

STANDARDS FOR WOUND MANAGEMENT

SECOND EDITION



Healing Wounds
Together

AWMA

Australian Wound
Management Association Inc.

National

Australian Wound Management Association Inc.

Philosophy

The Australian Wound
Management Association Inc.
believe that all people with,
or who are likely to develop a
wound, are entitled to receive
personalised care and management
that is supported by current
validated research.

Standards for Wound Management

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PREFACE

The Australian Wound Management Association Inc. (AWMA) is a multidisciplinary professional association for persons with an interest in wound healing and wound management. The objectives of the AWMA are to raise awareness of the science and art of wound healing and promote scientifically substantiated wound management practices.

The Standards for Wound Management presented in this revised second edition provide a framework for promoting best practice in wound management as they reflect current evidence. The Standards will be a valuable tool for directing clinical practice and the development of policies, protocols and education programs. The aim of the Standards is to facilitate quality care outcomes for persons with wounds or potential wounds.

It is the ongoing vision of the AWMA that these Standards will be adopted by health professionals and service providers across Australia and that the challenge associated with validating and embedding the Standards across all practice settings be taken up enthusiastically.

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INTRODUCTION

The Australian Wound Management Association Inc. Standards for Wound Management are intended to be reflective of best practice as defined in the literature and in the consensus opinions sought from expert wound clinicians. The Standards are presented as a guide to clinicians, educators and researchers, health students and health care providers who desire to promote optimal outcomes in the care of individuals with wounds or those at risk of wounding. The Standards are intended to be broad, which allows for their flexible application in accord with the needs of individual disciplines and practice settings.

The performance criteria listed in the Standards are considered to be base criteria for achieving each Standard. However, individual health professionals and health care providers are at liberty to adapt the criteria in context for achieving each Standard according to the expectations of individual professional roles, practice settings, legislation governing practice and institutional requirements for determining a standard of care.

The second edition of the Standards contains an additional Standard 8: Corporate Governance. It is recognised that the onus of responsibility for provision of best practice in wound management is shared by all involved health care providers.

Wound healing and the development of standards of care are both dynamic processes. It is anticipated that reviews of these Standards will occur as scientific endeavours promote greater understanding of the phenomenon of wound healing and best practice management. The Australian Wound Management Association welcomes comments and feedback at any time.

The Standards do not promote or endorse specific products, devices, pharmaceuticals or therapies.

STANDARD 1

COLLABORATIVE PRACTICE AND INTERPROFESSIONAL CARE

The optimal healing of the individual with a wound, or potential wound is promoted by a collaborative and interprofessional approach to wound management.

Collaborative practice includes evidence that the clinician:

1.1 Acknowledges the central role of the individual and their carer in wound management and relevant health care decisions¹⁻⁴.

Performance Criteria

The clinician will ensure the individual and their carer will be informed of:

- 1.1.1 The need and options for comprehensive and interprofessional team assessment.
- 1.1.2 Assessment outcomes.
- 1.1.3 Opportunities and information to encourage and facilitate their participation in wound management and wound prevention.

1.2 Establishes and maintains communication that facilitates interprofessional collaboration and coordination of care^{3,5-10}.

Performance Criteria

The clinician will:

- 1.2.1 Liaise and maintain regular communication with the interprofessional team.
- 1.2.2 Initiate timely and additional communication when there are changes that impact on the individual, their wound and their wound healing environment.

1.3 Recognises the knowledge, skills and contributions provided by members of the interprofessional team¹¹⁻¹⁴.

Performance Criteria

The clinician will:

- 1.3.1 Utilise a collaborative and interprofessional approach in wound management and wound prevention.
- 1.3.2 Refer to other members of the interprofessional team when wound management requirements are outside their scope of practice.
- 1.3.3 Advocate for collaborative and interprofessional services where they currently do not exist.

STANDARD 2

PROFESSIONAL PRACTICE

The safety and wound healing potential of the individual is ensured by clinical practice that respects and complies with legislation, regulations, codes of practice, evidence and health provider policies.

The obligations of the professional role are demonstrated by:

2.1 Performance in accordance with legislation and regulations affecting professional responsibilities and code of practice^{14, 15-21}.

Performance Criteria

The clinician will:

- 2.1.1 Function in accordance with the professional code of practice as determined by their regulatory authority.
- 2.1.2 Be accountable for and function within their scope of practice.
- 2.1.3 Be aware of limitations of scope of practice for regulated and non-regulated practice.

