Overview
Occupational therapists and occupational therapy assistants 1 routinely work with individuals and populations who are at risk for or have sustained wounds. In 2000, the U.S. Department of Health and Human Services in its Healthy People 2010 initiative called for a 50% reduction in pressure ulcer incidence by 2010. As a part of the work of the American Occupational Therapy Association (AOTA) in supporting occupational therapists and occupational therapy assistants, this white paper serves to inform internal and external audiences, including employers and payer sources, about the role of occupational therapy related to prevention and amelioration of wounds and their associated costs and impact on daily life activities.

Types, Incidence, and Prevalence
Wounds, or impaired skin integrities, include abrasions, punctures, bites, surgical wounds, diabetic ulcers, pressure ulcers, traumatic wounds, venous stasis ulcers, and arterial ulcers. Certain populations either exhibit or are at risk for wounds and from related complications. These populations include people with spinal cord injuries, cerebral palsy, hand injuries, diabetes, breast cancer, and burns, as well as those with sensory or mobility impairments. For example, more than 60% of nontraumatic lower-limb amputations occur among people with diabetes (National Diabetes Information Clearinghouse, 2005).

Impact on Daily Life
Wounds and related conditions can affect a person’s ability to participate in his or her daily life activities. There can be limitations with performing self-care or pursuing work, education, or other life roles. Sequelae of wounds can include depression, decreased social participation, and anxiety. Occupational therapy’s perspective on working in this area combines an understanding of both physical disabilities and mental health, with a focus on supporting health and participation through engagement in daily life activities and occupations.

Depending on the location and severity of the wound, a person may have difficulties with any of the following:

- Management of the wound site may be demanding, including applying wound care treatments and products to promote healing as well as managing drainage or odor. Clothing and footwear adaptations may be needed to avoid contact with the wound or wound dressings. Pressure garments for scar management may be used.

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1 Occupational therapists are responsible for all aspects of occupational therapy service delivery and are accountable for the safety and effectiveness of the occupational therapy service delivery process. Occupational therapy assistants deliver occupational therapy services under the supervision of and in partnership with an occupational therapist (AOTA, 2004).
• Pain and discomfort may make sleep challenging or prevent a person from performing everyday activities (e.g., walking, bathing, dressing).
• Limitations in mobility may be related to the wound site or associated pain. Prolonged periods of immobility may lead to further disability.
• Activity restrictions may prevent a person from sitting upright in bed or a chair, which can lead to further disability. Prevention of deep vein thrombosis is a concern after a burn injury.
• Discoloration of the skin, visible scars, extended time required for scar management, and wearing of compression garments may affect self-esteem.
• Economic ramifications due to an inability to work can cause economic stress as well as loss of worker identity.

Occupational Therapy’s Role in Wound Healing
Occupational therapy as a profession values engagement in activities that support participation in life (AOTA, 2002). Sustaining a wound, such as a finger amputation, may require direct attention to the wound itself as part of the overall occupational therapy intervention. Intervention also may include accommodations while the wound is healing, such as a handheld shower wand to allow independent bathing while maintaining the integrity of the wound area. Occupational therapy practitioners also are skilled in the prevention of wounds for people with various conditions such as spinal cord injuries, diabetes, hand injuries, and other sensory and mobility impairments. In these cases, individual attention is given to the client’s health status, environment supports, patterns of activity, and lifestyle choices so that skin integrity is maintained.

Specific methods and techniques are commonly used during occupational therapy intervention with clients who are at risk for or experiencing wounds. Optimal intervention should not only incorporate standard prevention techniques such as skin checks or pressure reliefs but also, based on a given patient’s personal profile, direct attention to additional concerns such as self-advocacy skills in assessing medical services, stress management, and the ability to identify an optimal balance between living a full life and avoiding activity-related ulcers (Clark et al., 2006, p. 1523).

The following are examples of types of interventions and intervention approaches used in the delivery of occupational therapy services (AOTA, 2002). Some interventions focus on the client, others address the way in which activities are performed, and others seek to change the context or environment that surrounds the client and influence performance (this is not an exhaustive list). Interventions also may focus on preventing a wound from occurring.

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When the term occupational therapy practitioner is used in this document, it refers to both occupational therapists and occupational therapy assistants (AOTA, 2006).
Health Promotion (Create, Promote)

Initial Skin Assessment
An initial skin assessment, which involves completion or assisting in the completion of skin assessment on admission to an acute care hospital or other health care facility, could include assessing a wound in any area of the person’s body that is affecting self-care. One frequently used skin assessment is the Braden Scale (Prevention Plus, 2001).

Remediation, Restoration (Establish, Restore)

Debridement, Splinting, AROM, and PROM
Specialized training in wound care, debridement, splinting, active range of motion (AROM), and passive range of motion (PROM) associated with rehabilitation after a burn, traumatic hand injury, or hand or finger surgery can prevent adhesions and provide proper positioning for a client during wound healing.

Wound Care
Wound care involves wrapping techniques with bandaging to maintain joint ROM and optimal functioning. It also can include direct wound care during therapy, whirlpool use, and client education on how to care for the wound.

Maintain

Support Surfaces
Making recommendations for support surfaces can include pressure relief surfaces for beds and wheelchairs.

Compensation, Adaptation (Modify)

Adaptive Equipment
Adaptive equipment can allow a client to assist with or perform dressing changes. Training in use of equipment is necessary to complete basic activities of daily living (ADLs; e.g., bathing, grooming, dressing, eating) and instrumental activities of daily living (IADLs; e.g., assistive devices, special mattresses, special wheelchair cushions) that are pertinent to the individual.

Positioning
Positioning involves positioning techniques, postural alignment, distribution of weight, balance, stability, and pressure relief (including splinting).

Disability Prevention (Prevent)

Compression Dressings and Stockings
To promote sustained prevention, occupational therapy practitioners can help clients identify ways to incorporate recommended prevention measures into their ongoing daily routines. This can include the selection and application of techniques to don and doff pressure garments to manage swelling and prevent upper-extremity lymphedema.

Reduction of Friction and Shearing Forces
Education in transfer techniques can minimize risk of skin tears.
Conclusion
Wound management encompasses a range of services, including wound prevention and wound care treatment, as well as client education related to wound care self-management. When these interventions are provided, they are always integrated into a broader occupational therapy program and plan of care. The occupational therapy interventions provided always serve to support engagement in activities that facilitate participation in life.

References


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