CHAPTER 1.

International Interprofessional Wound Caring

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Objectives

The reader will be challenged to:

- Conceptualize the dimensions of the International Interprofessional Wound Caring Model©
- Analyze his or her own practice by comparing and contrasting it to the International Interprofessional Wound Caring Model
- Commit to completing a personal scorecard and construct a personal learning portfolio
- Relate the needs of his or her practice and the needs of the person with wounds to his or her social responsibility for care at community, national, and international levels. **[AUT: I HAVE ATTEMPTED TO REWRITE THIS BULLET SO THAT IT IS STRUCTURALLY PARALLEL TO THE OPENING OF THE OBJECTIVES. IN OTHER WORDS, "THE READER WILL BE CHALLENGED TO…RELATE HIS OR HER NEEDS…" INSTEAD OF "THE READER WILL BE CHALLENGED TO… RELATE YOUR NEEDS…" OK?]**

Introduction

A person with a chronic wound often suffers from a myriad of biopsychosocial problems, such as physical disability, pain, social needs, and mental anguish. Addressing these multiple issues properly requires skilled help from knowledgeable wound care professionals; however, wound care expertise and knowledge of the evidence base for practice alone usually are not enough to heal a chronic wound and improve the life of the person with that wound.

In this chapter, the editors of *Chronic Wound Care: A Clinical Source Book for Healthcare Professionals* present the International Interprofessional Wound Caring Model© (Figure 1 and Plate 1 on page XXX). Our goals for you are to think about your own work environment and to reflect on whether your environment enables you to practice interprofessional wound care. We challenge you to analyze how your current practice model compares and contrasts with ours. Then ask yourself and other members of your team if you can improve your interprofessional wound caring practice model. Additionally, we challenge you to complete your own personal scorecard and to construct your personal learning portfolio for your continuous professional development and lifelong learning.

In this fifth edition of *Chronic Wound Care*, our new conceptualization of person, patient, and circle of care will be utilized. When the term person is used, this refers to an autonomous individual with no specific healthcare relationship for diagnosis and treatment. When the term patient is

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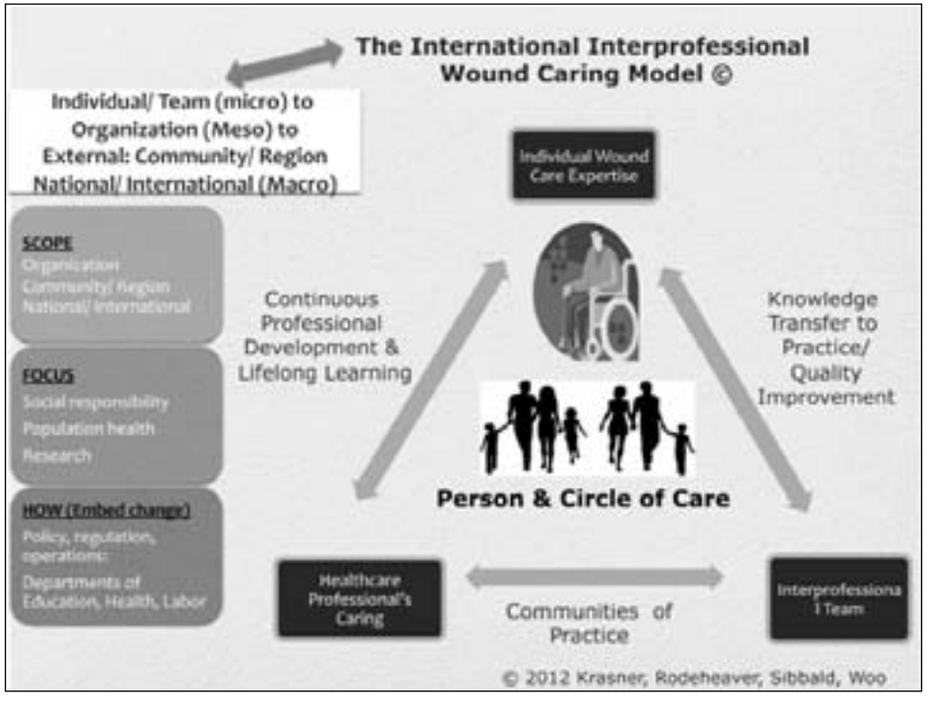