2.2 Application of evidence based wound management and prevention and advocacy when deficits exist²²⁻³⁰.

Performance Criteria

The clinician will:

- 2.2.1 Seek access to evidence from reputable sources.
- 2.2.2 Utilise best available evidence to direct practice.
- 2.2.3 Advocate for and promote evidence based practice amongst the interprofessional team.

2.3 Management of resources and negotiation for equitable access to appropriate products, pharmaceuticals, therapies, devices and services for wound management and wound prevention³¹⁻³⁶.

Performance Criteria

The clinician will:

- 2.3.1 Remain informed of the availability, indications for use and cost of products, pharmaceuticals, therapies, devices and services relevant to their scope of practice.
- 2.3.2 Use products, pharmaceuticals, therapies and devices in accordance with the manufacturers' instructions and the Therapeutic Goods Administration Guidelines.
- 2.3.3 Use products, pharmaceuticals, therapies, devices and services in an efficient and therapeutic manner and as determined by assessment.
- 2.3.4 Promote cost effectiveness in wound management, which will be influenced by:
 - Knowledge
 - Cultural preferences
 - Availability and procurement processes
 - Fiscal and resource constraints.

STANDARD 3

CLINICAL DECISION MAKING: ASSESSMENT AND PLANNING

The optimal outcome for the individual is facilitated by a continuous process of individual, wound and environmental assessment that determines the risk of wounding, wound aetiology, wound healing potential and informs the plan of care.

Clinical decision making is based on, and includes evidence of:

3.1 A comprehensive assessment of the individual, their wound and/or their risk of wounding and their healing environment³⁷⁻⁶³.

Performance Criteria

The clinician:

- 3.1.1 Performs a comprehensive assessment that reflects the health, cultural and environmental factors that have the potential to impact on wound healing or risk of wounding³⁷⁻⁴⁹.
- 3.1.2 Documents evidence of individual assessment outcomes that may include³⁷⁻⁴⁹:
 - Reason for presentation
 - Health history
 - Age and specific age related changes
 - Previous wound history and outcome
 - Medication history - prescribed and over- the- counter medications
 - Psychosocial implications resulting from wounding
 - Nutritional status
 - Sensitivities and allergies
 - Previous relevant diagnostics and investigations
 - Pain assessment with use of validated pain tool
 - Vital signs

- Individual's perceptions and wound healing goals and their ability to participate in self care.

3.1.3 When indicated expanded assessment parameters may include:

- Risk assessments e.g. falls and skin integrity
- Vascular assessment: observations for hypoxia and ischaemia, palpation of pulses, ankle brachial pressure index, transcutaneous oxygen perfusion
- Sensory assessment: monofilament testing or testing blunt/sharp pressure touch, vibratory sensation - tuning fork or biothesiometer, testing of reflexes - patella hammer.

3.1.4 Conduct initial and ongoing wound assessments that result in documented evidence of⁴⁸⁻⁶²:

- Type of wound
- Aetiology and original mechanism of wounding
- Duration of wound
- Location
- Dimensions of wound e.g. length, width, depth, circumference
- Clinical characteristics of wound bed e.g. agranular, granulation, epithelium, slough, necrosis, eschar, bone, tendon, fibrin, presence of foreign bodies
- Wound edge appearance: e.g. level, raised, rolled, undermined, colour
- Peri wound appearance: e.g. erythema, oedema, induration, maceration, desiccation, dermatitis/eczema, callus, hyperkeratosis, pigmentation, allergic reactions
- Exudate: type and colour e.g. serous, haemoserous, sanguineous, seropurulent, purulent, consistency - thick or thin and amount
- Odour
- Inflammation: could be related to physiological healing or chronic inflammatory changes - signs and symptoms include erythema, oedema, pain and heat
- Infection: classic signs and symptoms include pain, heat, erythema, oedema and purulence which tends to be more evident in acute surgical

or traumatic wounds. In chronic wounds and especially if host response is compromised, the signs and symptoms may be more subtle or differ according to wound type and aetiology

