extubation preparation, weaning support in the ICU, and post-extubation monitoring in the HCU, were integral to the patient's recovery. Findings highlight not only the importance of continuous, interprofessional collaboration within the ICU, but also the need for effective communication and coordination during transition to lower levels of care to optimize patient outcomes during and after mechanical ventilation. MSN

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NCPD
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Criteria for Awarding NCPD Contact Hours
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1. Read the article and complete the evaluation at www.medsurgnursing.net.
2. Deadline for submission: August 31, 2027
Fees: Subscriber: Free | Regular: $20

Evidence-Based Practice

Improving Nurses' Confidence, Comfort, and Knowledge with End-of-Life Patient Care

Rebekkah L. Stanko

Stanko, R.L. (2025). Improving nurses' confidence, comfort, and knowledge with end-of-life patient care. *MEDSURG Nursing, 34*(4), 175-181. https://doi.org/10.62116/MSJ.2025.34.4.175

Acute care registered nurses experience emotional fatigue and stress from end-of-life patient care due to minimal palliative care preparation before and after licensure. Educational interventions such as the CARES Tool improve palliative care self-efficacy and enhance the patient's death experience.

Keywords: palliative care self-efficacy, palliative care education, end-of-life education, CARES Tool, palliative care preparation

Learning Outcome: After completing this education activity, the learner will be able to describe the impact of the use of a palliative care reference guide on nurses' palliative care self-efficacy.

Nurses have borne witness historically to more deaths than members of any other profession (Shah et al., 2021). Approximately 36.4% of U.S. deaths occur in the acute care hospital setting (Centers for Disease Control and Prevention, 2023), with about 60% of hospitalized patients at end of life (EOL) choosing palliative care over continued curative treatment (Vega at al., 2023). By 2060, the number of patients requiring palliative care is projected to increase 87% (Connor et al., 2021).

Registered nurses (RNs) are the main care providers at the hospital bedside of dying patients (Shah et al., 2021). RNs who are unprepared to care for patients at EOL experience increased emotional fatigue and stress, resulting in decreased quality of patient care (Shah et al., 2021). However, when RNs possess high palliative care self-efficacy (PCSE), emotional distress, situational discomfort, and compassion fatigue are minimized (Kelly et al., 2021; Puente-Fernandez et al., 2020; Shah et al., 2021). High PCSE enriches RNs' personal and professional growth, and promotes a good death experience for patients and families by minimizing patient suffering and maintaining clinical and ethical standards (Kelly et al., 2021; Puente-Fernandez et al., 2020). EOL education significantly increases PCSE, yet less than 40% of RNs receive any pre-licensure EOL preparation and less than 20% of practicing RNs have taken an EOL continuing education course (Taheri-Ezbarami et al., 2024). Furthermore, the majority of RNs who received EOL education pre-licensure acquired less than 50 hours (Puente-Fernandez et al., 2020).

Project Site and Reason for Change

The COVID-19 pandemic created an influx of patients at the EOL in the medical-surgical project unit. Unit RNs voiced fear, timidity, and a lack of knowledge to advocate and care for patients at EOL. A root cause analysis concluded unit RNs received no EOL education in hospital or unit orientation and have no required continuing education related to provisions of EOL care. The purpose of this Doctor of Nursing Practice project was to apply evidence-based practice and implement a quality improvement project using the Comfort, Airway, Restlessness and Delirium, Emotional and spiritual support, Self-care of the nurse (CARES) Tool to improve clinical RNs' PCSE. The

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Clinical Question

- For registered nurses (RNs) in the acute care hospital setting providing care to patients at end of life (EOL) (P), how does implementation of the Comfort, Airway, Restlessness and delirium, Emotional and spiritual support, and Self-care of the nurse (CARES) Tool (I), compared to no tool (C), affect nurses' palliative care self-efficacy (O)?

EBP Model

- Johns Hopkins Nursing Evidence-Based Practice Model (Dang et al., 2022)

Patient Outcomes

- Increase palliative care self-efficacy (PCSE) of clinical medical-surgical RNs caring for patients at EOL by 10%.
  - EOL: When a person has an advanced incurable illness, is likely to die within the next 12 months, or when death is imminent (National Health Services, 2022)
  - Palliative care: Care focused on enhancing quality of life by relieving patient suffering associated with life-threatening illnesses until death (World Health Organization, 2020)
  - PCSE: Belief in one's capability, capacity, and knowledge to engage in competent provision of EOL care (Kim et al., 2020; Puente-Fernandez et al., 2020)

Search Strategy and Results

An exhaustive literature review to determine alignment of the CARES Tool with enhanced RN PCSE was performed using the following search terms: *CARES Tool*, *PCSE Scale, nurse, end-of-life, hospice, palliative care, competence, confidence, self-efficacy, knowledge, education,* and *resources*. Search limits were peer-reviewed articles available in the English language and published 2017-2024. The initial search produced 108 articles. Articles that did not answer the PICO question, used irrelevant acronyms CARES or PCSE, had a population of interest other than RNs, or were appraised as low-quality evidence using the Johns Hopkins Evidence-Based Practice Evidence Appraisal Tools (Dang et al., 2022) were excluded. Eleven articles were used.

Databases

- CINAHL, Medline Complete, Cochrane Library, Google Scholar

Clinical Setting/Patient Population/Average Daily Census

- 26-bed medical-surgical unit at a 76-bed acute care community hospital in southern Pennsylvania

healthcare organization did not require institutional review board submission, and the project was deemed exempt by the supporting university's review board before project implementation.

Summary of Literature Search

Eleven articles were included as evidence for this project: four Level II quasi-experimental studies (quality A/B), two Level III quantitative descriptive studies (quality A/B), one Level III qualitative study (quality B), and one each of the following Level V pieces of evidence: literature review (quality A), integrative review (quality B), case study (quality B), and quality improvement project (quality B).

Tenets of PCSE

PCSE includes three primary tenets: comfort, confidence, and knowledge (Bierle et al., 2021; Kim et al., 2020; Manning et al., 2021; Neiman, 2020; Rees et al., 2020). While knowledge is correlated positively with increased PCSE (p=.013), nurses must develop confidence and comfort with EOL care through education and experience to provide appropriate holistic care, cultivate professional satisfaction, and mitigate emotional fatigue (Bierle et al., 2021; Hou et al., 2024; Kim et al., 2020; Manning et al., 2021; Neiman, 2020).

Educational Resources

Knowledge translation is essential to increase RNs' PCSE, and requires easily implementable resources applicable across practice settings (de Campos & Walsh, 2021; DeFusco et al., 2023; Kim et al., 2020; Rees et al., 2020). After receiving formal EOL education, RNs experience statistically significant (p<.001) increases in knowledge, confidence, and preparation for the provision of EOL care regardless of years of nursing practice (DeFusco et al., 2023; Manning et al., 2021). Effective EOL education focuses on developing assessment skills and addressing common physiological and spiritual patient needs (de Campos & Walsh, 2021; Kim et al., 2020; Neiman, 2020).

The CARES Tool

The CARES Tool is a pocket-

sized, palliative care educational reference guide based on the Palliative Care Clinical Practice Guidelines for Quality Palliative Care (Rees et al., 2020). The tool increases RNs' knowledge and comfort with EOL symptom assessment and management by providing prompts to guide and augment provision of individualized patient and family EOL care using the acronym CARES (Bierle et al., 2021; de Campos & Walsh, 2021; Hou et al., 2024; Neiman, 2020; Rees et al., 2020). Additionally, the CARES Tool provides self-care strategies to aid RNs with personal grief and stress management. Following CARES Tool implementation, RNs have exhibited statistically significant increases in knowledge of EOL care (p<0.001; Hou et al., 2024), confidence with EOL care provision (p=0.003; Rees et al., 2020), and comfort with EOL symptom management (p<0.001; Hou et al., 2024).

Employers' Role

Professional development education is fundamental to enhance RNs' EOL knowledge, confidence, and comfort, and improve the death experience for patients and families (de Campos & Walsh, 2021; Hou et al., 2024). Regardless of previous experience or education, clinical RNs benefit when employers provide ongoing education and resources to promote quality EOL care (Bierle et al., 2021; de Campos & Walsh, 2021; DeFusco et al., 2023; Manning et al., 2021). However, EOL education is limited in pre-licensure academic courses and post-licensure continuing education programs (DeFusco et al., 2022; Hou et al., 2024; Manning et al., 2021). Employers have a responsibility to address this practice gap to improve patient outcomes, and decrease RN moral distress and patient symptom burden (Bierle et al., 2021; DeFusco et al., 2022; Hou et al., 2024; Manning et al., 2021).

Answer to the EBP Question

Educational resources effectively improve RN PCSE regardless of years of nursing experience or prior EOL education (Bierle et al., 2021; de Campos & Walsh, 2021; DeFusco et al., 2023; Manning et al., 2021). Employers' implementation of such resources is essential to improve the EOL experience for RNs, patients, and families (Bierle et al., 2021; de Campos & Walsh, 2021; DeFusco et al., 2023; Hou et al., 2024; Manning et al., 2021). The CARES Tool increases RN PCSE by providing prompts that enhance EOL knowledge and guide best practice integration at the bedside (DeFusco et al., 2023; Kim et al., 2020). Literature supports CARES Tool implementation in inpatient nursing units.

Implementation of the Change in Practice

The project examined RNs' change in PCSE after using the CARES Tool when providing care at patient EOL during a 9-week implementation period (January-April 2023). For this project, patients at EOL were defined as patients under the services of hospice or palliative care, or having a hospice or palliative consult related to EOL care provisions. Permission to use the CARES Tool was obtained (B. Ferrell, personal communication, October 3, 2022) on behalf of the late Bonnie Freeman.

Measurement Instrument

The PCSE Scale was selected to measure change in RNs' PCSE based on its brevity and high validity and reliability for evaluating RNs' capacity to manage aspects of EOL care (α=0.92; p<0.001; Phillips et al., 2011). The PCSE Scale uses a 12-item, 4-point Likert scale to measure confidence with 12 patient management topics (1=*need further basic instruction*, 2=*confident to perform with close supervision*, 3=*confident to perform with minimal consultation*, or 4=*confident to perform independently*; Phillips et al., 2011). Permission to use the PCSE Scale was obtained from the publishing company, Elsevier (Copyright Clearance Center, personal communication, October 3, 2022).