Figure 1. The International Interprofessional Wound Caring Model. © 2012 Krasner, Rodeheaver, Sibbald, Woo.

used, the healthcare provider-patient relationship is implied, including the legal obligation to care. To facilitate expression of all those involved in a person's biopsychosocial environment, we use the expression, the person's circle of care. This is not used as a legal term in this textbook as outlined elsewhere. It is utilized as a social term that includes all of the stakeholders in the patient's health and well-being. The circle includes, but is not limited to, the patient, a legal guardian or responsible party, a spouse or significant other, interested friends or family members, caregivers, and any other individual(s) who may have active involvement or interest in the patient's care and well-being.

A person with a wound and his or her circle of care need the wound care expert's professional knowledge and skill, but they also require the expertise of other members of the interprofessional team, including generalist physicians and nurses, physical therapists, dietitians, pharmacists, social workers, discharge planners, and so on. The mix of professionals that one patient needs will differ from another patient's through individualized patient-centered care.

Each individual healthcare professional's caring behavior is an essential dimension of our model. We sincerely believe that without this commitment to the call to care by all members of the team, wound care cannot be optimized. The human touch — reaching out to the person with a wound and his or her circle of care — builds the trust and the confidence that heals wounds, people, and lives.

Person, Circle of Care, and Population

The first dimension that is central to the model is that of the person with a wound and his or her circle of care. Several key factors often contribute to the development of chronic wounds. People with chronic wounds are often older — the average age is 70 years for venous leg ulcer sufferers and 60 years for people with diabetic neuropathic foot ulcers. These individuals frequently have co-

existing medical conditions that can impair healing. Oral drugs prescribed for patients' medical needs often interfere with the wound healing process. Chronic wound patients often experience pain that has not been addressed by their healthcare team. Several international pain surveys have demonstrated that pain is the third to fifth most important component of care for healthcare providers and may be the first priority for patients.[1] This disconnect emphasizes the need to address individualized patient-centered concerns as part of any chronic wound treatment plan. You will find numerous chapters in this fifth edition of *Chronic Wound Care* that focus on particular aspects of the chronic wound experience that must be addressed for the patient, family, and caregiver.

Chronic wounds usually interfere with a person's quality of life and activities of daily living. Imagine the social isolation that a person with a leg ulcer feels when he or she cannot eat with the rest of the family because the odor from the wound is offensive. The person with a diabetic neurotrophic foot ulcer can lay awake for hours because of burning and shooting neuropathic pain in both feet at night. The chronic pain, suffering, and diminished quality of life often lead to depression. Depression is particularly common in persons with diabetes due to multiple complications, including neuropathy as well as ischemia, infection, and deformity. Individuals suffering from chronic wounds often have decreased capacity for the activities of daily living. They often do not have the physical stamina for employment and can have several absentee days or even can be trapped into long-term disability. Frequent dressing changes may interfere with employment opportunities, and the cost of supplies may not be covered by the healthcare system. Affected individuals often are unable to walk long distances or stand for any prolonged period of time. They may have difficulty sleeping and even maintaining an adequate level of self-care. We must address all of these patient-centered concerns.