- a) Covert infection: also known as critical colonisation, local infection, topical infection or increased bacterial burden, signs and symptoms may include static healing, rolled edges, changes in granulation tissue (bright friable hypergranulation or pocketing), bridging of tissues, increased exudate or discomfort
 - b) Spreading infection: involvement of adjacent or regional structures e.g. cellulitis
 - c) Systemic infection: systemic signs and symptoms may include loss of appetite, general malaise, pyrexia, increased white cells, raised C-reactive protein.
- Wound pain: assess pain intensity with a validated pain scale and determine aetiology and presentation e.g.
 - a) Non-cyclic wound pain - suture removal or debridement
 - b) Cyclic wound pain - daily dressings
 - c) Chronic wound pain - not related to manipulated interventions
 - Presence of foreign bodies e.g. sutures, staples, orthopaedic implants, drains, glass, gravel, dirt
 - Previous wound treatments and their therapeutic outcome.

3.1.5 Conducts an assessment of the individual's healing environment to identify factors that could impact on confidentiality, safe performance of procedures, infection control or wound healing, and may include^{37,60,63}:

- Individual's lifestyle factors
- Confidentiality and privacy issues
- Storage security for the individual's records
- Environmental hygiene status
- Use of personal protection garments and devices by clinicians if there is a risk of contamination
- Avoidance of airborne contaminants during procedures

- Maintenance of stable environmental temperature to optimise wound temperature
- Safe and secure storage of wound products, pharmaceuticals and devices
- Appropriate disposal of used wound products, pharmaceuticals and devices
- Individual and clinician's safety precautions.

3.2 Diagnostic investigations will be performed when clinically indicated to ascertain and monitor wound aetiology, healing potential, assessment outcomes, associated diagnoses and management interventions^{57-58, 61,63-83}.

Performance Criteria

An interprofessional approach to diagnostic investigations may include the following:

- a) Biochemical analysis:
 - Blood glucose and HbA1c
 - Haemoglobin
 - Plasma albumin
 - Lipids
 - Urea and electrolytes
 - Rheumatoid factor
 - Auto antibodies
 - White cell count
 - Erythrocyte sedimentation rate
 - C-reactive protein
 - Liver function tests.

- b) Microbiology:
 - Wound swab for semi-quantitative and quantitative bacteriology
 - Needle aspiration and quantitative bacteriology
 - Wound biopsy for quantitative bacteriology
 - Skin and nail scrapings for culture and microscopy.
- c) Histopathology:
 - Wound biopsy to identify pathological changes.
- d) Diagnostic imaging:
 - Plain x-ray e.g. fracture, osteomyelitis
 - Bone scan e.g. osteomyelitis
 - Magnetic resonance imaging e.g. gas gangrene, osteomyelitis
 - Computed tomography e.g. soft tissue infection, osteomyelitis
 - Sinogram and fistulagram to identify tracking.
- e) Vascular assessment:
 - Ankle/brachial pressure index (ABPI) for vascular status of lower limb
 - Duplex ultrasound for venous and arterial disease
 - Photoplethysmography for venous disease
 - Transcutaneous oxygen for local tissue perfusion
 - Angiography for arterial disease.
- f) Neurological foot assessment:
 - Autonomic neuropathy: palpation to assess for bounding foot pulses and increased skin temperature, observation for dry cracked skin integrity and foot deformity
 - Peripheral sensory neuropathy: use of a 10gm/5.07 Semmes-Weinstein monofilament for assessment of sensation, a tuning fork (128C) or biothesiometer for assessment of vibration perception
 - Peripheral motor neuropathy: use of a patella hammer for assessment of patella and Achilles reflexes and muscle weakness.

g) Nutritional assessment:

- Food and fluid intake
- Hair and skin changes
- Anthropometric assessment: objective measurements used to estimate subcutaneous fat and skeletal muscle stores. Formulas such as the Harris-Benedict equation can be used measure and evaluate Basal Metabolic Rate (BMR) or Basal Energy Expenditure (BEE), waist to hip ratio
- Body mass index and nutritional assessment: height, weight , body mass
- Specific biochemical tests e.g. albumin, transferrin, zinc
- Mini Nutritional Assessment.

h) Psychological assessment

- Mini-mental for cognition and Alzheimer’s disease
- Hospital Anxiety and Depression Scale e.g. depression, anxiety
- Hamilton Rating Scale e.g. depression
- Quality of life scales for specific health populations.

3.3 Documented care decisions for the individual and their wound will be directed by comprehensive assessment and provide evidence of wound healing progress or complications^{2,6,46,50-52}.