Methodology

The project intervention followed a one-group pretest-posttest correlational design with a convenience sample of RNs working on the project unit. RNs were eligible for participation if the project unit was their primary unit, and they completed baseline education and surveys. Non-RN staff, travel/agency RNs, and RNs who were cross-trained or floated to work on the project unit, were not practicing in a clinical role, were on orientation or hired after project implementation started, or had a planned leave of absence during implementation were not eligible to participate.

The project leader (PL) facilitated participation by introducing the project via an information script and delivering synchronous education supported with a PowerPoint® on CARES Tool use and participation requirements at two mandatory unit meetings. The PL advised RNs' completion of baseline education and surveys would indicate implied consent, and participation was optional and anonymous, and would not increase time needed to render EOL care.

The PCSE Scale survey and a demographics survey were administered 2 weeks before intervention implementation; the PCSE

Scale survey was re-administered the week following project completion. During the implementation period, participants used the CARES Tool as a resource when rendering EOL patient care. To ensure project fidelity, the PL supplied physical copies of the CARES Tool. Consistency of results was achieved through participants' completion of a paper log at the end of each shift to track days worked, number of patients cared for at EOL, and use of the CARES Tool. The PL was available via email and was onsite regularly throughout implementation to monitor intervention use and support staff. All paper data were maintained under triple lock in an office only accessible to the PL. All electronic data were maintained in a locked document on a university-owned, password-protected computer.

Evaluation of the Initiative

Data were maintained, scrubbed, and analyzed using SPSS Statistics for Windows, Version 29.0. Before project implementation, the α level of statistical significance was set at 0.05. Data were matched for analysis using unique participant identifiers. Baseline and postintervention PCSE scores had adequate reliability with Cronbach's alpha of 0.85 and 0.98, respectively. Demographic data, raw PCSE Scale score data, and collection log data were analyzed using descriptive statistics. One participant did not answer the demographic question regarding prior EOL education. Statistical analysis indicated this missing data point was random, and thus the data point was not managed. The data set (*N*=5) met all assumptions of the dependent samples *t*-test for inferential analysis.

Table 1.
Sample Demographics

Demographics	Survey Answers	
	n	%
Age (years)		
21-35	2	40
36+	3	60
Gender		
Male	0	0
Female	5	100
Highest nursing education		
Associate's degree	2	40
Bachelor's degree	3	60
Total nursing experience		
6 months - <5 year	3	60
5-15+ years	2	40
Nursing experience on unit		
6 months - <3 years	2	40
3-15+ years	3	60
Prior EOL education*		
Yes	1	20
No	3	60
Last cared for EOL patient		
<1 month ago	5	100

N=5

*Only four participants answered this question.

Results

Of 32 RNs on the project unit, 17 (53.12%) met project inclusion criteria. Eight (47.06%) completed the initial education and surveys; the reason nine RNs chose not to participate is unknown. One participant (12%) was lost to attrition for unknown reasons. Two participants (29%) did not care for any patients at EOL during the intervention period and therefore were not included in the final sample. The final sample consisted of five female RNs. Most were age 36 or older (60%, *n*=3) with a Bachelor of Science in Nursing degree (60%, *n*=3). The majority of participants had fewer than 5 years of nursing experience (60%, *n*=3) and reported no previous EOL education (60%, *n*=3), but all had cared for a patient at EOL within the past month (see Table 1 for sample demographics).

During implementation, participants worked an average of nearly 12 days (*SD*=8.6; range 5-22) and cared for 19 patients at EOL. Average scores for individual items on the PCSE Scale were high at baseline and post-intervention. At baseline, 66.7% (*n*=8) of items averaged above 3.0 (confident to perform with minimal consultation). Postintervention, all items averaged above 3.0 (see Table 2).

Preintervention, a benchmark was set for a 10% increase in PCSE Scale scores. The average PCSE Scale score increased by 17.86%; a dependent samples *t*-test demonstrated this increase was statistically significant, $t(4)=3.35$, $p=0.029$, $d=1.50$, 95% CI [0.14, 2.80]. The large effect size ($p=0.29$, $d=1.50$) indicated the increase also was clinically significant. Inferential statistical analysis is described in Table 3.

Comparison to Current Literature

The average total baseline PCSE Scale scores (*M*=38.8, *SD*=4.97, *n*=5) were similar to the median baseline score (38) reported by DeFusco and colleagues (2022) and the average baseline score (33.8) reported by Kim and colleagues (2020). In a quasi-experimental study, Hou and colleagues (2024) implemented the CARES Tool to increase RNs' PCSE using a different measurement instrument; their findings also demonstrated statistically significant increases in RNs' knowledge and confidence regarding EOL care ($p<0.001$).

TABLE 2.
Descriptive Statistics for PCSE Scale Scores

Survey Item	*M*	*SD*	*Mdn*	Mode	Min	Max
Answering patients' questions about dying						
Pre	3.20	0.45	3.00	3	3	4
Post	3.80	0.45	4.00	4	3	4
Providing emotional support						
Pre	3.00	0.00	3.00	3	3	4
Post	4.00	0.00	4.00	4	4	4
Informing about support services						
Pre	2.60	1.14	3.00	3	1	4
Post	3.80	0.45	4.00	4	3	4
Discussing environment options						
Pre	3.20	1.10	4.00	4	2	4
Post	3.60	0.55	4.00	4	3	4
Discussing patient wishes						
Pre	2.80	1.10	3.00	3	1	4
Post	3.60	0.55	4.00	4	3	4
Questions about medications						
Pre	3.40	0.55	3.00	3	3	4
Post	3.60	0.55	4.00	4	3	4
Responding to pain						
Pre	3.80	0.45	4.00	4	3	4
Post	4.00	0.00	4.00	4	4	4
Responding to terminal delirium						
Pre	3.00	0.71	3.00	3	2	4
Post	3.60	0.55	4.00	4	3	4
Responding to terminal dyspnea						
Pre	3.40	0.55	3.00	3	3	4
Post	4.00	0.00	4.00	4	4	4
Responding to nausea/vomiting						
Pre	3.40	0.55	3.00	3	3	4
Post	3.80	0.45	4.00	4	3	4
Responding to constipation						
Pre	3.60	0.55	4.00	4	3	4
Post	4.00	0.00	4.00	4	4	4
Responding to patient's limited decision-making capacity						
Pre	3.40	0.89	4.00	4	2	4
Post	3.40	0.55	3.00	3	3	4
Individual item summary						
Pre	3.22	0.74	3.00	3	1	4
Post	3.77	0.43	4.00	4	3	4
Total scores						
Pre	38.80	5.00	41.00	33*	33	44
Post	45.20	1.64	45.00	44*	44	48
Difference	↑6.40	↓3.36	↑4.00	↑11	↑11	↑4

*Multiple modes exist; the smallest mode is listed.

TABLE 3.
Inferential Statistics for PCSE Scale Score Findings

Statistical Analysis	Findings
Tests of normality	Normally distributed
Skewness	Not skewed: 0.44
Kurtosis	Platykurtic: -3.01
Shapiro-Wilk	p=0.09
Dependent samples t-test	Assumptions met
p-value	p=0.029
Statistical significance	Yes
Cohen's d	d=1.50
Clinical significance	Large

Note: α level for statistical significance: $p<0.05$

Project Sustainment

Project findings support continued use of the CARES Tool on the project unit as a practical resource for assisting clinical RNs to acknowledge and heighten their PCSE. Project sustainability would require all RNs who did not participate in the project to receive a copy of the CARES Tool and be educated on its use. Newly hired RNs could be educated during new-employee orientation or as part of unit onboarding. The CARES Tool is the only material resource required; one-time education can be delivered synchronously or asynchronously.

Limitations

Project limitations included the small final sample (N=5), which limited the robustness of findings, prevented transferability of findings beyond the project site, and prevented making inferences about confounding variables. CARES Tool use and number of patients at EOL cared for were based on participants' self-report. Unplanned renovations on the project unit during the implementation period temporarily closed multiple patient rooms, potentially decreasing the number of patients at EOL on the unit.

Lessons Learned/ Nursing Implications

Frequent use of the CARES Tool early in the intervention period resulted in RNs' decreased need to reference the tool later in the intervention period. Additional research on this scaffolding effect of the CARES Tool is warranted. A strength of this project was that implementation occurred during participants' scheduled shifts and CARES Tool use did not increase the time to provide EOL care; thus, the organization did not have to pay participants additional work hours. Costs for developing additional copies of the CARES Tool and educating RNs on using the tool were minimal. For this project, the tool was sized to fit into scrub pockets; however, some RNs indicated they would benefit from an electronic or large-print tool.

Employers have a responsibility to address current nursing practice deficits and promote a positive working environment for nurses that fosters resiliency and growth (Bierle et al., 2021; de Campos & Walsh, 2021; DeFusco et al., 2023; Manning et al., 2021). The benefit of the CARES Tool is twofold. For the experienced nurse, the CARES Tool offers guidelines to address emotional fatigue and low PCSE; for the novice nurse, the CARES Tool provides the groundwork to promote a career of high PCSE (de Campos & Walsh, 2021). When employers implement interventions such as the CARES Tool, they assist in making patients' last moments on earth and the families' last experience with the patient as positive as possible (Bierle et al., 2021; de Campos & Walsh, 2021; DeFusco et al., 2023; Freeman, 2015; Hou et al, 2024; Manning et al., 2021).

Conclusion

When RNs possess high PCSE, the death experience is improved for patients, families, and the RN. Medical-surgical RNs regularly support patients through EOL; however, a lack of EOL education has resulted in low PCSE. Employers can address this by implementing educational interventions that promote the application of knowledge into practice. Despite project limitations, clinically significant findings add to the current evidence supporting the CARES Tool as an effective intervention to increase RN PCSE. Continued use of the CARES Tool on the project unit is recommended. Larger scale pilot projects and longitudinal studies are warranted on the impact of the CARES Tool on RN burnout and turnover, and the patient and family experience. MSN

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Leveraging the Expertise of the Nursing Professional Development Practitioner in a Nurse Residency Program

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Background

The nursing professional development practitioner (NPDP) is a registered nurse with a bachelor's degree or an international equivalent in nursing (Harper & Maloney, 2022b). Persons in this role foster learners' professional growth and competence to improve patient care. To be recognized as a nursing professional development specialist, the nurse must be graduate-prepared and hold a nursing professional development certification. Based on the practice model, the seven characteristics of the NPDP include leader, champion for inquiry, learning facilitator, change agent, mentor, advocate for specialty, and partner for practice transition. Additionally, the NPDP in healthcare organizations plays a critical role in educational components, such as onboarding, competency management, role development, and collaborative partnerships (Bobek et al., 2024; Harper et al., 2024). The NPDP role is described, along with ways in which an NPDP is well-suited for the position of nurse residency program (NRP) coordinator.

