

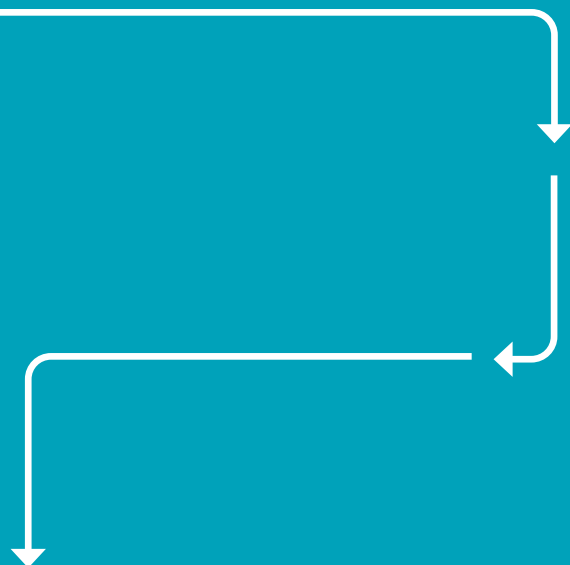


*The Wound Care Pathway*

# *Your 5 step guide to wound healing*



Developed by clinicians for clinicians



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**Developed by clinicians for clinicians – brought to you by Coloplast.**

The Wound Care Pathway was developed with feedback and input from over 2200 health care professionals working in the field of wound care. It offers a unique, evidence-based approach to managing chronic wounds.

# The shortest way to wound healing

We all want patients living with chronic wounds to have fewer days with wounds. But finding the shortest way to wound healing can be a challenge.

By following the Wound Care Pathway you will be sure, you are doing your best to provide an optimal healing environment and prevent complications that could lead to delayed healing or worse.

The Wound Care Pathway was developed by clinicians for clinicians, and helps you put the latest evidence in wound care to use in real life.



## The step-by-step guide

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# What is a chronic wound?

Any wound that has not healed in 30-days despite best practice intervention is considered a 'chronic wound'. Wounds that are not expected to heal within 4-6 weeks are therefore automatically considered 'chronic' regardless of their aetiology (cause).

The guidance given here will help you provide an optimal healing environment for all types of chronic wounds. Even non-healable wounds (i.e. inadequate vasculature or palliative wounds) can be managed by following the recommendations in the Wound Care Pathway.



**Keep in mind:** any acute wound can turn into a chronic wound if proper wound treatment is not followed!

## Wound types



**A pressure ulcer/pressure injury** is localized damage to the skin and underlying soft tissue usually over a bony area or related to a medical or other device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear.



**A diabetic foot ulcer** is caused by infection, ulceration, or destruction of tissues of the foot associated with neuropathy and/or peripheral artery disease in the lower extremity of a person with a history of diabetes mellitus.



**A venous leg-ulcer** is a full-thickness defect of the skin that persists due to venous disease of the lower leg. Venous ulceration is a chronic condition that is generally considered to result from venous occlusion, incompetent calf muscle pump function or venous valvular failure, giving rise venous hypertension.



**A surgical wound** is a cut or incision in the skin that is usually made by a scalpel during surgery. They are usually closed with sutures or staples but are sometimes left open to heal by secondary intention.



1

How to assess a person  
with a chronic wound



# How to assess a chronic wound

When you assess a chronic wound you should always take both patient and wound into account. By taking a 'holistic approach' you have a better chance of determining the best way forward.

A 'holistic' wound assessment considers a wide range of factors beyond simply the biology of the wound, and requires coordination between you and the other care providers involved.

When conducting your assessment, you should always use a validated assessment tool, such as the Triangle of Wound Assessment, and ensure that everyone on your team is using the same measurement parameters to assess the wound.

**Please find a description of the most important parameters your assessment should include on the following pages.**

Chronic wounds need to be re-assessed every 4 weeks to evaluate healing progression and determine if significant changes in the patient's condition occur.



**Remember:** The wound is on a patient, the patient is in their environment and the environment is part of a health care system.