Historically, patients often are given instructions on how to treat a wound with minimal discussion to explain the cause(s) or address patient-centered concerns. The patient may not comprehend the pathophysiology of the wound and the importance of his or her cooperation (and his or her family's and caregiver's cooperation) to promote wound healing. This is typical of the concept of compliance, which is the act or process of obeying an order or command. This is very provider-centered care — not patient-centered care. Recent literature has emphasized the concept of adherence or the ability of a patient to follow through on a treatment or regime [AUT: SHOULD REFERENCE 2 BE CITED HERE?]. The emphasis shifts away from provider-centered care and refocuses on the patient's perspective. To increase the collaborative network even further, the term coherence refers to frank discussion between the healthcare professional and the person with a wound, allowing both points of view to be considered and a negotiated treatment plan that incorporates both perspectives to be developed.

We must work toward collaboration to include persons with chronic wounds and their circle of care. We must acknowledge the fact that every person who has a social network of caregivers, family, friends, and concerned acquaintances is likely to have far better outcomes than those individuals who are socially isolated.[3]

Wound Care Expertise

Wound care expertise consists of evidence-based wound care knowledge of the skills gained from clinical experience and of the attitudes and values that we bring to practice as individuals. Healthcare providers can acquire knowledge of the evidence base for wound care by reading or by attending formalized courses, conferences, and seminars. Novice healthcare professionals transition to expert practitioners with time and experience as described by Benner[4] and others. As healthcare providers, we need to treat the whole patient and not just the hole in the patient (Figure 2). Our knowledge base should include expertise about the cause(s) of common chronic wounds, such as venous leg ulcers, pressure ulcers, diabetic neurotrophic foot ulcers, and nonhealing surgical wounds. We also need to know about uncommon chronic wounds, palliative wounds, and deteriorating wounds. This knowledge needs to be complemented with the ability to assess and treat pain, other patient-centered concerns, and local wound care expertise.

Traditional wound care has often been delivered with saline wet-to-dry gauze dressings. Removal of these dressings can cause local bleeding and

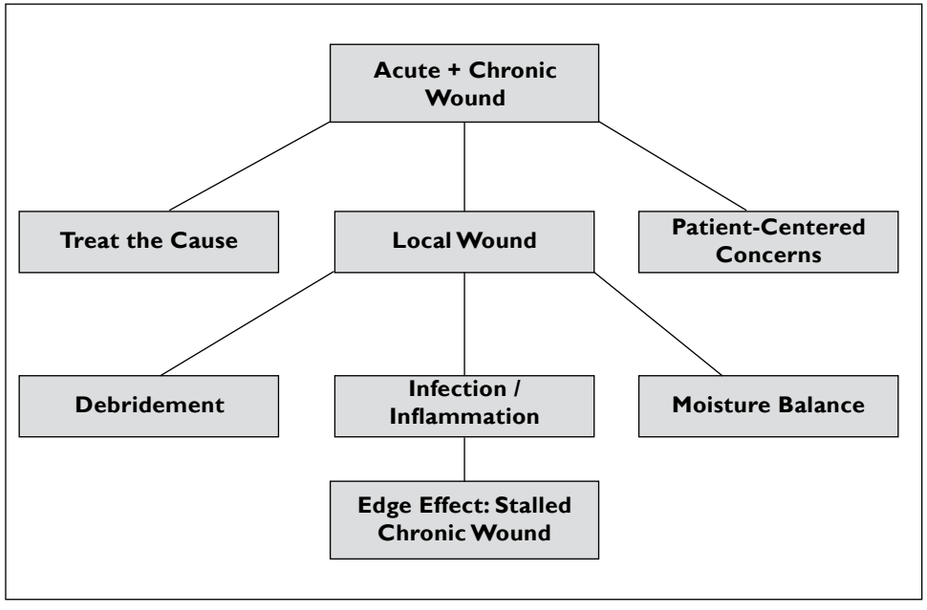

Figure 2. *Wound bed preparation paradigm for holistic patient care. Sibbald et al. 2000, 2003, 2006, 2007, WHO 2010, 2011.*

pain, and the procedure is nursing time-intensive. Since the classic work of Winter[5] in 1962, several advantages for moist wounds have been identified and include a faster healing rate with occlusion and enhanced re-epithelization with removal of eschar. To translate this into everyday practice, several newer, moist, interactive wound dressings have been added to our therapeutic toolkit.