Stanislaus, M.R., Coughlin, V., Nash, A., & Zavotsky, K.E. (2025). Leveraging the expertise of the nursing professional development practitioner in a nurse residency program. *MEDSURG Nursing, 34*(4), 182-188. https://doi.org/10.62116/MSJ.2025.34.4.182

Nurse residency programs have been implemented widely to enhance the successful transition of novice nurses into professional practice. The use of a program coordinator role is addressed, along with ways the nursing professional development practitioner can assist the coordinator.

Keywords: resident, medical-surgical, novice nurse, nurse residency program, nursing professional development practitioner, practice transition, transition-to-practice program

Nursing Professional Development Practice Model

The scope and standards of practice outlined by the Association for Nursing Professional Development provide essential resources to support the roles of the NPDP and various nursing professional development initiatives. The ANPD nursing professional

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TABLE 1.
Nurse Residency Program Coordinator Role Benefits from Components of the Nursing Professional Development Practitioner

Nursing Professional Development Practitioner Responsibilities (Harper & Maloney, 2022b)	ANCC PTAP Conceptual Model (ANCC, 2024)	AACN/Vizient Curriculum Domains (AACN, 2024)
Onboarding/Orientation	Organizational enculturation process promotes learner assimilation into culture and values of the organization.	Knowledge for nursing practice
Competency Management	Development and design focus on education, curriculum development, and competency management	Foundation of nursing quality and safety
Education		
Role Development	Practice-based learning Learning under guidance of preceptors and mentors	Development of the professional nurse Leadership and system-based practice
Collaborative Partnership	Program leadership to oversee overall program design, development, and evaluation	Interprofessional practice
Inquiry	Program goals and outcome to understand overall impact of the program	Scholarship for nursing practice

AACN=American Association of Colleges of Nursing, ANCC=American Nurses Credentialing Center, PTAP=Practice Transition Accreditation Program

development practice model is grounded in systems theory and consists of three key elements: input, throughput, and output (Harper & Maloney, 2022b). This model offers a comprehensive design and iterative evaluation process that promote greater engagement and help uphold high standards of nursing practice. These components are crucial for assisting novice nurses in transitioning into the practice setting. An NPDP understands nursing professional development scope and standards of practice and the importance of networking skills, and holds a graduate degree and certification. This person can be positioned to support development of the program coordinator role (Harper et al., 2024; Rainford et al., 2022). Incorporating Association for Nursing Professional Development system practice models in the program through a robust design and iterative evaluation process promotes increased engagement of new graduate nurses and the use of nursing professional practice standards in the program (Harper & Maloney, 2022b).

Input includes the learners (nurse residents, preceptors, mentors, NPDPs), environmental health (materials and tools), and roles and responsibilities. These tools assist the NPDP in conducting a comprehensive gap analysis of the program and identifying ways to enhance it while aligning program goals with the mission and vision of the organization (American Nurses Credentialing Center [ANCC], 2024). The description of throughput includes internal and external activities that align with the organizational mission and vision (Harper & Maloney, 2022b). In the first year of this program, new graduate nurses receive orientation, manage their competencies, and develop their roles while participating in seminars that integrate them into the healthcare organization. Output includes changes, such as professional role competence, staff satisfaction, increased retention rates, and improved patient outcomes (Harper & Maloney, 2022b).

Validation of NPDP Function as Program Coordinator

The NPDP role has many attributes that can prepare practitioners to assume a program coordinator role. The NPDP role is versatile and able to embrace responsibilities, such as onboarding/orientation, competency management, education, role development, collaborative partnership, and inquiry (Harper & Maloney, 2022b). The program coordinator role benefits from the components of

Table 2.
Example of Evidence-Based Curriculum Development

Topic	Curriculum Development
Fall Prevention	The NDNQI definition of fall, how to assess falls, and where to find the dashboard to review patients' fall data are introduced in seminar I. Integration of a presentation on how to enter a fall on the patient safety electronic dashboard is followed by a fall case study in the Mock RCA lecture to understand the process for root cause analysis specific to falls.
Narrative Reflection	Nurse residents complete guided reflections to support their professional development though use of brief, group, and self-reflection.
NC3 (Nursing Culture, Community, and Connection)	The NC3 framework of the nurse residency program endorses health equity content across all seminars. Topics such as the significance of gender pronouns and gender identity in the context of lesbian, gay, bisexual, transgender, and queer or questioning (LGBTQ) are integrated upon initiation and throughout the nurse residency program.

NDNQI=National Database of Nursing Quality Indicators, RCA=root cause analysis

the NPDP in several ways (see Table 1) (American Association of Colleges of Nursing [AACN], 2024; ANCC, 2024; Harper & Maloney, 2022b). Characteristics of the NPDP can be useful in addressing needs of new graduate nurses (Harper & Maloney, 2022b), and the role could be leveraged to function as program coordinator. The residency program coordinator role offers a unique opportunity for the NPDP to provide specialized classroom instruction to improve residents' clinical leadership skills, create a sense of belonging, and provide clinical experiential learning with the support of preceptors, mentors, and subject matter experts. The coordinator also guides a smooth transition to professional practice for nurse residents (AACN, 2024; ANCC, 2024; Cosme, 2023).

Leader

As a leader, the NPDP ensures residency programs align with the organization's mission, vision, and values, which is crucial in transition-to-practice programs. The NPDP is responsible for identifying gaps in the program's curriculum, learner requirements, and operations as aligned with the organization's mission and vision (ANCC, 2024). This enables the NPDP to conduct ongoing evaluations of the program and identify feedback from stakeholders. Furthermore, retention rates in healthcare systems over the past 5 years have been challenging financially (Nursing Solutions, Inc. [NSI], 2025). Beyond the general concept of creating and disseminating educational programs, the NPDP in the role of a residency program coordinator can help determine the program's financial impact. The collaboration of the NPDP and preceptors can influence new graduate nurses' retention and turnover rates significantly (Reebals et al., 2021).

A reduction in turnover can decrease orientation costs, which are estimated nationally to average $61,100 per nurse with an organizational impact of more than $4 million annually (NSI, 2025). In 2024, the organizations with this program and a dedicated program coordinator role maintained a retention rate of 89% compared to the national benchmark of 76.2% (AACN, 2024; NSI, 2025). Additionally, skills among residents over the 12-month program improved in central line dressing, physician communication, and blood administration (AACN, 2024). The NPDP considers these financial implications to bring value to the organization.

Champion for Inquiry

When nurses become advanced beginners, they can perform satisfactorily based on their previous clinical experience. They are efficient in some areas but may need guidance as their knowledge still is developing (Benner, 1984). The NPDP can help provide needed structure for residency programs, serving as a content expert who understands the values of continuous professional development. In addition, the person in this role can assist nurse residents in translating evidence for use at the bedside, thereby contributing to excellence in practice and high standards of nursing care. According to Vizient/AACN Nurse Residency Program core curriculum, the initial program seminar focuses on necessary skills for evidence-based decision-making at the point of care (AACN, 2024). Supporting nurses beyond orientation and preceptorship, the NPDP as program coordinator works closely with novice and

advanced beginner nurses for the first 12 months, acts as an educational navigator, and fosters critical thinking using gamification and group exercises to help them develop their professional identity and role confidence (Szarejko et al., 2021). Nurse residents need education to identify resources to begin the process of scholarly inquiry, which is included in the role responsibilities of the program coordinator.

Learning Facilitator

Much like the NPDP, the program coordinator facilitates curriculum development and competency management and promotes learning. Evidence suggests this is fundamental to the professional development of the novice nurse (White et al., 2021). With a background in nursing professional development, the NRP coordinator values the importance of providing effective education or facilitating learning through serving as a subject matter expert. The NRP coordinator uses resources such as curriculum subject matter experts and adapts to the organization's setting (AACN, 2024) (see Table 2).

Competency management experience in the NPDP role includes oversight of initial and ongoing competencies (Coughlin et al., 2021). Ensuring validation of skills to support nurse residents' competency is based on requirements of professional organizations, credentialing and certification entities, regulatory agencies, employers, and other key stakeholders (American Nurses Association [ANA], 2021). With expertise in adult learning principles and various learning styles, the NPDP provides opportunities to meet learners' needs. For hands-on learners, opportunities with kinesthetic learning (e.g., skills stations) are tailored to the specialty of each work setting. These skills may include IV insertions, indwelling urinary catheter care, chest tube management, central line dressing change, 12-lead electrocardiogram, and tracheostomy care. The program coordinator with an NPDP background formulates effective teaching methodologies to promote learning and skill development (Harper & Maloney, 2022a).

Advocate for the Nursing Specialty and Nursing Professional Development Practice

The NRP coordinator is a role model in advocating for NPD and nursing practice. For example, the NRP coordinator advocates for healthcare organizations by participating in programs that promote nursing retention strategies and professional practice. The National Patient Safety Goals from The Joint Commission (2025) can guide the provision of appropriate training for medication administration and reconciliation across the continuum of care. The role of an NRP coordinator, similar to that of the NPDP, includes evaluation of program goals and outcome measures using validated tools that compare outcomes to national benchmarks to help advocate for and amplify the program. Leveraging a formal NRP advisory board consisting of key stakeholders helps to guide the NRP through collaboration, evaluation, and creativity in alignment with organizational goals (ANCC, 2024) and supports the validation and sustainability of the program. Advocating for the program in collaboration with an NRP advisory board, the coordinator uses nursing professional development practice judgment skills to analyze learner outcomes and revise the program's goals if necessary (ANA, 2021; Harper & Maloney, 2022b; Harper et al., 2024; Hu & Broome, 2020).

Change Agent

Constant change in health care and demand from consumers, patients, and agencies are challenges in the process of preparing and maintaining a contemporary curriculum for novice nurses' practice transition (Cantrell et al., 2024). The NPDP is a natural change agent able to influence scientific inquiry by participating in various stakeholder meetings to address program challenges and remain aware of healthcare issues, educational trends, and organizational factors (Brunt & Bogdan, 2025). The NRP coordinator collaborates with interprofessional team members, academic partners, and other key stakeholders to support transition to practice programs using nursing professional development practice judgment and opportunities for program enhancement (Cantrell et al., 2024). Research has described transition to professional practice as stressful due to novice nurses' self-doubt; they often feel under-prepared and overwhelmed, especially regarding time management, decision-making, communication, and care provision (Donnelly et al., 2023). The NPDP is essential in the acute care setting to promote growth and development of novice nurses. The NPDP plays a vital role in driving positive change and aiding novice nurses in meeting their ongoing education needs in a quickly evolving healthcare environment by supporting and coaching them throughout stages of professional development. Efforts to build clinical and professional skills in novice nurses add value to the organization (Boerger, 2020; Harper et al., 2024).