Performance Criteria

The documented plan of care should consider and incorporate:

- 3.3.1 Short and long term goals and expected outcomes.
- 3.3.2 Evidence based practice.
- 3.3.3 The individual or their carer’s preference, ability and willingness to participate in their care decisions and interventions.

- 3.3.4 A comprehensive and chronological record of care.
- 3.3.5 Effectiveness and complications of management interventions.

3.4 Implementation of goals of care and interventions that prevent wounding and optimise the wound healing potential of the individual^{1-2, 84-86}.

Performance Criteria

The clinician as a member of the interprofessional team will:

- 3.4.1 Adhere to infection control practices.
- 3.4.2 Address nutritional deficits.
- 3.4.3 Review medications regularly.
- 3.4.4 Manage other health conditions.
- 3.4.5 Promote activity and mobility activities.
- 3.4.6 Modify environmental risks.
- 3.4.7 Increase awareness of healthy lifestyle choices.

STANDARD 4

CLINICAL DECISION MAKING: PRACTICE

Wound management is practised according to the best available evidence for optimising outcomes for the individual, their wound and their healing environment.

The clinician comprehends the importance of, and is able to:

4.1 Determine when an aseptic wound management technique is required if the individual, their wound and their healing environment is compromised⁸⁷⁻⁹⁷.

Performance Criteria

The clinician will:

Use an aseptic wound technique using sterile products, pharmaceuticals and devices:

- When the individual is immunosuppressed
- When the wound enters a sterile body cavity e.g. nephrostomy or central venous line
- During the peri-operative period
- When the wound healing environment is compromised
- When the service provider protocols dictate.

4.2 Determine when a clean wound management technique is acceptable if the individual, their wound and their healing environment are not compromised^{87-91, 94, 96-107}.

Performance Criteria

The clinician will:

- Use a clean wound management technique i.e. washing or showering of wounds when criteria for Standard 4.2 are not demonstrated
- When service provider protocols dictate.

4.3 Maintain an optimal wound moisture balance¹⁰⁸⁻¹¹⁵.

Performance Criterion

The clinician will:

- 4.3.1 Promote a moist wound healing environment unless clinically contraindicated e.g.
- a) In the presence of dry eschar with insufficient blood flow to the affected body part to support infection immune responses and wound healing
 - b) In palliative wound management when healing is not a realistic goal and eschar protects underlying vascular structures against bleeding or infection.

4.4 Maintain a constant wound temperature consistent with optimal healing¹¹⁶⁻¹¹⁸.

Performance Criteria

The clinician will:

- 4.4.1 Avoid exposing the wound to cooling temperatures, products, pharmaceuticals, therapies or devices.
- 4.4.2 Minimise wound exposure.
- 4.4.3 Use wound cleansing solutions at body temperature.
- 4.4.4 Avoid extremes in intact skin temperature by:
- Providing advice or interventions, appropriate for maintaining normal body and skin temperature
 - Avoiding overheating with clothing, bed linen or heating devices
 - Limiting skin contact with plastic bed protection covers and plastic lined garments
 - Ensuring adequate hydration
 - Maintaining a stable and comfortable environmental temperature.

4.5 Maintain a neutral or slightly acidic pH in the wound consistent with healing¹¹⁹⁻¹²³.

Performance Criteria

The clinician will

- 4.5.1 Avoid the use of alkaline soaps, cleansers and other agents.
- 4.5.2 Avoid desiccation of wound bed as this increases alkalinity.

4.6 Prevent and manage infection¹²⁴⁻¹⁴¹.

Performance Criteria

The clinician as a member of the interprofessional team will:

- 4.6.1 Practice adequate and regular hand hygiene.
- 4.6.2 Use personal protective equipment as deemed relevant for practice when there is a risk of contamination to the individual or clinician.
- 4.6.3 Perform adequate wound cleansing and debridement to minimise contamination by exogenous micro-organisms.
- 4.6.4 Use appropriate products and devices to protect the wound from infection.
- 4.6.5 Optimise host response e.g. manage other health conditions and address nutritional deficits.
- 4.6.6 Assess clinical signs and symptoms of wound or systemic infection.
- 4.6.7 Conduct diagnostic investigations when clinically indicated to determine a definitive diagnosis of wound infection.
- 4.6.8 Manage clinical infection.
- 4.6.9 Perform wound interventions with a frequency that optimises wound bed preparation.

