Wound Care Nursing: Professional Issues and Opportunities

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As the field of wound care advances and seeks validity as a distinctive healthcare specialty, it becomes imperative to define practice competencies for all related professionals in the arena. As such, the myriad nurses practicing wound care in settings across the continuum should be understood for their unique contribution to the wound care team. Furthermore, the hierarchy of wound care nursing with varying levels of licensure, certification, and scope of practice can be clarified to delineate leadership and reimbursement issues to meet current health care challenges. A review of the role of nursing in wound care from a historical and evolutionary perspective helps to characterize the trend towards advanced practice nursing in the wound care specialty.

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BACKGROUND

“It may be worthwhile to remark, that where there is any danger of bedsores, a blanket should never be placed *under* the patient. It retains damp and acts like a poultice.”

—Florence Nightingale, 1859¹

“The objective of this descriptive cohort study was to examine the relationship between sub-epidermal moisture and visual assessment of early pressure ulcers in 31 nursing home residents.... Concurrent visual assessments and SEM were obtained at the sacrum, right and left trochanters, buttocks, and ischium weekly for 20 weeks.”

—Barbara Bates-Jensen, PhD, RN,
CWOCN, 2008²

FOR MORE THAN 150 YEARS, nurses have assessed and treated patients with wounds. Traditionally and generically, wound healing has been under the patronage of basic nursing care practice encompassing dressings and infection control but also promotion of therapeutic nutrition, mobility, psychosocial support, hygiene, and comfort. At all levels, in practice

settings spanning from critical care through palliative care, from hospitals to battlefield, and from gene therapy to gauze, it is the nurse who is principally caring for patients with wounds. Demographics, technology, scientific knowledge, and money have all propelled this once basic aspect of nursing care into a field more amenable to an interprofessional approach. As we look to the future with an emerging medical board specialty in wound healing, we should reflect on some issues: What is unique to wound nursing? What are the varied wound nursing roles and practice requirements? Who are the decision makers in wound care nursing? How do they optimally partner with wound trained physicians, physical therapists, podiatrists, and scientists to achieve best outcome for patients? An examination of wound nursing specialization, certification, education, licensure, and scope of practice sheds light on the opportunities.

Our original Nightingale roots of “nurse as trained professional

Abbreviations and Acronyms

ADN = Associate’s Degree in Nursing

APRN = Advanced practice registered nurse

BSN = Baccalaureate Degree in Nursing

DNP = Doctorate of Nursing Practice

LPN/LVN = licensed practical/vocational nurse

MSN = Master’s Degree in Nursing

RN = Registered Nurse

WOCN = Wound Ostomy and Continence Nurse

WOC-APRN = WOCN Board certified advanced practice registered nurse

WOC-RN = WOCN Board certified registered nurse

generalist,” have evolved into nursing specialization in the later twentieth century. Obstetrical, peri-operative, psychiatric, critical care and wound care nursing all developed in response to burgeoning health care advances and the demand for unique knowledge and skill sets. Nursing specialty practice was historically attained on the job, either by acquired honed proficiency or through mentorship by senior practicing experts, but also by methods less likely to uphold standards such as through longevity, self-proclaimed authority, or occupancy default. Professional organizations began to define specific competencies and training, eventually leading to certification examinations that verified specialty designations.³

Wound care nursing emerged from beginnings as enterostomal therapy, pioneered in the late 1950s by Dr. Rupert Turnbull, a colorectal surgeon at the Cleveland Clinic, and Norma Gill, a former patient. Both were visionary in developing specialized nursing care to meet the needs of the population with intestinal and urinary diversions and they chartered a formal training program in 1961.⁴ As patients' needs grew, the organization broadened its perspective and in 1968 became (what is now known as) the Wound Ostomy and Continence Nurses (WOCN) Society, with a mission to promote educational, clinical and research opportunities to advance the practice and guide the delivery of expert health care to individuals with wound, ostomy, and continence issues.⁵ After 50 years, it is the oldest wound care society and the WOCN Board certification is considered the gold standard for wound nursing, having certified over 6,100 nurses worldwide. WOCN Board certification is offered at two levels: basic/baccalaureate level and advanced practice/master's level. Tri-specialty or individual specialty in wound and/or related fields of continence and ostomy care are offered. The certification requires completion of a defined curriculum, demonstrated clinical competency through preceptorship in each healthcare setting, passing scores on rigorous examination, and stringent 5-year recertification by professional practice contribution or re-examination.

Appreciation for the certification accreditation process is imperative for the wound clinician of any discipline. A profession or occupation uses certification to differentiate among members using standards based on legal and psychometric requirements.⁶ “Board certification” is a term used by various healthcare professions to distinguish individuals who meet a pre-defined educational preparation for practice and are able to demonstrate exceptional expertise in a specialty through

clinical practice and examination.⁷ It gives consumers and payers some assurance that the designee has attained an expert level and agrees to engage in lifelong learning, with implied allegiance to best practice, leadership, safety, and achievement of superior patient outcomes. Accreditation demonstrates that the credentials given by the certifying program are based on valid and reliable testing. The WOCN board certification has met all of these requirements and is nationally accredited by the Accreditation Board for Specialty Nursing Certification and an umbrella organization, the National Commission for Certifying Agencies. Wound physicians are embarking upon the journey to gain wound specialty through the American Board of Medical Specialties process.