Mentor

The NPDP has a broad understanding of mentorship's impact for new graduates. Strategically introducing mentorship to nurse residents at the beginning of program seminars sets the stage for relationship building. Mentorship provides dedicated career and psychosocial support, ensuring nurse residents feel reassured and confident in their professional development (ANCC, 2024). Mentorship tailored to a nurse's cultural needs can empower a commitment to career progression (Brown-DeVeaux et al., 2023). Mentorship that supports a diverse workforce also boosts self-confidence, problem-solving skills, and professional communication (Brown-DeVeaux et al., 2023; Gularte-Rinaldo et al., 2023). Successful nurse mentorship programs in healthcare organizations can strengthen relationships between experienced staff and novice nurses as well as provide administrative support (Belanger-Hardy et al., 2023; Kreedi et al., 2022). Beyond the program seminars, nurse residents are able to participate in mentee/mentor training, which promotes continued education and professional development and is guided by the NPDP and NRP coordinator.

Partner for Practice Transition

Residency programs are designed to support the successful transition of advanced beginners into professional practice (AACN, 2024; ANCC, 2024; Davis et al., 2021), which aligns with the role of the NPDP. Curricula not only must prepare new graduate nurses to work effectively in the clinical setting but also prepare them to build resilience, personal attributes, and courage to face the challenges of the dynamic health system (Donnelly et al., 2023). The NPDP helps enculturate new graduate nurses into their new roles by supporting and guiding their educational and professional needs.

Evaluation Process

NPDPs have the expertise to evaluate the achievement of learning, change, and professional role competence and growth. This skill is crucial in assessing the progress of new graduates' professional development in programs through validated survey tools (Harper & Maloney, 2022b). Surveys such as the Casey-Fink Graduate Nurse Experience Survey are conducted at 6, 12, 24, and 36 months after beginning professional practice to track the progress of graduate nurses (Casey et al., 2021). Also, seminar program evaluation surveys can be used to evaluate program content and teaching strategies. The NRP coordinator assesses the program in collaboration with nursing leaders and key stakeholders by sharing and examining data.

Limited support during transition to practice increases stress for new graduate nurses and risks job retention. Evidence highlights three key themes for the transition: achieving competence for safe practice, managing stress, and reducing turnover (Reebals et al., 2021). Sustaining the program requires thorough planning and evaluation, which NPDP involvement can enhance. The NRP coordinator familiarizes new nurse leaders with the program, encouraging them to participate in seminars to understand their roles and responsibilities and ensure program sustainability. The program's sustainability is based on organizational culture and retention of novice nurses through partnership with organizational stakeholders (Davis et al., 2021). Additionally, program evaluations are part of day-to-day activities for the NPDP in enhancing program outcomes.

The Value of NPDP and Program Outcomes

The program can influence the first-year retention rate for novice nurses, an important performance indicator for many healthcare organizations that includes a positive financial impact on the organization (Davis et al., 2021). For example, developing and sustaining a successful program can improve new nurse retention, eliminate the need to hire contracted staff, and support a healthy annual budget. Evidence from NSI (2025) shows a $48.72 hourly pay difference between staff and travel nurses. Reducing use of contracted staff by 20 travel nurses could save an organization an average of $2,026,760. Savings could allow organizational leaders to focus on hiring and training more new graduate nurses (Cantrell et al., 2024).

Implications to Practice

A medical-surgical unit is among the top five areas for new graduate nurses hired into practice. For many of them, the medical-surgical unit is an initial step into professional practice that allows nurses to develop essential skills while managing diverse patient populations with various medical conditions. The NPDP in this setting significantly impacts quality of care by providing new graduate nurses with structured, focused training, leading to enhanced clinical competency and patient safety and improved communication with patients and families. Through a supportive learning environment, new nurses confidently transition to practice, minimizing potential errors and improving patient outcomes (Hallaran et al., 2023). The NPDP

uses the role's full potential to support confidence building, role satisfaction, organizational commitment, and resilience skills.

Curricula prepare new graduate nurses to work effectively in the clinical setting and build resilience, personal attributes, and courage to face the challenges of the dynamic health system (Donnelly et al., 2023). The NPDP's efforts to identify gaps in knowledge, assess learning needs, evaluate program outcomes, and provide ongoing support for new graduates help the organization reduce turnover rates. By improving staff satisfaction and fostering a desire to remain with the organization, these efforts can contribute to a more stable workforce (Varghese & Shkrabak, 2025).

Responsibilities of an NPDP in medical-surgical settings include program planning, implementation, and evaluation through partnership, collaboration, and networking with various stakeholders. If there is an opportunity in organizations to develop a program for transition to practice, the NPDP role should be strongly considered to improve its overall success. The NRP coordinator role exemplifies how healthcare organizations maximize the NPDP's knowledge, skills, and abilities to improve program effectiveness and success (Szarejko et al., 2021). The program coordinator influences organizational culture, partnering with human resources and acting as a marketing and retention specialist, performance coach, counselor, and advocate. Having the most qualified professional to help manage the program can minimize role strain and assist with graduate nurses' transition to practice (ANCC, 2024; Szarejko et al., 2021).

The NPDP connects the goals of the NRP to clinical practice while continuing to support graduate nurses' transitions in their professional development (Cosme, 2023; Reebals et al., 2021). The program's sustainability requires engaged stakeholders, including preceptors, nurse leaders, NPDPs, expert clinical nurses, and other ancillary healthcare workers, as well as support from within the organization (e.g., human resources). Developing an NRP requires identification of potential limitations or challenges, which can include time, budgets, stakeholder involvement, leadership support, curriculum development, and space allocation to accommodate the program structure (Cosme, 2023). Implications of this role overview may be used by nurse leaders, NPDPs, and policymakers to support the value of an NRP.

Conclusion

The NPDP's adept use of the nursing professional development practice model in a program leadership position may promote professional development by enhancing learning experiences and role competence, and supporting lifelong learning. The success of residency programs relies on collective efforts of nurse leaders and key stakeholders to ensure adequate resources are available. NPDPs can help fulfill the program coordinator role in creating an environment that develops clinically competent and well-rounded professional nurses. MSN

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Overactive Bladder Syndrome

Mary L. Schreiber

Overactive bladder (OAB) is a clinical diagnosis associated with a variety of chronic symptoms affecting urinary function and storage, including urgency, frequency, nocturia, and urge incontinence (Carpenter & Campaign, 2022; Rogers, 2023). Symptoms can worsen without treatment, creating an economic burden and significantly impacting patients' quality of life (Cleveland Clinic, 2022; Rogers, 2023). Women tend to suffer more from urge incontinence, and men tend to experience more episodes of urgency and frequency (Scarneciu et al., 2021). According to the Cleveland Clinic (2022), approximately 33 million adults have OAB, although the prevalence is suspected to be much greater as many patients fail to report their symptoms because of the embarrassing nature of this condition. Clinical manifestations and risk factors of OAB, assessment and diagnostic testing foci, and a variety of treatment considerations are discussed.

Clinical Presentation

Patients with OAB can present with varied symptoms, which supports the need for individualized care. Typically, urinary urgency associated with frequency and nocturia are present. Urge incontinence may not be present in all cases, and a urinary tract infection should not be present in any case (Scrivens, 2022; Yates, 2023). Symptoms burden patients with incontinence and urine leakage, which can affect employment opportunities due to the excessive need for toileting and the anxiety of not having immediate access to a toilet (Yates, 2023). Embarrassment and reluctance of patients to participate in social activities and sexual relationships occur, and patients can be distressed to the point of becoming isolated with increased anxiety and depression (Scrivens, 2022).

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Overactive bladder syndrome can create severe physical and emotional burdens for patients because of the sudden, urgent need to urinate. Various treatment options are available for symptom management. Patients' consistent involvement with recommendations is imperative to improving quality of life.

Keywords: overactive bladder, bladder function, urinary urgency, urinary frequency, incontinence

Learning Outcome: After completing this education activity, the learner will be able to discuss the clinical presentation, diagnosis, and management of patients with overactive bladder syndrome.

Risk Factors

Numerous risk factors are associated with OAB (see Table 1). Black and Hispanic populations have a higher risk for OAB. Estrogen loss is a precipitating factor for post-menopausal women. Intra-abdominal pressure on the pelvic floor, as occurs with obesity, also can increase urinary incontinence (Carpenter & Campaign, 2022). Other medical conditions, such as genital prolapse, irritable bowel syndrome, urinary tract infection, enlarged prostate, and obstructive sleep apnea, are risk factors for OAB. Anxiety and depression can result from OAB. An episiotomy or use of forceps during a vaginal birth and prostate surgery are risk factors for OAB. Any foods or beverages to which a person is sensitive can be the culprit as well (e.g., coffee, carbonated drinks, alcohol, artificial sweeteners). Smoking also can lead to OAB (Carpenter & Campaign, 2022; Rogers, 2023; Scarneciu et al., 2021).

TABLE 1.
Risk Factors for Overactive Bladder Syndrome

- Black and Hispanic populations
- Postmenopausal women
- Obesity (body mass index >30 kg/m2)
- Genital prolapse
- Irritable bowel syndrome
- Obstructive sleep apnea
- Urinary infection
- Enlarged prostate
- Anxiety and depression
- Prostate surgery
- History of vaginal births
- Smoking
- Consumption of coffee, carbonated beverages, and artificial sweeteners

Sources: Carpenter & Campaign, 2022; Rogers, 2023; Scarneciu et al., 2021

Assessment and Diagnostics

A comprehensive history and physical examination are essential for investigating differential diagnoses and potential treatment options. Identifying risk factors and pre-existing conditions is crucial (Wienand-Barnett & Guerrero, 2022). A thorough medication reconciliation should be performed to identify current medications that may affect continence (e.g., loop and thiazide diuretics, ACE inhibitors, alpha blockers, benzodiazepines, ketamine) (Yates, 2023). Patients should keep a 3-day voiding diary for the practitioner to assess urination habits, volume, frequency, and incontinence. The diary also can assist in determining severity of the condition (Scrivens, 2022). Urinary urgency, urge incontinence, frequency, and nocturia are symptoms that typically lead to a diagnosis of OAB (Carpenter & Campaign, 2022; Scrivens, 2022). Any suggestion of neurological involvement should prompt assessments of mobility, cognition, hand function, and lumbar-sacral function. The physical exam should include a digital rectal exam for male patients and a vaginal exam for female patients (Wienand-Barnett & Guerrero, 2022). An abdominal or pelvic mass and prostate issues should be ruled out before initiating treatment (Phillips, 2020). A skin assessment of the perineal area should be performed. Leakage of urine can result in skin breakdown, increasing the risk for infection (Rogers, 2023).