- 4.6.10 Employ prudent and discriminate use of tissue safe topical antimicrobials e.g. cadexomer iodine, silver impregnated products, wound honey, to treat localised wound infection or in combination with systemic antibiotics in the treatment or spreading or systemic infection.
- 4.6.11 Evaluate the need for prophylactic systemic antibiotics for high risk wounded individuals.
- 4.6.12 Evaluate the need for systemic antibiotics when spreading or systemic infection is identified. Pathological investigations and clinical assessment outcomes need to be considered jointly in determining causative organisms for wound infection or osteomyelitis.

4.7 Minimise the actual and potential impact of pain¹⁴²⁻¹⁴⁴.

Performance Criteria

The clinician as a member of the interprofessional team will:

- 4.7.1 Adequately identify causative factors of pain.
- 4.7.2 Ascertain type of pain and its characteristics.
- 4.7.3 Implement strategies to prevent, minimise and manage pain.

4.8 Protect the wound environment¹⁴⁵⁻¹⁵³.

Performance Criteria

The clinician will:

- 4.8.1 Avoid aggressive wound cleansing unless the goal of care is debridement.
- 4.8.2 Avoid the use of products, pharmaceuticals, devices and interventions that desiccate or traumatise the wound bed or surrounding skin.
- 4.8.3 Avoid known or suspected toxic agents or allergens.
- 4.8.4 Protect the wound and peri wound area from trauma and maceration.

- 4.8.5 Protect the wound and surrounding tissues from pressure, shear and friction.
- 4.8.6 Remove foreign bodies from the wound where appropriate.
- 4.8.7 Avoid irrigating or packing a sinus where the dimensions of the sinus tracking cannot be visualised without further investigations.
- 4.8.8 Avoid tight or excessive packing that might prevent wound drainage or result in damage to the tissues.
- 4.8.9 Ensure that any packing product, drainage tube or devices inserted into a sinus is in one continuous piece and is able to be visualised and secured at the wound surface.
- 4.8.10 Ensure that all packing products, pharmaceuticals drainage tubes or devices inserted into the wound are documented and removed in entirety.
- 4.8.11 Offload plantar pressures in the presence of a foot wound.
- 4.8.12 Eliminate pressure, shear and friction for the prevention and management of pressure ulcers.

4.9 Maintain the integrity of wound management products, pharmaceuticals and devices¹⁵⁴.

Performance Criteria

The clinician will:

- 4.9.1 Securely store products, pharmaceuticals and devices according to manufacturer's instructions.
- 4.9.2 Perform dressing changes according to manufacturer's recommendations and clinical indications for change e.g. products, pharmaceuticals and devices changed as frequently as required to effectively remove and contain exudate or infected material.

4.10 Use products, pharmaceuticals and devices in accordance with licensing acts and / or regulatory bodies and manufacturer guidelines¹⁵⁴.

Performance Criteria

The clinician will:

- Use wound management products, pharmaceuticals and devices for the indications approved by the Therapeutic Goods Administration and in accord with manufacturer's instructions unless they are used as a component of a research protocol with appropriate ethical approval.

STANDARD 5 DOCUMENTATION

Documentation will provide a legal, comprehensive, chronological record of the individual's wound assessment, management and prevention plan.

5.1 A comprehensive and legible record¹⁵⁵⁻¹⁵⁹.

Performance Criteria

The clinician as a member of the interprofessional team will:

- 5.1.1 Maintain and store records according to legislative, regulatory and service provider requirements.
- 5.1.2 Document a chronological record which includes:
 - Health history in relation to the wound and wounding
 - Aetiology
 - Assessment outcomes
 - Diagnostic investigations and results
 - Goals of care
 - Management plans
 - Evaluation of outcomes
 - Individual's expectations and participation in their care
 - Evidence of interprofessional communication and care.
- 5.1.3 Maintain documentation systems in a format that facilitates audit, research and evaluation of care.

5.2 Individual consultation¹⁶⁰⁻¹⁶⁴.

Performance Criteria

The clinician will:

- 5.2.1 Provide the individual and or their carer with information relating to assessment outcomes and care options in a manner that is considerate of their age, cognitive status, education and culture and which will facilitate their understanding and informed consent to assessment and planned care.
- 5.2.2 Obtain informed consent for clinical interventions.
- 5.2.3 Obtain informed consent prior to the recording and use of wound images.