CURRENT STATUS

Specialty certification in nursing has been linked to patient satisfaction, nurse staffing, retention rates, workplace empowerment, and more recently, an association with improved patient outcome, inpatient mortality, and patient safety.⁸ Accumulating evidence suggests that certified wound care nurses demonstrate superior substantive knowledge compared to noncertified nurses. Wound certified nurses more accurately stage pressure ulcers and assess lower extremity vascular status than non-certified nurses.^{9,10,11} With mounting focus on patient safety and outcome performance, job opportunities for certified wound nurses are increasing in hospitals, skilled nursing facilities, home care, and outpatient wound centers.

Not surprisingly, many other organizations have emerged to offer wound certification to nurses.¹² In contrast to the WOCN certification, none require precepted clinical competency evaluation. The fastest growing (accredited) program touts certification for nurses without baccalaureate preparation, accomplished within four classroom days. Agreed, wound education is beneficial for all clinicians, but certifications' inferred pledge to the consumer—the highest level of expertise—cannot be met with such minimal preparation. Additional research is needed to differentiate outcomes associated with varied certification tracks. The authors' anecdotal and professional bias is that non-WOCN certified nurses are not rigorously prepared for decision-making and leadership roles in the current healthcare climate. Nursing certification, then, becomes a piece of specialty practice, but must be considered along with education, licensure, and scope of practice.

Educational preparation for nursing practice has been the most contentious issue in the professional evolution of nursing. It is also constantly misunderstood by other healthcare team members, patients, families, and payers. In most states, nursing education is provided at several levels:

- LPN/LVN Diploma program, 9–18 months, technical /vocational program
- RN Diploma program, 2–3 years, no college degree
- RN ADN program, 2 years, community college
- RN BSN, 4 years, bachelor's degree
- RN/APRN/MSN, master's degree
- RN/APRN/DNP/PhD, doctoral level

Despite national attempts at standardizing entry into nursing, state requirements vary and are controlled by each state's higher education programs, lobby groups, social and financial pressures, and the nursing profession itself. The correlation between higher levels of nursing education and improved patient outcome has been established,¹³ and the Institute of Medicine has called for a doubling of the current 40% of RNs with baccalaureate education.¹⁴ Graduate level (master's and higher) education prepares nurses for leadership roles in administration, education and advanced practice.

The complexity between education and certification is illustrated as follows: Wound certification pathways exist for the non-baccalaureate prepared RN and LPN. That the wound certification process has gradually warped to accommodate the nurse entry dilemma does not justify the fact that it would be difficult for a wound care nurse to appreciate the cellular processes of inflammation and angiogenesis without college level biology and chemistry. As cell-based therapies are likely to become the future of wound care, expert wound nurses should have a minimum of baccalaureate education.

Licensure is the process by which a state agency grants permission to an individual to engage in a profession, such as nursing, and prohibits all others from legally practicing without the designation. For example, a physician cannot delegate licensed nursing functions to a non-licensed person. Licensure further authorizes the use of a title, for example, Registered nurse (RN) or advanced practice registered nurse (APRN), and protects the public by ensuring an entry level of professional competence.⁷ A licensee may legally perform ser-

vices that are within the scope of practice for various levels of nursing licensure as delineated by state boards. For example, a WOCN certified RN (WOC-RN) may be the most knowledgeable wound care professional in the skilled nursing facility, but she/he is not licensed to prescribe enzymatic debriding agents or negative pressure wound therapy without a physician or prescriber order. A WOC-RN on a hospital wound team may recognize the need to biopsy an atypical leg ulcer, but she/he cannot accept delegation of suturing a wound after biopsy because it is not in the scope of practice for the RN in that state. According to several states' laws, an LPN working in a wound clinic may not assess (interpret clinical data) or develop nursing care plans, so she/he would be unable to triage patient phone calls and suggest alterations in wound care regimens. Essentially, education supports licensure, and licensure and scope of practice trumps certification.

CLINICAL PROBLEM ADDRESSED

The APRN holds a masters or doctoral degree concentrating in a specific area of advanced nursing practice and a second nursing license including prescriptive authority. APRNs build upon the roles of the RN by exhibiting a greater depth and breadth of knowledge, an increased complexity of skills and interventions, and an advanced synthesis of data. The APRN provides service through core competencies of direct care, consultation, research, expert guidance, leadership, ethical decision making, and collaboration.¹⁵ "APRNs manifest the highest level of nursing expertise in the assessment, diagnosis, and treatment of the complex response of individuals, families, or communities to actual or potential health problems, prevention of illness and injury, maintenance of wellness, and provision of comfort."¹⁶ Since the Budget Reconciliation Act of 1997, APRNs can obtain direct reimbursement from the Centers for Medicare and Medicaid Services (CMS) and other insurance, thus affording more autonomy, visibility, and access. The 2008 Consensus Model for APRN Regulation, supported by the Institute of Medicine, improves standardization in APRN education programs across state jurisdictions and a consortium of colleges has adopted the goal to move advance practice nursing preparation to a doctoral degree by 2015.⁷