As part of differential diagnosis, laboratory studies should include a urinalysis with culture, hemoglobin A1C, and creatinine (Scarneciu et al., 2021). Bladder scanning and ultrasonography can approximate the volume of post-void residuals; amounts greater than 100 milliliters are considered significant (Wienand-Barnett & Guerrero, 2022). Additional urodynamic studies such as cystometric testing may be indicated. This test measures bladder pressure during filling and voiding (leak point pressure) through use of a urinary catheter and manometer. Electromyography can measure the strength of the detrusor and bladder sphincter muscles during voiding, and video-urodynamic recordings of the bladder filling and emptying can aid in measuring the coordination of the bladder and sphincter (Rogers, 2023).

Treatment Options

Treatment for OAB involves a range of options, typically starting with conservative measures to improve symptoms (Scrivens, 2022). An essential first step is to educate patients about OAB and emphasize the importance of their consistent involvement with the recommended treatment plan. Patients also may not realize the effect of certain foods and beverages on their condition, making participation and adherence to the recommendations paramount to achieving optimal outcomes (Scarneciu et al., 2021). According to Wienand-Barnett and Guerrero (2022), patients who drink a lot of water can reduce their symptoms of urgency, frequency, and nocturia by cutting fluid intake by 25%. Alcohol, caffeine, and carbonated beverages, and tomato-based, spicy, and salty foods can contribute to OAB symptoms and should be limited (Phillips, 2020; Wienand-Barnett & Guerrero, 2022).

Patient referrals to a pelvic health physiotherapist can be a beneficial option for introducing exercises and other techniques to aid in symptom relief. When proper technique is used, Kegel exercises can strengthen pelvic floor muscles (Carpenter & Campaign, 2022). Bladder retraining can lead to reduction in urinary urgency, frequency, and leakage through training the bladder to hold a larger urine volume before needing to void (Phillips, 2020). Use of incontinence products can improve patients' comfort and confidence in addition to keeping the skin dry.

Pharmacological treatments for OAB aim to produce symptom relief with minimal side effects. Primary treatment considerations are listed in Table 2. Antimuscarinics bind to receptors in the detrusor muscle of the bladder and inhibit its contraction by blocking acetylcholine (Carpenter & Campaign, 2022). Dry mouth, constipation or gastric upset, blurry vision, and dry eyes are typical side effects of these medications. Antimuscarinics are contraindicated for patients with narrow angle glaucoma (Scrivens, 2022; Yates, 2023). In addition, caution should be used in prescribing antimuscarinics to patients who are frail

Table 2.
Primary Treatment Considerations for Overactive Bladder Syndrome

Modifiable Foci
- Behavioral therapy
- Weight loss (for body mass index >30 kg/m2)
- Adequate hydration
- Avoiding consumption of bladder irritants (e.g., coffee, carbonated drinks, alcohol)
- Smoking cessation

Exercises and Techniques
- Pelvic floor exercises
- Bladder retraining
- Timed voiding
- Constipation prevention
- Urge suppression methods
- Use of incontinence products

Common Medications (not all inclusive)
- Antimuscarinics (anticholinergic subtype)
  - oxybutynin (Ditropan®)
  - tolterodine (Detrol®)
  - darifenacin (Enablex®)
  - solifenacin succinate (VESIcare®)
  - trospium chloride (Sanctura®)
  - fesoterodine fumarate (Toviaz®)
- Beta-3 adrenergic agonists
  - mirabegron (Myrbetriq®)
  - vibegron (Gemtesa®)
- Hormones
  - estradiol (Estrace®)

Sources: Carpenter & Campaign, 2022; Ellsworth, 2025; Scarneciu et al., 2021; Scrivens, 2022; Yates, 2023

or over age 65 due to potential side effects of cognitive impairment, fall risks, and cumulative effects of polypharmacy. Use of the Anticholinergic Burden Scale can help providers determine the patient's risk for adverse events, with a score of 3 or more indicating a safety risk with increasing mortality (Carpenter & Campaign, 2022; Scrivens, 2022; Yates, 2023). Trospium chloride (Sanctura®) does not cross the blood-brain barrier and is considered a primary choice for older adults (Carpenter & Campaign, 2022).

For patients who are unable to tolerate antimuscarinics, a beta-3 agonist (mirabegron [Myrbetriq®]) can be considered. This drug inhibits an overactive detrusor muscle, relaxing the bladder. Typical side effects include hypertension, urinary tract infections, and nasopharyngitis (Yates, 2023). Mirabegron is contraindicated for blood pressure exceeding 180/110 mm Hg (Carpenter & Campaign, 2022). OAB may be reduced with hormonal treatment in postmenopausal women with vaginal atrophy (Scrivens, 2022).

Patients who do not respond adequately to medications, have an intolerance to medication side effects, or have other contraindications may be considered for invasive procedures in attempts to gain symptom relief. Through cystoscopy, botulinum toxin A (Jeuveau®) can be injected into the detrusor muscle to cause localized paralysis, promoting reduction of urinary frequency and urge incontinence. Injections are repeated when effects dissipate after approximately 9 months (Scrivens, 2022). Sacral nerve modulation (SNM) involves placement of an implanted device near the sacral nerves. Bladder function is controlled by the sacral nerves, and this device delivers continuous, low frequency impulses to control bladder function. The impulses can be regulated to meet the patient's normal voiding pattern (Phillips, 2020). Posterior tibial nerve stimulation (PTNS) delivers intermittent impulses to the posterior tibial nerve immediately proximal to the medial aspect of the ankle. The stimulus travels to the sacral nerve plexus in the lower spine. This option requires weekly visits over 3 months and subsequent follow-up visits (Scarneciu et al., 2021). With SNM and PTNS, varying levels of stimulation are assessed to reach the patient's normal voiding habits without causing discomfort. Bladder reconstructive surgery and urinary diversion (ileal conduit and surgery) are rarities in the treatment of OAB and are considered only in unique circumstances (Scarneciu et al., 2021; Scrivens, 2022). Patients also can be directed to numerous resources for additional support in effectively managing OAB. Table 3 lists several key organizations that offer information and support.

TABLE 3.
Overactive Bladder Resources

Continence Product Advisor	www.continenceproductadvisor.org
National Association for Continence	www.nafc.org
The Urology Foundation	www.theurologyfoundation.org
Urology Care Foundation	www.urologyhealth.org
American Urogynecologic Society	www.augs.org
International Continence Society	www.ics.org

Conclusion

OAB is a chronic condition that requires a thorough investigation of patient history and detailed physical assessments to ensure proper diagnosis and optimal treatment choices with realistic goals are provided. No cure exists for OAB (Scarneciu et al., 2021). Consistent treatment and support that meet individualized patient needs can lead to effective management of this burdensome condition and enhance patients' physical and emotional quality of life. MSN

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Skin Cancer: What Nurses Need to Know

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Skin cancer is the most common cancer in the world, with the number of cases in the millions. The most common types of skin cancer include basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). Another type of skin cancer, malignant melanoma, accounts for 1% of all skin cancer but causes many of the deaths associated with skin cancer. In 2025, an estimated 104,960 new cases of invasive melanoma and 107,240 cases of *in situ* melanoma will occur, with 8,430 deaths in the United States. Before age 50, skin cancer is more common in women but shifts to men after age 50 (American Cancer Society, 2025).

Medical-surgical nurses should be aware of the types of skin cancer and skin cells in which they originate. BCC is the most common type of skin cancer, often occurring in patients with fair skin; it develops in sun-exposed skin (e.g., head, neck, arms) but can form on the chest and legs. Originating in the basal cells, BCC is a round growth that looks like a white bump or a pink patch of skin (see Figure 1). SCC develops in the squamous cells and is the next most frequently occurring skin cancer. Patients may have a red hard bump, a scaly patch, or a wound that heals and continues to open. Again, this skin cancer occurs mostly in fair-skinned adults on the ear, neck, arms, and back (see Figure 2). Melanoma is considered a

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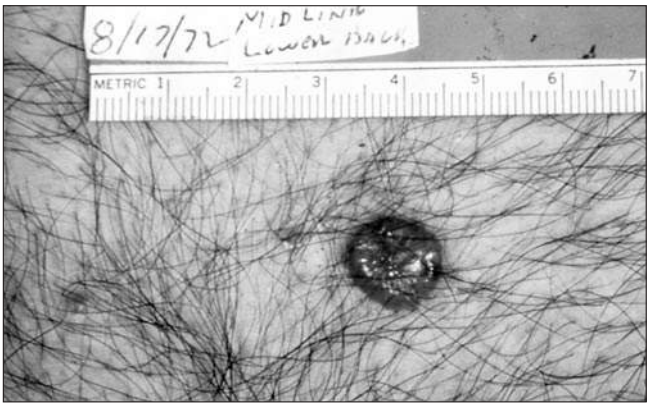
Skin cancer is a common yet preventable malignancy. Early detection and prevention can reduce morbidity significantly and improve long-term outcomes. Healthcare professionals are key to educating patients about sun safety and promoting regular skin checks.

Keywords: skin cancer, basal cell carcinoma, squamous cell carcinoma, melanoma

FIGURE 1.
Basal Cell Carcinoma



Source: National Cancer Institute

FIGURE 2.
Squamous Cell Carcinoma

Source: National Cancer Institute

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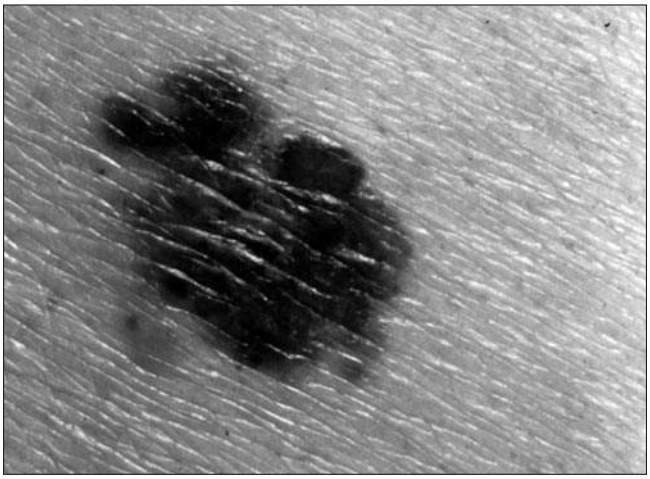
FIGURE 3.
Melanoma



Source: National Cancer Institute

more aggressive cancer because it tends to metastasize and is the deadliest form. Melanoma appears as a dark spot or a change in a mole. Knowing how to recognize melanoma is extremely important for early diagnosis and treatment (American Academy of Dermatology Association, n.d.) (see Figure 3).