Local wound care expertise goes well beyond the selection of the appropriate dressing to look at criteria to benchmark healing and when to use advanced products, including growth factors, skin substitutes, complementary therapies, and other procedures, such as skin grafting. We often teach the principles of local wound care with the mnemonic: DIM before DIME for adequate Debridement, Infection and Inflammation control, and Moisture balance before the Edge effect, signaling stalled healing and the need for active local therapy. The optimal wound care practices outlined in the preparing the wound bed algorithm are essential before advanced and often expensive therapies are considered (see Chapter 4.15).[6–8] If a wound with the ability to heal is not 30% smaller at Week 4, despite optimal local wound care, it is unlikely to heal by Week 12, and advanced therapies should be considered.[9] Clinicians are reminded that if a wound is unlikely to heal (eg, due to inadequate vasculature or coexisting illness), advanced therapies are seldom indicated and their chance of success is minimal (nonhealable wound). In addition, a maintenance wound does not heal at the expected rate because the patient may refuse to wear the compression that is required to correct venous disease or because the healthcare system does not provide plantar pressure redistribution for a person with a neurotrophic foot ulcer and the patient cannot afford the treatment.

There is a need to link our new knowledge and research findings in wound care to the improved outcomes of patients with wounds worldwide. This process involves the inclusion of evidence from 3 different perspectives:[10]

- Efficacy — it works in idealized patients
- Efficiency — it works in usual patients
- Effectiveness — it has benefit at a reasonable cost.

The current organization of the evidence base for wound care may not encompass all 3 perspectives. One of the pitfalls of randomized controlled

trials (RCTs) in wound research is the strict subject selection, eliminating most "usual" patients, and the disadvantage when attempting to extrapolate the RCT results to the real world of clinical practice for patients who would not meet the entry criteria of the study. Efficacy studies compare strictly controlled patients without confounding variables to a placebo. These conceptual studies are necessary for proof of concept. These studies need to be complemented with RCTs comparing the new treatment to usual practices or evidence-informed practice in a clinic that includes usual current treatment for all patients assessed with wounds that have the ability to heal. This treatment must be cost neutral or cost saving for the practice to be translated into day-to-day care by obtaining reimbursement within a healthcare system (effectiveness). There is a need to build economic models to test the feasibility of integrating a new treatment that may be expensive but have cost savings or may be cost neutral to the healthcare system.

Sackett et al[11] emphasized the importance of combining clinical expertise and the best available external evidence, expert knowledge, and patient preference. Without clinical expertise, practice risks becoming tyrannized by evidence — even excellent external evidence may be inappropriate for an individual patient. Without current best evidence, clinical practice rapidly will be out of date, to the detriment of patients. This combination of the scientific evidence base with expert opinion contextualized to local practice is referred to as evidence-informed practice. We also must remember the central needs of the patient and the consultation with patients to determine their preferences for treatment. The person's experiences with illness and the experiences of his or her circle of care are often forgotten in the rush for RCTs and other levels of evidence.

To translate the evidence-based paradigm, we can develop a clinical practice guideline. However, all guidelines are not created equal. The methodological quality of a guideline can be assessed through the Appraisal of Guidelines for Research & Evaluation (AGREE II) Instrument (www.agreetrust.org). This instrument examines 6 domains: scope and purpose, stakeholders, rigor, clarity, applicability, and editorial independence. Through this process, we can identify high-quality guidelines and recommendations for translation into practice without continually creating new guidelines or reinventing the wheel.

The Interprofessional Team

Professionals involved in wound care come from diverse professional backgrounds. Each professional brings unique expertise, adding strength to the team. Team collaboration helps fill knowledge gaps, broadens perspectives, and optimizes patient care delivery. Many of the contributors to the fifth edition of *Chronic Wound Care* have shared their collaborative experiences working in teams. This teamwork has presented both benefits and challenges that need resolution.

