

Day in the life

Each issue of *Wounds International* features a typical day in the life of a different wound care clinician from around the world. This series looks at the variety of techniques that are required in different settings and asks clinicians about the type of conditions they work in, the types of wounds they see and the challenges that they face when providing wound care to patients.



Sara Holland (centre) and colleagues at the Surgical Intensive Care Unit, Hospital of the University of Pennsylvania.

This issue features Sara Holland, a Clinical Nurse at the Surgical Intensive Care Unit (SICU), Hospital of the University of Pennsylvania, USA. She is also currently enrolled in the Johns Hopkins Doctoral Programme, studying wounds in developing countries.

Can you outline where you practise?

The Hospital of the University of Pennsylvania (HUP) is an 880-bed academic medical centre located in Philadelphia. As a level I trauma centre, the HUP cares for a very diverse population of patients in the community and surrounding suburbs.

Can you explain the make-up of your team?

The Rhoads 5 Trauma/Surgical Critical Care ICU, which specialises in trauma and general surgery, has 24 patient care beds. The staff comprises 90 clinical nurses, one clinical nurse specialist (CNS), six nurse practitioners, eight rotating fellows, and 12 rotating

intensivists. Nurses are proficient in caring for patients with multi-system organ dysfunction. On admission to the SICU, patients undergo a full skin assessment identifying any signs of pressure ulcers, surgical or traumatic wounds, and possible risks of potential skin integrity issues. Twice a month skin care teams comprised of nurses on the unit and the CNS, inspect every patient's skin. We pride ourselves on the quality of patients' skin and keeping them free of ulcers.

What types of wounds do you regularly see?

Almost every patient has some type of wound, whether it is a complex surgical incision, blunt trauma or penetrating injury. Patients are often transferred to HUP for surgical debridement of wounds and hyperbaric therapy.

What are the main types of equipment, dressings and techniques that you use on a day-to-day basis?

Non-complicated surgical wounds may just require dry gauze or simply be left open to air if there is primary closure. Wounds that are partially open with no exudate are treated with moist gauze covered with dry gauze to keep the wound bed moist and promote granulation. For complex wounds we use products such as hydrogels, which promote hydration and phagocytic activity, leading to autolytic debridement of necrotic tissue. Recently, the use of honey products has been implemented due to its high osmolality, which causes bacterial cell shrinkage. Many wounds require

negative pressure wound therapy (NPWT) with frequent bed-side changes or scheduled theatre visits to debride necrotic tissue until skin closure can be achieved. This is often combined with hyperbaric treatments for patients with necrotising fasciitis.

What is the most unusual wound you have seen recently and how did you manage it?

A 40-year-old man was admitted from an outside hospital with necrotising fasciitis of the left lower leg. Following debridement, the lateral portion of his leg had an open area approximately six inches long, four inches wide and one inch deep. Along with four hyperbaric treatments, several surgical debridements were required to remove dead tissue, as well as NPWT to promote healing.

Do you feel your service has any unique obstacles that hamper your work?

If anything we have multiple specialties involved with complex wounds, including infection control staff and emergency and plastic surgeons. We are fortunate to have many types of therapies and specialists available to our patients.

What equipment/resource/education would make the most difference to your everyday work?

Certification in wound care therapy for nurses would provide an opportunity to achieve a higher quality of care and acknowledge the expertise of nurses dedicated to daily wound care practice.