Causes and Risk Factors of Skin Cancer

Skin cancer starts when mutations occur in skin cells, resulting in unchecked growth. It usually is due to multiple risk factors, such as environmental exposures or personal risk factors. One environmental exposure is ultraviolet (UV) radiation, whether from the sun or artificial sources such as tanning beds. Additional risks for cutaneous SCC include genetic predisposition, immune system suppression, and exposure to carcinogenic chemicals (Jiang et al., 2024).

Prolonged unprotected exposure to UV rays, especially at peak sun hours, may damage the deoxyribonucleic acid in skin cells. Accumulation of this kind of damage over time is associated with a higher probability of cancer. Both natural sunlight and tanning beds have been classified as carcinogenic by multiple health authorities. More than 90% of non-melanoma skin cancers are linked to UV exposure (Centers for Disease Control and Prevention, 2024; Skin Cancer Foundation, 2024).

Some individuals are more susceptible by virtue of skin type. People with pale skin, light eyes, and fair or red hair contain less melanin, a pigment which provides some defense against UV rays. As a result, they are more prone to sunburn and UV-related damage. The Fitzpatrick skin classifications I and II identify people who easily burn and seldom tan; they are at highest risk for melanoma from UV exposure (Kwa et al., 2024).

Genetic predisposition to skin cancer can influence an individual's risk of developing the disease significantly; specific genes and hereditary syndromes are associated with skin cancer. For BCC, a basal cell nevus syndrome caused by variants increases a patient's risk. For SCC, certain syndromes such as oculocutaneous albinism and Fanconi anemia can increase risk. CDKN2A is a germline tumor suppressor gene that is associated with an increased likelihood of developing melanoma (National Cancer Institute, 2025).

A personal history of blistering sunburns, particularly in childhood or adolescence, is another major risk factor. Having five or more severe sunburns can double the risk of developing melanoma (Skin Cancer Foundation, 2024). A weakened immune system also elevates the risk of developing cutaneous SCC. Individuals who have had organ transplants, undergone chemotherapy, or taken immunosuppressive medications are included in this risk group (Jiang et al., 2024).

Environmental exposures can influence the risk of developing skin cancer significantly. According to the National Toxicology Program (2021), long-term contact with substances such as arsenic, coal tar, or certain industrial chemicals is linked to non-melanoma skin cancers. Individuals who have undergone radiation therapy for other conditions are more likely to develop BCC or SCC in treated areas (Jiang et al., 2024).

Understanding causes and risk factors of skin cancer is essential for recognizing persons who may be at higher risk. While genetics cannot be changed, many risks can be minimized through informed choices and awareness, especially those related to UV exposure.

Signs, Symptoms, and Diagnosis

Signs and symptoms of skin cancer include a new or changing growth, a bump that is increasing in size, or a sore that does not heal. These changes usually occur in sun-exposed areas of the body but may occur in other areas. Melanoma has specific signs referred to as "ABCDE" rules: "A" for asymmetry (halves do not match), "B" for border (irregular), "C" for color (black or blue in a mole, pigmentation is not uniform), "D" for diameter (greater than 6 millimeters), and E for evolution (change in size, color, or shape over time). Any of these signs should be evaluated by

a provider through a thorough examination of the skin. Dermoscopy (using a magnifying lens and light) may help in determining if a suspicious lesion should be biopsied. A definitive diagnosis is done by taking an excisional biopsy (remove entire lesion) or punch biopsy (remove part of lesion). A shaved biopsy is not recommended for melanoma lesions. If the provider is concerned about metastasis, full body imaging should be done to evaluate any spread of the cancer (Kottschade, 2024).

Staging

BCC, SCC, and malignant melanoma are staged differently. BCC is staged based on risk of recurrence and extent of disease, classifying cases as low-risk, high-risk, or advanced. SCC is staged as local or regional. Local disease indicates no lymph node involvement, while palpable lymph nodes on physical exam require a needle biopsy to confirm regional disease. Melanoma staging follows a three-step process to assess tumor depth (T), nodal involvement (N), and distant metastasis (M) for initial clinical staging, followed by pathological staging. Pathological staging is determined after surgical removal of the primary tumor and, if necessary, nearby lymph nodes (National Comprehensive Cancer Network, 2023, 2025). Once staging is established, appropriate treatment options can be reviewed.

Treatment Options

When pathology and staging are complete. the provider determines options for treatment. These may include surgery, radiation, chemotherapy, targeted therapy, and immunotherapy. Primary treatment is by surgical excision with extraction of the tumor along with surrounding healthy tissue to ensure borders are clear of all cancerous cells. The depth of the skin lesion in melanoma is important; for certain depths, a sentinel lymph node biopsy may be warranted (Kottschade, 2024). To conserve normal tissue in BCC and SCC, a Mohs procedure may be done where removal of the cancerous tissue slice by slice is followed by microscopic analysis of the tissue until the frozen section is noted to be tumor-free. This saves as much normal tissues as possible (Hasan et al., 2023). Another surgical treatment method, electrodesiccation and curettage (ED&C), involves local anesthetic and a curet to scrape out malignant tissue and then burn the bottom of the cancer area. Hasan and co-authors noted this method only can be used to remove cancerous tissue that is on the top layer of epidermis with BCC and SCC in the presence of low-risk diagnosis.

Other conventional treatments for BCC and SCC include use of cryotherapy, photodynamic therapy, topical chemotherapeutics (e.g., fluorouracil [5-FU] or imiquimod [Aldara®]), chemical peels, and chemotherapy/immunotherapy. These therapies can be combined successfully to eliminate the cancerous tissue burden along with other tumor cells that may be present elsewhere in the body (Hasan et al., 2023). Tumor-directed therapy with photodynamic therapy may be done for BCC and SCC, and consists of using light to destroy the cancer cells. Some systemic chemotherapy is an option for SCC and compendium-approved for melanoma; options include carboplatin (Paraplatin®) and paclitaxel (Taxol®) (Kottschade, 2024). The only chemotherapy approved for melanoma by the U.S. Food and Drug Administration is dacarbazine (DTIC-Dome®) (Kottschade, 2024).

Radiation may be used if margins were not clear of the cancer or the skin cancer could not be removed by surgery. Radiation may be used in the adjuvant and metastatic setting of melanoma. Multiple methods are available to deliver radiation in melanoma, including stereotactic radiosurgery in which increased amounts of radiation are delivered to a precise area (Kottschade, 2024).

Immunotherapy uses the body's defense systems to attack cancer cells. The different ways in which immunotherapy can kill skin cancers include immune checkpoint inhibitors. Immunotherapies to treat melanoma stage III-IV that already has been surgically excised consist of programmed cell death protein 1(PD-1)/programmed death ligand 1 (PD-L1) inhibitors such as pembrolizumab (Keytruda®), nivolumab (OPDIVO®), interferon alfa-2B (Intron® A) and CTLA-4 ipilimumab (Yervoy®), which can be combined (Hasan et al., 2023). Cemiplimab (LIBTAYO®) and pembrolizumab may be given for unresectable SCC (Kottschade, 2024).

Skin cancers also may be treated with targeted therapy that kills specific cancer cells; for example, vismodegib (Erivedge®) and sonidegib (ODOMZO®) inhibit signal transduction, killing BCC (American Cancer Society, 2023). Melanoma patients with the V-Raf Murine Sarcoma viral oncogene homolog B1 (BRAF) mutation can be treated with combination therapy. This involves using BRAF and mitogen-activated protein kinase inhibitors. Combinations approved for melanoma include dabrafenib (Tafinlar®) / trametinib (Mekinist®); vemurafenib (Zelboraf®) / cobimetinib (Cotellic®); and encorafenib (BRAFTOVI®) / binimetinib (Mektovi®) (Kottschade, 2024).

Prevention and Early Detection

Education on skin cancer prevention should begin at an early age, starting in the home. This includes using sunscreen regularly, wearing hats and sunglasses, and covering skin prone to sunburn with protective clothing. Sunscreen should be broad-spectrum, water-resistant, and have an SPF of 15-30 or higher. It should be applied generously and reapplied every 2 hours (Perez et al., 2022). One of the most effective interventions is limiting outdoor activities during peak UV radiation hours, typically between 10 a.m. and 2 p.m., and avoiding tanning beds.

The American Cancer Society and the Skin Cancer Foundation offer public health education campaigns that emphasize prevention, early recognition of skin abnormalities, and when to seek medical evaluation. Monthly self-skin checks and annual full-body professional skin exams are key preventive strategies that can be adopted as part of individual wellness goals. Modifying personal risk factors is also essential to maintaining long-term health.

Conclusion

Skin cancer is a common yet preventable malignancy, with UV radiation being a key cause. Identifying risk factors, such as fair skin, immunosuppression, and family history, is essential for early intervention. Recognizing signs such as non-healing lesions and atypical moles enable timely diagnosis. Diagnosis is confirmed by thorough skin evaluations and biopsies and is followed by treatment, such as surgical excision, topical agents, or radiation therapy. Healthcare professionals are key to educating patients about sun safety and promoting regular skin checks. Early detection and prevention can reduce morbidity significantly and improve long-term outcomes. MSN

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Qualities Leaders Seek in Medical-Surgical Nurses

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Chargualaf, K.A., & Russin, K. (2025). Qualities leaders seek in medical-surgical nurses. *MEDSURG Nursing, 34*(4), 197-198. https://doi.org/10.62116/MSJ.2025.34.4.197

Nurse leaders maintain expectations of nurse followers to achieve their vision. Communicating role expectations and modeling healthy behaviors are essential to creating a successful team. Leaders who articulate a clear vision with expectations promote positive leader-follower relationships.

Keywords: nurse leaders, nurse followers, leader expectations, leader-follower relationship

Successful leadership depends on a professional, respectful relationship between leaders and followers. Each maintains expectations of the other to support and enhance this dynamic relationship. Nurses expect to work in a healthy, safe environment where they can make decisions and problem-solve as part of an autonomous practice. Clear, timely communication and professional development opportunities increase motivation and support a positive working relationship (Chargualaf & Abraham-Settles, 2025).