Since wound care has deep roots in nursing practice, the sharing of knowledge and collaboration with other team members has created both dilemma and opportunity. Wound nurses have

learned how to practice without the input from knowledgeable physicians or prescribers, but this is not always the most ideal team model. In the wound clinic arena, many non-wound trained physicians are directing wound care, buoyed by collaboration with certified wound nurses. In skilled nursing facilities, designated (but not always trained or certified) wound nurses guide topical wound care with “do whatever and I’ll sign it” orders from overburdened medical directors. Certified wound nurses in home-care search referrals for supportive prescribers to obtain treatments and equipment they know their patients’ require. With uneven wound education, licensure, and certification by all practitioners, patients are the losers. To transcend these gaps, the wound certified advance practice nurse has the ideal combination of skillset: prescriptive authority, holistic approach, advanced assessment, continuum skills, and legitimate wound certification.

The changing climate of healthcare reimbursement, patient safety focus, regulation, and cost-effectiveness all demand the highest level of expertise, efficiency, and intraprofessional practice by clinicians. Advance practice wound care clinicians (WOC-APRNs) are at the forefront of making an impact on known high-ticket issues such as pressure ulcers, non-healing chronic wounds, urinary tract infections, and surgical site infections.¹⁷ The unique contribution of the WOC-APRN in collaboration with RNs, physicians, podiatrists, physical therapists, and nutritionists makes up the intraprofessional wound care team. Examples of WOC-APRN practice role functions in various setting follows.

In the wound clinic, the WOC-APRN manages caseloads of chronic wound patients; orders wound treatments, therapies, and diagnostic tests; debrides wounds; applies bioengineered skin products; collaborates with physicians to direct the home care WOC-RN and RN; consults with specialists in plastic surgery and infectious disease to treat patients with osteomyelitis; designs and measures outcome from community educational sessions on diabetic foot care; researches wound therapeutics in collaboration with industry partners; counsels venous ulcer patients in evidence-based self-care strategies; and mentors clinic RN staff in best practice wound strategies.

In the skilled nursing setting, the WOC-APRN, with physician collaboration, provides consultation services and debridement to acute and chronic wound patients, prescribes treatments and therapies to complement the facility protocol care provided by the WOC-RN and other nurses, refers to

specialists and recommends rehabilitation services and specialized nutritional support, and analyzes facility microbiology reports for trends and practice patterns. From personal experience, facilities that have routine formalized WOC-APRN consultation have improved pressure ulcer outcome compared to those with traditional “nurse-medical director” dressing based care. Studies are needed to validate this observation.

Hospital based WOC-APRNs power-up the traditional WOC nursing services that are routinely available in many teaching institutions with the addition of advanced practice skills. While the WOC-RNs might be responsible for complex dressing changes, ostomy education, special equipment gatekeeping, and validating RN wound staging, the WOC-APRN, working in collaboration with physician, provides billable patient consultations, collaborates with medical team specialists, designs pressure ulcer outcome measurement strategies, evaluates emerging technologies based on evidence, directs patient plans for continuum of care toward healing, conducts research projects, selects institutional products according to best evidence analysis, and directs cost effective, coordinated care that promotes process improvement.

The WOC-APRN in acute care is uniquely trained to measure quality and patient safety standards related to wound care: pressure ulcers, readmission rates, surgical site infections, catheter related urinary infections urinary infections, and other avoidable benchmarked outcomes. From personal experience as a WOC-APRN for more than 20 years, the advanced practice level of leadership in patient safety is the critical factor in successful programs. In addition to the expected expertise in physical assessment and pathophysiology, critical skills in system-wide change, data and cost benefit analysis, research utilization, and conflict resolution are needed tools for the WOC-APRN. A fully equipped WOC-APRN will be invited to the table to inform high-level board decisions and hospital-enterprise-wide strategy. Well-meaning but under-certified/educated/licensed/credentialed personnel continually experience frustration in trying to meet the challenges in this regulatory and reimbursement climate.¹⁸

Mejza¹⁹ described the evolution of WOC “specialty practice” into “advanced practice” according to the staged theory of Hamric.¹⁵ Stage I is characterized by designation of the specialty (*i.e.*, enterostomal therapy becomes WOC practice). Stage II develops curriculum, training, certification, and a distinct body of knowledge (*i.e.*, the WOCN certification process). Early stage III is exemplified by

transition to advanced practice as the evidence base grows and leaders advocate graduate education. Increasing demands for research competence by the APRN further pushes the evolution to the doctoral level. The later stages result in interprofessional practice interaction enhancements that translate to improved patient outcome.

In summary, as the science of wound care evolves into a more complex environment, nursing is challenged to meet this complexity. Delineation of nursing roles consistent with education, licensure, and certification will enhance collaboration with the

wound team and achieve best outcomes for patients. An exciting future for our specialty materializes.

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