Click here to access a validated assessment tool



Click here to learn more about holistic patient assessment

## How to assess your patient:

- ✓ Determine age, mobility, dexterity, mental capacity and ability of patient to engage in self-care.
- ✓ Check for current medications and medication history.
- ✓ Check for co-morbidities, deteriorating or uncontrolled conditions, wound and pressure injury risk history.
- ✓ Check for clinical history, such as previous surgeries, wounds and diseases, allergies to medications, etc.
- ✓ Identify life-style risk factors such as: smoking, nutrition (underweight or obesity), sedentary life-styles and alcoholic/substance abuse.
- ✓ Check for vascular insufficiencies.
- ✓ Check for dermatological diseases and complications such as allergies to treatment products.
- ✓ Identify sociological issues, such as income instability/employment, housing, social network, social isolation, and overall quality of life.
- ✓ Identify psychological issues, such as depression, anxiety, etc.
- ✓ Take note of the experienced level of pain (potential treatment must be assessed both at dressing change and during the agreed treatment plan).

## How to assess the type and condition of a wound

- ✓ Determine the cause of the wound (the wound aetiology).
- ✓ Understand the wound's 'history', duration and healing progression.
- ✓ Register the wound's location and measure its size (depth, length and width).
- ✓ Identify bioburden and check for signs of infection.

Ask yourself:

### Assess the wound depth:

- ✓ Measure the wound depth.
- ✓ Inspect the wound bed structure and topography.
- ✓ Check for exudate pooling.



How deep is the wound?



Was the used dressing the most appropriate?



Do you see exudate pooling?

### Assess the wound exudate:

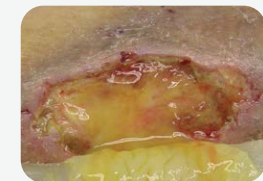
- ✓ Inspect the used dressing for any leakage (always note when the dressing was last changed).
- ✓ Determine the amount of wound exudate in both wound and dressing. (how saturated is the dressing?).
- ✓ Assess the colour, viscosity and odour of the wound exudate.



Did the previous dressing absorb and retain the exudate?



Is the exudate clear or cloudy?



What colour does the exudate have?

### Assess the wound edge and periwound skin:

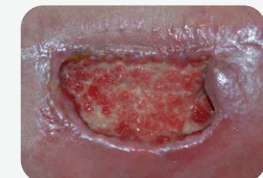
- ✓ Assess the wound edges (are they attached, rolled, inflamed, undermined, advancing, macerated?).
- ✓ Assess the periwound skin (is it intact, fragile, inflamed, macerated?).



Is the wound edge and periwound skin macerated?



Is the wound edge undermined?



Are there rolled wound edges?



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graph LR; A[ ] --> B((2)); B --> C[ ]; C --> D[ ]; D --> E[ ]; E --> B; F[ ] --> B; B --> G[ ]; G --> H[ ]; H --> I[ ]; I --> B
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2

How to develop  
a treatment plan



# How to develop a treatment plan

Once you have completed your holistic patient and wound assessment, an evidence-based treatment plan must be developed. It should define the path forward and be agreed upon by everyone involved – including the patients and their family.

Your treatment plan should focus on:

- Treating the underlying cause/etiology of the wound.
- Managing existing co-morbidities.
- Ensuring effective wound bed preparation and management.
- Selecting appropriate wound dressings.



Click here to learn more about how to develop a holistic treatment plan

## Treatment Plan – Checklist:

### Assess the wound team:

- ☒ My treatment plan clarifies who is on the multidisciplinary care team.
- ☒ It is accessible and understood by all members of the clinical care team (e.g. physicians, nurses, homecare staff).
- ☒ It is understood and agreed to by the patient and the patient's family/personal support network.

### Goal:

- ☒ My treatment plan clearly prescribes the care pathway, including specific treatment of the periwound skin and the wound bed.
- ☒ It includes specific milestone/targets for the wound's healing progression (both short-term and long-term).
- ☒ It articulates what to do if the targets are not reached.
- ☒ It identifies risk factors and adverse events to watch for and instructions on what to do if they arise or are suspected (i.e. early signs of infection, change in wound exudate or wound edge maceration)

### Safety:

- ☒ My treatment plan makes it clear to the patient when to alert their wound care provider (i.e. warning signs/symptoms of infection).
- ☒ It clearly defines when consultation or referral to a specialist is necessary.