Nurse leaders maintain expectations of nurse followers to achieve their vision. Successful followers do not idly wait for a leader's direction; as Yoder-Wise and Sportsman (2023, p. 13) suggested, leaders instead contribute "optimally in tandem with other group members to achieve clinical and organizational outcomes." These authors also identified Bleich's Tasks of Followership as an outline for behaviors of an effective nurse follower. Nurses should demonstrate accountability to themselves to provide safe care based on an established standard; to the team by working collaboratively, sharing knowledge and skills with others; and to the organization by upholding policies and processes. Acts of incivility, expressed as using passive-aggressive words or actions or withholding information, undermine successful followership. Followers who embrace change, support a healthy work environment, and give or receive feedback to advance a colleague, the team, the unit, or the organization are valued.

Nurse leaders desire nurses who work together as a team in a productive and collegial manner (Alba et al., 2025). A literature search by the column authors revealed key themes that underpin the leader/follower relationship and optimize team outcomes. Team dynamics are influenced positively when leaders create a culture that values role modeling/mentorship, engagement, emotional intelligence, and moral resilience. Articulating these expectations is essential to creating a successful team.

Mentoring is an essential part of creating a team of nurses who are dedicated to quality patient care through best practice (Alba et al., 2025). Mentors are role models who remain abreast of current research, serve as evidence-based practice champions, follow policies and procedures, and lead or directly support quality improvement projects (Yoder-Wise & Sportsman, 2023). A culture of mentoring reduces turnover, improves patient care, and enhances the work environment due to a strong, mutually beneficial relationship between mentor and mentee (Coventry & Hays, 2021). Recognizing the clear and positive influence of mentors in clinical settings, nurse leaders expect experienced nurses will embody leadership and uphold excellence in nursing practice while also being accountable to support the transition and development of new nurses. By fostering mentorship, nurse leaders promote the growth and empowerment of nurses (Alba et al., 2025).

Nurse engagement is more than just participation in workplace activities; it is a purposeful devotion to the unit or organization that results in increased job satisfaction, retention, and teamwork (Hisel, 2020). Rooted in coaching and professional growth, engage-

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ment is a benefit of mentorship and role modeling (Armstrong et al., 2021). Engaged nurses tend to be happier and healthier, while disengaged nurses often lack passion and promote negativity (Armstrong et al., 2021; Hisel, 2020). Through supportive leadership, nurses are empowered to participate actively in unit or organizational initiatives. Including clear expectations for nurse engagement in annual performance evaluations reinforces the value placed on participation in unit or organizational initiatives.

Nurse leaders also desire emotional intelligence (EI) in their followers. Emotionally intelligent nurses are mindful, observant, thoughtful, and responsible (Lu & Shorey, 2021). Behaviors indicative of EI include demonstrating motivation to learn, empathy towards others, personal reflection, and monitoring or self-regulation of personal emotions (Lu & Shorey, 2021). Turjuman and Alilyyani (2023) concluded EI is related significantly and positively to nurses' work engagement and work performance. These researchers advised nurse leaders to cultivate a culture that values EI, provide training to enhance EI skills, create opportunities for interaction with emotionally intelligent peers, and support nurse self-care. With organizational support, nurses can exhibit EI in their practice.

Moral and ethical dilemmas are common in the healthcare setting. Continued exposure to such dilemmas increases risks to nurses' psychological safety (Berdida, 2023). Moral resilience is the capacity to navigate challenging situations while preserving well-being and minimizing burnout (Brewer et al., 2024). Expecting a morally resilient nursing workforce is unrealistic without purposeful support from nurse leaders and healthcare organizations. Providing dedicated self-care resources, training to develop resiliency skills and capacity, promoting open communication, and implementing policies that prioritize ethical care thus are essential. Ultimately, fostering moral resilience in the nursing workforce requires leadership support and personal commitment.

Nurse leader expectations should be conveyed clearly and promptly, with consideration for followers' needs and perspective. Successful leaders acknowledge the importance of communicating important information in multiple ways that demonstrate appreciation for generational preferences (Alba et al., 2025; Christensen et al., 2018). Christensen and colleagues advocated for using social media as one communication modality. Clearly articulated expectations promote accountability, workplace engagement, professional growth, and patient care quality.

Nurse leaders maintain expectations of followers. When leaders fairly and consistently uphold their expectations, they foster trust, accountability, and a positive work environment that leads to improved team morale, better work performance, and optimal patient outcomes. Ultimately, leaders who articulate a clear vision with expectations promote positive leader-follower relationships. MSN

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Use of Mobile Applications in Managing Veterans' Post-Traumatic Stress Disorder Symptoms

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Military service often exposes individuals to a disproportionately high level of stress and potentially traumatic experiences, significantly increasing their risk of developing post-traumatic stress disorder (PTSD). According to the U.S. Department of Veterans Affairs, National Center for PTSD (2025b), an estimated 7% of all veterans will experience PTSD at some point in their lifetimes, with higher estimates for those who deploy to war zones. PTSD can have great impact on a veteran's daily activities and pursuit of interpersonal relationships, leading to a decrease in overall quality of life. Despite challenges associated with PTSD, veterans are less likely to seek treatment compared to other affected groups. This likely is related to known barriers, such as stigmatization, lack of knowledge, or challenges accessing the VA healthcare system (Owen et al., 2018; Reger et al., 2022; Wielgosz et al., 2024).

Current research supports concurrent use of medications and nonpharmacological therapeutic interventions for PTSD management, with nonpharmacological interventions as the primary management strategy. Cognitive processing therapy, eye movement desensitization and reprocessing, and prolonged exposure are commonly used nonpharmacological treatments (U.S. Department of Veterans Affairs, 2025). If nonpharmacological interventions alone prove ineffective, pharmacological agents such as selective serotonin reuptake inhibitors or serotonin-norepinephrine reuptake inhibitors may be added. While these treatments have demonstrated effectiveness for many people, incorporating the use of mobile applications (apps) in theory gives veterans access to PTSD management around the clock (Owen et al., 2018). Mobile apps will not eliminate the need for professional treatment, but they can be used to support veterans during periods of limited resource availability and thus potentially enhance quality of life.

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Military service increases veterans' risk of developing post-traumatic stress disorder (PTSD). Mobile mental health apps can improve veterans' quality of life by decreasing PTSD symptoms, addressing barriers to care access, and positively influencing mental health self-management.

Keywords: veterans, post-traumatic stress disorder, PTSD, mental health, mobile app

Mobile Apps

Over the past two decades, the Veterans Administration (VA) has worked in conjunction with other agencies to improve the availability of treatment options for PTSD. In their report on the early development, testing, and evaluation of mobile apps, Owen and colleagues (2018) highlighted the need to design apps with veterans in mind. Knowing the stigmatization veterans may experience related to PTSD and challenges with accessibility to treatment, the VA designed free-to-use mobile mental health apps that promote privacy by not requiring them to store users' personal identifying information. The VA employed user experience testing to ensure understanding of how apps could be incorporated best into clinical care and address unmet and complex mental

TABLE 1.
Select Mobile Applications for Veterans with Post-Traumatic Stress Disorder

App	Features	Special Considerations
PTSD Coach	• Provides education about PTSD symptoms and treatments • Includes self-assessment tools • Offers coping strategies such as relaxation techniques and positive self-talk • Tracks symptoms over time	• Best used as a supplement to professional treatment • Some features are customizable.
CBT-I Coach	• Addresses insomnia related to PTSD • Provides sleep tracking and strategies from Cognitive Behavioral Therapy for Insomnia (CBT-I) • Includes relaxation exercises and sleep hygiene education	• Best used in conjunction with therapy • Requires ongoing user engagement for effectiveness • Some exercises may not be effective for severe sleep disturbances without professional guidance
Mindfulness Coach	• Guides users through mindfulness exercises to manage stress and anxiety • Provides structured training in mindfulness techniques • Offers daily practice reminders and progress tracking	• Useful as a complementary tool but not a standalone treatment • May require consistent practice to see benefits • Some exercises may not resonate with all users.
VetChange	• Aids veterans with PTSD who struggle with alcohol use • Helps users set drinking goals and track progress • Provides cognitive-behavioral tools to manage triggers and craving	• Best used alongside therapy or support groups • Requires motivation to engage in self-monitoring and behavior change • Not a replacement for professional addiction treatment if needed

Source: U.S. Department of Veterans Affairs, National Center for PTSD (2025a)

healthcare needs. Through testing, the researchers found veterans value having apps available to provide personalized, context-specific interventions during times of need.

Generally, mobile mental health apps are practical and well received, and appeal to veterans (Wielgosz et al., 2024). Research demonstrates use of mobile apps is effective in reducing PTSD symptoms and increasing resiliency and mindfulness (Owen et al., 2018; Reger et al., 2024; Wielgosz et al., 2024). Regular, consistent engagement with mobile apps over time is essential to achieving the desired results. Table 1 highlights a selection of apps available through the VA, their features, and special considerations for use. Incorporating innovative features into an app (e.g., the option for peer support) may increase its appeal, user self-accountability, and engagement, thereby increasing the likelihood of symptom improvement (McLean et al., 2022; Reger et al., 2024). In addition, mobile apps have emerged as alternatives to instructor-led group-format sessions that may be less desirable for some veterans (Wielgosz et al., 2024).

Despite the availability of mobile mental health apps, a cross-sectional study by Reger and colleagues (2022) reported only 42.5% of 127 veterans who accessed VA outpatient and mental health clinics had heard of the VA-developed mobile apps and only 20.4% had used one. The most common barrier reported by participants was lack of awareness of the apps (65.7%). Although this study featured a small sample, the theme is consistent across other publications.

Implications for Nurses

The rise of mobile apps over the past decade has made the clinical integration of mental health apps a new and accessible tool for healthcare providers. Although providers report positive attitudes toward mobile mental health apps, integration can be affected by lack of awareness and training (Owen et al., 2018). Further, many veterans receive or seek mental health care in private and public (non-VA) healthcare systems, placing a responsibility on civilian nurses and other providers to educate veteran patients with PTSD about these resources. Nurses and other healthcare providers should encourage use of mobile apps to help decrease PTSD symptoms, address barriers to access, and influence mental health self-management positively for veterans with PTSD (Wielgosz et al., 2024).