Teams are not created overnight. Individuals in a multiprofessional network need to respect each other's expertise and work toward improving patient outcomes. The next step is to form an interprofessional team with group care plans and sharing of situational learning from experience. In some cases, this may even evolve to a transprofessional team. Advanced practice team members can often perform the functions of more than one team member when required. Highly functioning teams have a flattened structural framework with shared care of patients and do not exemplify the pyramidal structure of a dominant leader and followers that have little to do with key patient care decisions.

Each of us as individuals requires a network of other individuals with complementary expertise in wound care. Let us conceptualize our team for this chapter. George Rodeheaver, PhD, as the basic scientist, brings us new perspectives, treatments, or diagnostic procedures from the laboratory or clinical investigations for consideration. Diane Krasner, RN, as a nurse and allied healthcare professional, focuses on prevention, local treatment, and allied healthcare issues across the continuum of care. Gary Sibbald, MD, as the physician key opinion leader, evaluates innovative treatments or procedures and trials them before identifying the strengths and weaknesses as well as the advantages and disadvantages for patient care before translating a new modality into everyday clinical practice. Kevin Woo, RN, as a nurse researcher and educator, shares his passion for knowledge generation, synthesis, and translation. These 4 distinct professional perspectives broaden our base and strengthen our team.

By practicing as a team, healthcare professionals are able to balance the amount of responsibility and the workload, particularly in challenging cases. It is imperative that all team members share their knowledge and experience in order to provide better care. Tuckman[12] has defined 4 stages to team development: forming, storming, norming, and performing. Several aspects are more likely to be found in successful teams, including clear communication, flexibility, adaptability, openness, shared leadership, and mutual respect.

Healthcare Professional's Caring

Wound care experts must realize that working in a silo even with individual caring cannot offer the person and his or her circle of care optimal treatment. Many individuals who have become healthcare professionals do so because they truly want to help others. The journey to successful healthcare professional status requires a formalized training program that often supplies the basics of nursing, medicine, podiatry, physical therapy, occupational therapy, and other healthcare professional disciplines. It is important to complement professional knowledge with skills to work within a healthcare system. Professionals in health disciplines need to develop communication, collaboration, and management skills. A caring healthcare professional must have a patient-centered approach. This can be exemplified by the Keller and Carroll model[13] to patient communication:

- Engage
- Empathize
- Educate
- Enlist.

For each patient, we should know something about him or her other than the reason for the visit (engagement). This information may include hobbies, important family events, or milestones in his or her life. We need to be good listeners, and we need to empathize with patients' pain and suffering and not dismiss their concerns with trivial sympathetic comments. Establishing patients' perspectives on their disease processes allows healthcare professionals to educate individuals from current beliefs to a negotiated treatment plan, taking patients' wishes into account and having a consensus on the next steps. We then need to enlist the patient to be an active participant and take personal responsibility for the diagnostic and treatment process.

As individuals, healthcare professionals need to be in tune with their own belief systems and have a balance with attention to their physical, spiritual, psychological, and social needs. Professionalism refers to the behavior of a professional to uphold ethical and interpersonal values. Healthcare professionals are expected to demonstrate respect for others and uphold appropriate boundaries between themselves, coworkers, and patients.

We should create a comfortable work environment with compassion for others and commitment to improving illness and promoting wellness. There is a need to be a health advocate and to promote a healthy living style and wellness by setting a good example. Other ways to advocate for health include developing new and better healthcare systems with universal access, treating illness early, educating the general public, and supporting wellness.

Continuous Professional Development and Lifelong Learning

Continuous professional development (CPD) refers to lifelong learning that is learner- and workplace-centered. This is also referred to as situational learning because it is determined by practice and problems with patient care. Continuous professional development relates to day-to-day activities. The outcomes from CPD are more likely to change behavior and improve patient care outcomes than an accredited classroom event or traditional continuing education programs.