# How to include the patient and their caregivers

Research shows that patients who are included in planning their treatment and educated on effective self-care are more likely to adhere to their treatment plan.

## Including patients and their caregivers means:

- Listening to the patient.
- Working with the patient to find solutions.
- Considering the patient as a partner in care planning.
- Encouraging patient ownership of their own health outcomes.
- Providing tools to help keep patients on track (e.g. providing a copy of the care plan, diaries, progress tracking tools).
- Recognizing and discussing the patient's economic and social realities.
- Accepting the patient's wishes.



A **treatment plan** should always consider personal preferences and take the patient's ability to self-care and their personal support-network into account.

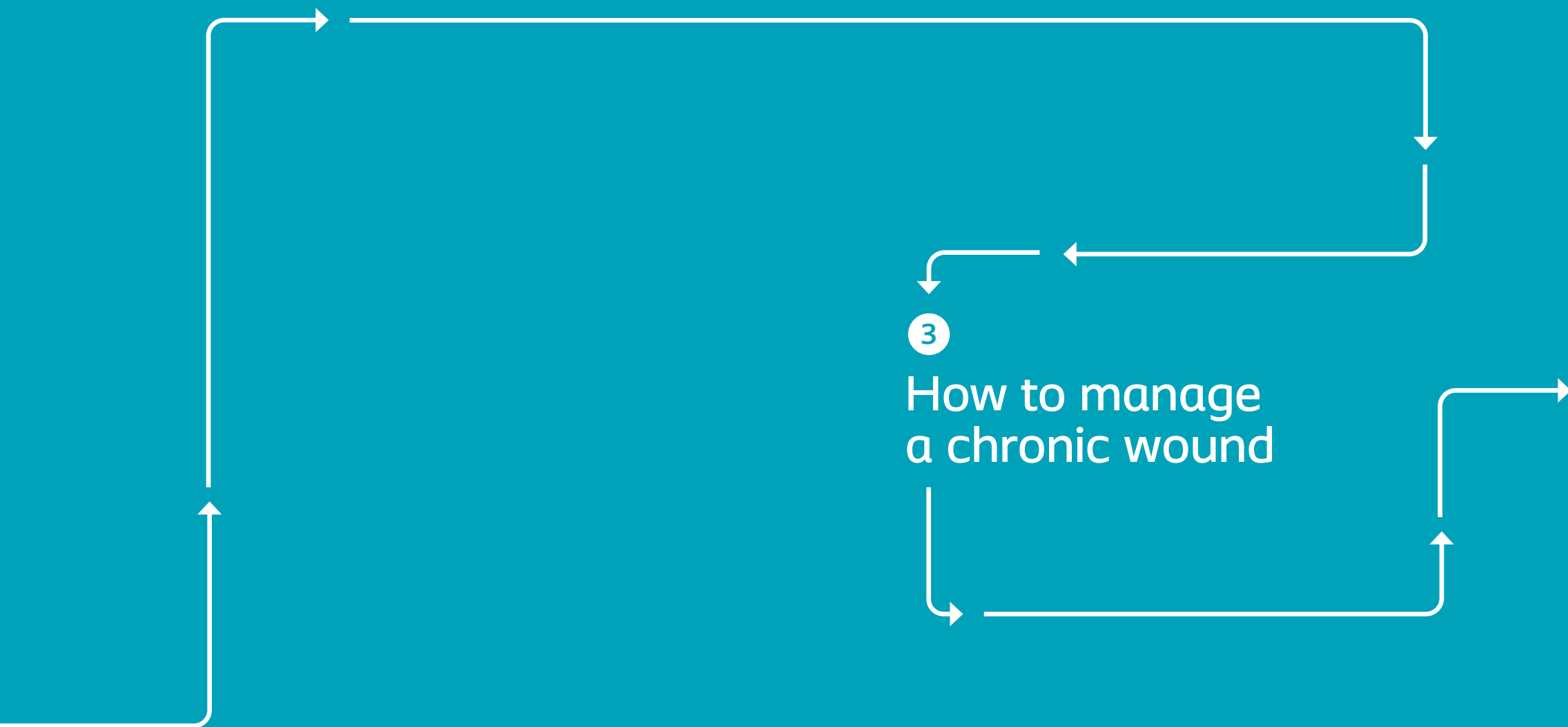
## Educating patients and their caregivers means:

- Showing them how to perform effective dressing changes.
- Letting them know how to identify signs of infection or other risks that require contact with wound care specialist.
- Providing advice about personal and wound hygiene
- Bringing attention to self-harming behaviours (i.e. smoking, alcohol, hydration, not levating limb or taking off 'moon boot').

To help your patients, their family members and care-givers understand, consider using multiple communication methods (e.g. demonstrations, pictures, pamphlets, videos). Also remember to follow up and get confirmation that they have understood.



**Patient concordance** – also referred to as adherence or compliance, is a critical factor in preventing complications and healing chronic wounds. Research shows that engaging patients in planning, including them in decision-making and offering continuous education on effective self-care and prevention is the best way to increase patient concordance.



# How to manage a chronic wound

When managing a chronic wound, your main focus should be on preventing complications and creating the optimal environment for wound healing, based on the etiology (cause) of the wound. Based on your holistic assessment you should adhere to the evidence-based standards of care:

1. Treat the underlying causes and gain control of co-morbidities
2. Manage wound tissue through cleansing and debridement
3. Manage wound exudate by managing 'the gap'
4. Prevent or treat infection

How you treat the underlying causes and gain control of co-morbidities will depend on the individual circumstances. In the following pages you will find a guide to managing wound tissue and wound exudate, as well as advice on how to prevent or treat infections.

## Managing wound tissue

Before you apply a dressing to a chronic wound it is essential that you cleanse and debride. Effective preparation of the wound bed and the periwound skin is key to maintaining an optimal healing environment and to preventing complications.

Remember! You have to prepare the wound bed and the periwound skin at every dressing change. However, as healing progresses less debridement and refashioning of the wound edges may be necessary.



### Cleansing and debridement matters because you are:

- Removing debris and necrotic or non-viable tissue, that provides a medium for bacterial growth, initiates inflammation and delays healing.
- Reducing the inflammatory components and enzymes in the wound.
- Managing the bacterial balance for optimal healing.



# Managing wound tissue

## How to cleanse:

- ✓ Use saline or clean potable water.
- ✓ Consider using solutions with a surfactant, antiseptic or antimicrobial agent if infection or biofilm are suspected.
- ✓ Cleaning solutions should be at body temperature.
- ✓ Apply solution with gentle force to wound bed and periwound skin to loosen superficial devitalized tissue, wound debris, foreign debris and biofilm.
- ✓ Aggressive wound cleansing should occur where there is suspected infection or biofilm but this can be painful to the patient and must be managed carefully.



Wound cleansing



Wound cleansing



Click here to learn more about cleansing



Click here to learn more about debridement

## How to debride:

- ✓ Use therapeutic irrigation with a force of 4-15psi (mechanical debridement).
- ✓ Debridement pads or wipes can also be used.
- ✓ Remove necrotic tissue, slough, debris and biofilm.
- ✓ Refashion wound edges to ensure that the skin aligns with the wound bed to facilitate healing.
- ✓ Aggressive debridement must be considered when there are signs of infection or biofilm. This can cause considerable pain for the patient.
- ✓ Refer to a wound care specialist if aggressive debridement is outside of your scope of practice (conservative sharp, surgical, low frequency ultrasound, chemical and autolytic debridement must be done by a qualified wound care specialist).
- ✓ Debriding a wound that does not have adequate vascular supply is not recommended.



Sharp debridement



Pressure Ulcer before debridement



Pressure Ulcer after debridement



**Remember:** to re-cleanse the wound after debridement with potable water, saline, surfactant, antiseptic or antimicrobial solution.