STANDARD 6

EDUCATION

The clinician maximises opportunities for advancing self knowledge and skills in wound prevention and management.

6.1 The clinician determines their learning needs and maximises opportunities for advancing knowledge and skills in wound prevention and management¹⁶⁵⁻¹⁷⁰.

Performance Criteria

The clinician will:

- 6.1.1 Assess personal learning needs.
- 6.1.2 Seek opportunities and resources for meeting learning needs.
- 6.1.3 Participate in educational strategies that are evidence based and relevant to individual learning needs.
- 6.1.3 Apply evidence based principles and be able to state the rationale for interventions and anticipated outcomes.

6.2 The clinician will support the learning needs of the interprofessional team^{167, 171-173}.

Performance Criteria

The clinician will:

- 6.2.3 Act as a positive role model to members of the interprofessional team.
- 6.2.4 Share knowledge and skills with the interprofessional team.
- 6.2.5 Initiate and/or contribute to interprofessional activities to promote wound prevention and management.

6.3 The clinician will support the learning needs of the individual and their carers^{1, 3, 174-175}.

Performance Criteria

The clinician will:

- 6.3.1 Provide relevant information and learning opportunities in a manner that is considerate of the individual or their carer's age, cognitive status, literacy and culture in order to advance health literacy and facilitate their ability to participate in care decisions and activities.

STANDARD 7

RESEARCH

Evidence based wound prevention and management advances optimal outcomes for individuals and the interprofessional team.

Evidence based practice is supported by:

7.1 Implementation of evidence based practice¹⁷⁶⁻¹⁷⁸.

Performance Criteria

The clinician will:

- 7.1.1 Critique relevant literature and research findings.
- 7.1.2 Implement wound prevention and management practices based on contemporary research and consensus recommendations.

7.2 Adherence to national and service provider guidelines when participating in research¹⁷⁹⁻¹⁸⁴.

Performance Criteria

The clinician will:

- 7.2.1 Adhere to the National Health and Medical Research Council (NHMRC) Guidelines on the ethical conduct of research involving human subjects.
- 7.2.2 Adhere to the NHMRC guidelines to promote the well being of animals used for scientific purposes.

STANDARD 8

CORPORATE GOVERNANCE

The service provider framework within which the clinician practices, supports evidence based wound management.

The service provider supports wound management through:

8.1 Endorsement of evidence based practice¹⁸⁵⁻¹⁸⁸.

Performance criteria

The service provider will:

- 8.1.1 Ensure access to evidence based documented protocols to guide wound prevention and management within the organisation.
- 8.1.2 Facilitate access to evidence based learning for the interprofessional team.
- 8.1.3 Provide or facilitate access to the necessary resources for the implementation of cost effective evidence based practice in the prevention and management of individuals with wounds.

8.2 Provision of resources to ensure systematic collection of information³¹⁻³⁶³¹.

Performance Criteria

The service provider will:

- 8.2.1 Develop and implement a systematic process for the collection and security of wound related health records.
- 8.2.2 Conduct audits of quality activities for the delivery of best practice in wound prevention and management.
- 8.2.3 Endorse and facilitate research activities when appropriate.

GLOSSARY

Clinician	Any health practitioner, educator, researcher or health worker involved in clinical wound management.
Service provider	Any organisation, institution, facility, agency that is responsible for provision of wound management or related services.
Interprofessional	Interdisciplinary and multidisciplinary health practitioners and team health workers involved in the care of individuals with wounds or the prevention of wounding.
Protocol	Any policy, guideline, work instruction or other formal or informal document that guides or regulates wound management.
Health history	Past or concurrent diseases or comorbidities, trauma, surgical interventions, medication regimens, or other factors of relevance to current health status and care.
Product	Dressings, bandages adhesive tapes used for wound management.
Pharmaceuticals	Solutions or pharmaceutical agents used either topically or systemically in the management of individuals or their wounds.
Devices	Devices used in the management of wounds and may include: ostomy and wound management appliances, suction or negative pressure wound drainage collection apparatus, tubes, catheters, drains, stents, topical negative pressure systems, pressure garments, orthotics, pressure redistribution equipment.
Therapies	Adjuvant therapies used in the management of individuals with wounds and may include: hyperbaric oxygen, electrical stimulation, ultrasound, laser light, cytokines / growth factors, hydrotherapy, larvae, dietary supplements.

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