Single educational events without secondary enabling or reinforcing strategies to bring the information back to the workplace are often unsuccessful in changing practice. Enablers, reference guides, and toolkits are examples of products that can be utilized to change practice. An enabler or quick reference guide is a 20-second to 2-minute summary of relevant strategies for bedside or patient care. [AUT: IT IS UNCLEAR WHAT 20-SECOND AND 2-MINUTE RELATE TO. THE LENGTH OF TIME IT TAKES TO READ AN ENABLER OR QUICK REFERENCE GUIDE?] An educational toolkit is designed for the implementation of best clinical practices and may consist of educational materials, measuring guides, monofilaments, and other useful aids to clinical practice. Mentorship after an educational event or small learning groups and educational outreach visits (during which an expert may translate the information learned in the formalized setting for the workplace) can also facilitate the integration of new knowledge into practice.

As healthcare professionals, we also must commit to lifelong learning through experience. We learn from the literature, but we also must learn from our experiences and dialogues with colleagues. The first step is to create a network of individuals with whom we can consult when we do not have an answer to a clinical question. We may need to involve a preceptor to learn a skill or task that is important to our job or clinical activities. Preceptorships are often time-limited and driven by specific goals and objectives. Beyond preceptorships, we also may need a mentor. A mentor is an individual who, in a nonjudgmental, comfortable manner, can provide guidance for job-related, personal, and other decisions to achieve life goals and balance as well as to advance a career and promote wound care expertise. Some mentorship relationships have a time-limited spectrum, while others can evolve into a co-mentorship relationship. A younger mentee may be a computer "native" and can teach a computer "immigrant" mentor tricks of the new technologies. At the same time, the senior mentor can continue to add contextual knowledge from lifelong experience, solving difficult situational clinical problems for the younger mentee.

We often learn from relaying case studies or case series and then discussing diagnoses and management. Another dimension to a case history is storytelling. In storytelling, the emotional and situational components of the history and the sequence of events are related with a personal analysis or honesty that may not be contextualized in the formal case history dominated by facts in the sequential history, physical, investigation, and treatment process. Storytelling and the personal anecdote remain critically important methods — even with the current trend of evidence-informed healthcare.

Knowledge Transfer into Practice

Knowledge transfer into practice refers to the link between scientific evidence and the need to change clinical practice. This is a conceptual framework of moving new knowledge from the laboratory bench to the literature/classroom and ultimately to the bedside in order to improve patient care outcomes. This concept requires the transfer of knowledge from efficacy or proof-of-concept RCTs in idealized patients to the trial of the same principles in usual everyday wound care clinics in order to demonstrate that the integration of the concept improves patient care outcomes.

Wikipedia, the Internet's free encyclopedia, describes 3 related concepts in the health sciences: knowledge utilization, research utilization, and implementation. These concepts describe the process of bringing a new idea, practice, or technology into consistent and appropriate use in a clinical setting.[14] The study of knowledge utilization and implementation is a direct outgrowth of the movement toward evidence-based or evidence-informed medicine. Research to demonstrate efficacy of a new treatment is often completed in idealized patients, and this research needs to be repeated with usual patients to confirm that the same treatment will make a difference in everyday practice settings on usual patients.

Informal Communities of Practice

The concept of a community of practice (CoP) refers to the process of social learning that occurs when people who have a common interest in some subject or problem collaborate over an extended period to share ideas, find solutions, and build innovations. Do you have a wound care CoP?