# Managing wound exudate by managing 'the gap'

After you have effectively prepared the wound bed, it is time to proceed based on your assessment of the wound and wound exudate. (for more [see page 7](#))

Exudate can be defined as the fluid that leaks from a wound. Wounds produce exudate as a normal part of their healing proces, but an over- or under-production of exudate, or exudate pooling can delay healing and lead to infection.

That's why exudate management is the key to wound healing. You must determine the best dressing choice and frequency of dressing changes to create an optimal moisture balance in the wound.



Low level of wound exudate



Moderate level of wound exudate



High level of wound exudate

To manage exudate you need to:

- ✓ Treat the systemic reasons for over or under production of exudate (e.g. inadequate compression therapy for lower extremity wounds, lower limb oedema, nutrition or dehydration).
- ✓ Adapt the frequency of dressing changes.
- ✓ Choose the appropriate dressing that fill the gap (for more [see page 17](#)).
- ✓ Educate patient on effective exudate management techniques (compression, elevation, hydration, frequency of dressing changes, etc.).



**Choose a wound dressing** that conforms to the wound bed, manages the exudate and reduces the risk of exudate pooling by filling the gap between the wound bed and dressing.



Click here to learn more about how to manage exudate

# Preventing or treating infection

Preventing infection and biofilm should always be a goal of wound care, and effective exudate management is key. But if a wound becomes infected it must be treated.

You should check for signs of infection and biofilm at every dressing change:



## Warning signs include:

- A healable wound is not healing.
- Changes to the patient's overall health or wellbeing (fever, etc.).
- Increased amounts of exudate, discoloration, odour.
- Deterioration of wound edge or periwound skin.
- Hyper-granulation – discolouration of the wound bed, granulation tissue, fragile wound bed tissue.
- Biofilm should be suspected if a local infection is non-responsive to topical antimicrobial treatment.



Local infection



Systemic infection



Suspected biofilm



Suspected biofilm

## To effectively prevent or treat infection and biofilm you need to:

- ✓ Prepare the wound bed appropriately at every dressing change (cleansing & debridement).
- ✓ Apply therapeutic cleansing of the wound and periwound skin, using potable water, saline, surfactant, antiseptic or antimicrobial solution at every dressing change both before and after debridement.
- ✓ Debride to remove devitalized or non-viable tissue, bacteria and contaminants.
- ✓ Assess wound bioburden at every dressing change using the Wound Infection Continuum (IWII, 2022).
- ✓ Manage the wound bioburden.
- ✓ Use a dressing with antimicrobial properties for local, spreading or systemic infections.
- ✓ Manage exudate by using a dressing that fills the gap between the wound bed and the dressing.
- ✓ Change dressings at an adequate frequency.
- ✓ Use systemic antibiotics appropriate for the type and level of spreading or systemic infections (avoid prescribing antibiotics when they are not indicated or when their intent is simply to prevent infection or improve wound healing).
- ✓ Ensure effective personal and wound hygiene.
- ✓ Educate and support the patient to ensure the promotion of a consistently clean environment through hand washing, antiseptic use, etc.



[Click here to learn more about how to treat and prevent infection](#)

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graph LR; Start(( )) --> Up1[ ]; Up1 --> Right1[ ]; Right1 --> Down1[ ]; Down1 --> 4((4)); 4 --> Down2[ ]; Down2 --> Right2[ ]; Right2 --> Up2[ ]; Up2 --> Left1[ ]; Left1 --> End(( ))
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4

How to choose  
a dressing



## How to choose a dressing

An important part of managing a chronic wound is choosing the appropriate dressing. Whether a dressing is 'appropriate' depends on both the status of the wound (is the wound healing? Deteriorating? Infected?) and the frequency of dressing changes you have estimated.