Conclusion

As the need for mental health services grows beyond the capacity of the VA and civilian healthcare systems, expansion of virtual and self-guided care can bridge the gap without compromising standards of treatment. Mobile mental health apps have proliferated in recent years and provide a viable path to improving mental health outcomes by overcoming barriers to care for veterans (McLean et al., 2022). They demonstrate the ability to decrease PTSD symptoms and can improve veterans' quality of life. Moreover, the means of management gives veterans an increased sense of autonomy and independence by bringing care to them in a manner that can be modified to their own preferences and needs. MSN

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The Case for Study Abroad for Pre-Licensure Nursing Students

Noël Kerr

Providing opportunities for full-semester study abroad has been a focus as well as a challenge for baccalaureate nursing programs for several decades. Of 89 BSN programs across the United States offering a semester abroad opportunity, Read (2011) found 47% were private schools that made a semester abroad possible during the sophomore year. The author provided a detailed discussion of perceived constraints and benefits of study abroad, and identified specific benefits of studying abroad for a full semester, such as facilitating personal growth, gaining first-hand experience toward cultural competence, facilitating global health and relations, and stimulating insights that could lead to improvements in individual nursing programs. A few years later, a descriptive analysis of data collected from semi-structured interviews with 12 students who participated in a semester long exchange between nursing programs in Scotland and Western Australia revealed similar themes (Adamson, 2018).

Trapani and Cassar (2020) conducted a mixed methods study to explore motivations of Maltese nursing students who studied abroad with the Erasmus+ program, as well as to compare intended versus perceived outcomes of that program. Sixty-five participants completed an online questionnaire (44.8% response rate), and 16 took part in a 2-hour focus group. These authors found students' interest in study abroad is not motivated necessarily by awareness or interest in the intended program outcomes, but their perceived outcomes were consistent with the intended outcomes. Qualitative analysis revealed five themes of student experience: "Enhanced Employability as a Nurse;" "Exposure to Nursing Beyond the National Shores;" "Personal Growth;" "Context-Sensitivity of Nursing Care Delivery;" and "Language and Citizenship." Based on their findings, the authors recommended nurse educators continue to encourage and facilitate study abroad for nursing students.

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Providing undergraduate nursing students with opportunities for intercultural exchange through study abroad should remain a priority in nursing education. Benefits of study abroad for pre-licensure nursing students include increased skills in communication, cultural sensitivity, critical thinking, and problem-solving.

Keywords: baccalaureate nursing programs, undergraduate nursing students, study abroad, cultural competence, global health, professional development

Mailloux (2017) suggested providing nursing students with exposure to global health experiences is becoming increasingly important because cultural competence is a requirement for accreditation by the Commission on Collegiate Nursing Education and the Accreditation Commission for Education in Nursing. Study abroad provides students with experiences far beyond completion of coursework toward a pre-licensure degree. Benefits include appreciation for the people of a host country, a sense of personal growth that contributes to self-confidence, and a sense of autonomy upon entering the workforce.

Evidence also indicates short-term experiences for study abroad are beneficial and allow pre-licensure nursing students to gain cultural competence, professional development, and personal growth (Granel et al., 2021; Hsiao et al., 2021). Johanson and Priode (2023) used a phenomenological approach to determine if study abroad continues to have impact on entering the profession after licensure. In 2005-2017, 150 students participated in a week-long service-learning course to the Yucatan region in Mexico during spring break. These authors had contact information for 54 nurses who had participated in this program while undergraduates. Of those, 22 nurses agreed to complete a semi-structured interview over

the phone. Data saturation was achieved after the 17th participant interview. Three themes emerged from these data. The first theme "Changed Personal Perspectives in Practice" included the subthemes of Increased Empathy, Heightened Cultural Awareness and Communication Struggles, Awareness & Developing Strategies (pp. 194-195). The second theme was "Appreciation of Personal Blessings & Embracing an Enhanced Service Orientation" (p. 195). The third theme was "Development of Greater Insights on the Healthcare System" (p. 196). Authors provided many examples of participant statements throughout their narrative that demonstrated all three themes had an impact in the future careers of each participant. One exemplar of these statements read as follows:

> ...it's interesting that there is no one type of patient in healthcare that you are going to be treating. There are different cultural beliefs, religious beliefs, all kinds of things that are included that affect a person's health and the way that you take care of them. I think the opportunity to go somewhere and experience somebody else's culture and get that perspective of someone else's experience gives you better appreciation and sensitivity and knowledge that there is not just one way to do things. I think it's priceless. (Johanson & Priode, 2023, p. 195)

Students at my university often perceive cost as a significant barrier to studying abroad. Several years ago, I co-authored a successful proposal for a Department of Education – Undergraduate International Studies and Foreign Language Grant for $284,651 to support study abroad and foreign language study in 2023-2025 at Illinois Wesleyan University (IWU). The overarching goal of the grant, which was entitled "Building Capacity to Increase Global Engagement across the Curriculum," was to leverage the university's strengths in study abroad, high-impact practices, and experiential learning to deepen global engagement and develop skills and knowledge in intercultural competence for students and faculty. The grant enabled development of multiple short-term programs in addition to providing several modest scholarships to students who wanted to study abroad. As Director of the IWU Barcelona Program January-April 2024, I had the opportunity to see first-hand the positive impacts of study abroad on each of the students who participated in the program. Five of the eight students studying in Spain that semester were pre-licensure nursing majors (four sophomores, one junior). Students in the IWU pre-licensure program are encouraged and able to study abroad for an entire semester without needing an additional semester or year to finish their degree (Folse et al., 2015). Two nursing students happily shared statements that summarized what they believed were the most significant benefits of studying abroad. As the first IWU student stated,

> Study abroad was beneficial for me because it really helped me gain a greater respect for different perspectives and cultures. ... I also was forced to navigate a foreign city and push some of my normal comfortable boundaries every day, even doing seemingly small tasks such as ordering food at a restaurant or going grocery shopping. I definitely feel like I have grown as an individual from every single one of my experiences while in Europe and have honestly changed in many ways for the better. (C. Wilson, Personal communication, September 7, 2024).

The second IWU nursing student commented,

> [Study abroad] opens you up to the world and helps you become a more well-rounded and confident person. After I studied abroad, I gained self-confidence due to being put in a completely new environment with some guidance, but not a lot, and I had to find a way to live and grow. I think that studying abroad makes a person a lot more open to different perspectives, along with being more open to themselves. ... Studying abroad allows nursing students to be in the minority in a different country, which gives them a new appreciation for any of their patients that may be in similar situations. (K. Rankin, Personal communication, September 7, 2024)

The benefits of study abroad not only include increased skills in communication and cultural sensitivity, but also critical experiences that ignite learning and growth on an individual level to inform development of critical-thinking and problem-solving in an increasingly complex world. Anthony Bourdain once said, "Travel is not reward for working. It's education for living" (as cited by Forrest, 2024). Providing undergraduate nursing students with opportunities for intercultural exchange through study abroad should remain a high priority in nursing education. MSN

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Further Ethical Considerations in Research

Lynne M. Connelly

In a previous column (Connelly, 2014), I addressed the basics of ethical considerations in research. In this column, I will address some other concepts in this area, including data collection during the pandemic, community-based processes, and ethics and society review.

Summary of Earlier Considerations

In an earlier column (Connelly, 2014), I discussed the role of institutional review boards (IRBs). Studies that involve human and animal subjects require approval by an IRB. These boards address the protection of human and animal subjects in research. Their focus is on protecting individuals from risks associated with conducting a study. The IRB review ensures participation is voluntary and subjects are informed of risks and benefits. The IRB also is responsible for monitoring research for any complications due to the study. Informed consent was outlined in the earlier column as well, with discussion of the role and ethics of researchers and recruitment of subjects. The ethical conduct of research procedures was outlined briefly along with the importance of open and honest reporting. The following discussion reflects other ethical considerations for readers.

Data Collection during the Pandemic

The pandemic had a major effect on research, especially data collection. Many researchers used remote methods and other innovative ways to collect data, but ethics remain paramount despite the situation (Uleanya & Yu, 2023). Researchers reported working to maintain ethical principles around technological issues. For example, researchers would send consent forms by email in advance as opposed to in-person. One researcher reported accepting verbal consent, as many participants did not have electronic signatures. In some cases, audio-only processes were used for data collection so participants' surroundings were not visible and privacy was protected (Uleanya & Yu, 2023). Many of these procedures and technologies still are being used for the convenience of participants and researchers, so we should be aware of the ethics in studies in which adjustments are made to research procedures.

Community-Based Ethics Processes

An important aspect of research ethics relates to community-engaged and participatory research programs. Community-based research ethics processes, which involve specific communities and partnerships with researchers, have their own issues (Shore et al., 2011). However, these often are not mandated or regulated except for federally recognized community IRBs. The number of such projects has increased in many fields, particularly in public health studies (Eder et al., 2023). Ethical considerations in this area include making sure the community directly benefits, is engaged in the study, and helps set the agenda for the research. In addition, protecting the community from possible risks is a consideration (Shore et al., 2011). This may include naming community members to a review or advisory group that examines studies including ethics. How a community is defined is also an issue of concern that can affect the ethics of a study (Eder et al., 2023). For example, a community might be defined too narrowly and omit important groups within the community.

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Ethics involves all aspects of research. Select ethical considerations are reviewed, including data collection during a pandemic, community-based processes, and ethics and society review.

Keywords: research, ethics, review board, community-based research, society, data collection

Ethics and Society Review

A related and relatively new concept is that researchers should reflect on the possible effect of their proposed study on human society to identify risks and develop plans to mitigate them. Some experts think the definition of "human subjects" should be expanded to include societies. This kind of review has been spearheaded by faculty at Stanford University (Bernstein et al., 2021) related to funding seed grants for research involving artificial intelligence (AI) in various departments, including medical research. For example, risks might include the possibility AI could increase biases for various groups, or interventions based on research could backfire when implemented. At Stanford University, this review is done separately as IRB review usually does not go beyond considering risks to individual subjects to address risks to human society (Bernstein et al., 2021). This additional review is called an Ethics and Society Review (ESR) at Stanford University. It is done after the IRB review, but before funding is released to investigators.

This additional review involves an interprofessional group that examines possible risks and benefits to society from the proposed research. This does not mean the research will be risk-free, but investigators must have appropriate mitigation plans in place when needed. This review can involve an iterative process where investigators respond to feedback from the ESR panel. Most researchers found the process helpful (Bernstein et al., 2021). This process is not widespread at present but may become standard practice in the future.

Ethics are not limited to having a study approved by the IRB and informed consent. Ethics involves all aspects of research. Readers of research should review articles carefully, asking themselves if each part of the study meets the highest ethical standards and if they would agree to be participants in the study. The references are additional resources for topics in this column. MSN

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