Wikipedia notes, *"The term [community of practice] was first used in 1991 by Jean Lave and Etienne Wenger [to describe] situated learning as part of an attempt to 'rethink learning' at the Institute for Research on Learning. In 1998, the theorist Etienne Wenger extended the concept and applied it to other contexts, including organizational settings…Some of the aims and goals of a community of practice include: the design of more effective knowledge-oriented organizations, creating learning systems across organizations, improving education and lifelong learning, rethinking the role of professional associations and a design of a world in which people can reach their full potential…[a community of practice is] a group of individuals participating in a communal activity, and experiencing/continuously creating their shared identity through engaging in and contributing to the practices of their communities."* [AUT: I DID NOT FIND THIS EXACT TEXT IN THE WIKIPEDIA ENTRY FOR "COMMUNITY OF PRACTICE." PLEASE DOUBLE CHECK AND CONFIRM

Figure 3. Personal scorecard.

Concept	Strength	Weakness	Threats	Opportunities	Next Steps: Personal Portfolio
Wound care knowledge					
Patient and circle of care					
Interprofessional team relations and new partnerships					
Caring clinician and personal growth					
Continuous professional development/ lifelong learning					
Knowledge transferprojects					
Community of practice					

SOURCE.]

Following are questions to ponder:

- Do you participate in one or more CoP?
- Can you describe their membership and essential components?
- How could you optimize your participation to maximize your social learning and improve your wound care knowledge?
- Could and should you foster a CoP?

Local to Global, Micro to Macro

Persons with chronic wounds do not always receive the expert professional healthcare that they require. Professor Terence Ryan outlines several examples of this in Chapter 1.2. There is a social responsibility to increase collaboration within interprofessional teams on community, national, and international levels. The World Health Organization (WHO) document, "Transformative Scale Up of Health Professional Education,"[15] highlights the active strategies of healthcare personnel, especially in developing countries, including Sub-Saharan Africa where millions of people are without health services. More providers are needed, and these providers require training that is more relevant to the population's health needs. Education of individual professions needs to include a greater emphasis on interprofessional communication and collaboration. There is also a gap between the needs of private and public healthcare systems and the social responsibility to these countries that must be balanced with improved personal finances that accompany immigration to a developed country. Policies from the WHO will be welcomed to assist developing countries (national authorities) in working with local communities, development partners, and educational institutions.

Conclusion

The fifth edition of *Chronic Wound Care: A Clinical Source Book for Healthcare Professionals* is a compilation of the evidence base for chronic wound care with expert opinion from key wound care leaders around the world. It is the starting point for your personal journey to improve outcomes for people with chronic wounds. Figure 3 presents a personal scorecard for you to copy and update on a regular basis for your personal self-assessment and evaluation of the journey. This is also a way to identify personal needs and plan your future educational portfolio. We challenge you to be:

- More effective communicators and collaborators with your patients and their circle of care
- Patient-centered (Do you practice the 4-E model?)
- Betterdistillersofwoundcareknowledgethrough:
  - Examining the evidence base presented in this book
  - Reviewing guidelines with good methodological quality
  - Seeking the opinions of others in your own personal network in order to develop your wound care expertise
  - Building your own wound care networkorcommunityofpracticewithinor outside your organization or workplace.

Have you also personally:

- Become a more dedicated interprofessional team member by listening, sharing, and collaborating with passion and commitment
- Developed a knowledge translation strategy for your workplace to improve the efficacy, efficiency, and effectiveness of your care
- Improved your personal caring?

Regarding your current physical, psychological, spiritual, and mental scorecard:

- Where are your strengths and weaknesses, and can you improve?
- Do you have an action plan?

Can you be more effective in your commitmenttocontinuousprofessionaldevelopmentand lifelong learning? Do you learn personally from asituationalcontinuousprofessionaldevelopment model, or do you still rely on conferences and formal educational opportunities to obtain continuing education credits as your major method of learning?

In closing, we challenge you to complete your own personal scorecard and to construct your personal learning portfolio. We urge you to reach out to patients, families, and caregivers in order to build the trust and the confidence that heal wounds, patients, and lives.

We wish you every success in International Interprofessional Wound Caring!

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