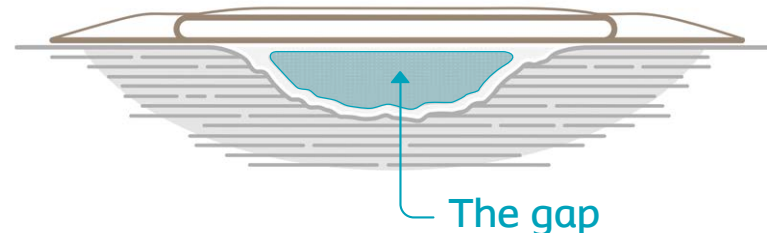
Based on your assessment (see page 7) you have to decide which dressing will best help you manage the wound.

You know you have chosen the appropriate dressing if:

- ✓ Its size and shape allows you to secure it to clean dry skin to aid adhesion.
- ✓ It removes excess exudate from the wound bed by absorbing and retaining it in the dressing.
- ✓ It maintains a moist healing environment.
- ✓ It conforms to the wound bed and reduces the risk of exudate pooling by filling the gap between dressing and wound bed.
- ✓ It protects the wound edge and periwound skin from trauma and maceration, by vertically absorbing the exudate.
- ✓ It provides confidence and security to the patient.
- ✓ It is comfortable for the patient and makes it easy for the patient to perform self-care in concordance with care regime.



**Consider dressing availability** and any socioeconomic constraints or physical/mental limitations faced by the patient.



Choose a dressing that conforms to the wound bed and fills 'the gap'.



**Always follow locally agreed** dressing formularies and local protocols. If a wound is not progressing according to the treatment plan, referral and consultation with a specialist is recommended.



Use a dressing that conforms to the wound bed, absorbs and retains the wound exudate to reduce the risk of leakage and to protect the wound edge and periwound skin.



In case of local infection always consider a dressing with an active component (i.e. silver, honey, iodine, PHMB).



Click here to learn more about choosing the appropriate dressing



5

How to monitor  
patient and wound  
progression

# How to monitor patient and wound progression

To evaluate wound progression and check for infections, you should conduct a basic assessment at every dressing change, using an assessment tool, such as the Triangle of Wound Assessment.

The condition of both the wound and patient should match the goals and targets identified in your treatment plan ([see page 9](#)).

At every 4-6 weeks you should conduct a full re-assessment of the patient and wound – including measuring the wound depth, length and width – to monitor healing progression, overall patient wellness and treatment plan concordance.



Healthy wound edge



Healthy periwound skin



Granulating wound bed



Day 0:  
Wound depth 9mm and width 40mm.



Day 40:  
Wound depth 2mm and width 25mm.

When you re-assess it is important to determine:

- ✓ If the current dressing regime met clinical and patient goals. Remember: The condition of a previous dressing can indicate if change is needed with concern to dressing type or frequency of dressing changes.
- ✓ If the treatment plan needs to be changed. Remember: Significant changes in the treatment plan, such as change in dressing type or dressing change frequency, generally requires 14 days of consistent implementation to determine its effectiveness.
- ✓ If the patient needs to be referred to a specialist. Remember: A deterioration in the wound or the patient's overall wellbeing should trigger automatic referral to a wound care specialist ([see next page](#)).
- ✓ If further diagnostics are required.



**You should** continue monitoring the wound after skin closure to assess for risks of infection and re-opening.



[Click here to learn more about monitoring patient and wound progression](#)



## When to refer or consult a specialist

**You should reach out to a wound care specialist if:**

- ✓ The treatment plan was established and followed but the wound shows no signs of healing progression within 14 days.
- ✓ The wound area has decreased less than 20% within 4 weeks.
- ✓ Worsening of wound condition observed by increases in wound size, odour, pain or exudate.
- ✓ Deterioration of wound edge (e.g. advancing, rolling, undermining, maceration) or periwound skin (advancing maceration, etc.).
- ✓ There are underlying structures in the wound like exposed bone or tendons.
- ✓ The etiology (cause) of the wound is unknown.
- ✓ There is suspicion or signs of systemic infection.
- ✓ Where detrimental biofilm or local infection is suspected, and aggressive cleansing or debridement is indicated, but outside of your scope of practice.
- ✓ Comorbidity complications (i.e. uncontrolled diabetes, increased BGL, elevated C-Reactive Proteins, vascular status).
- ✓ There is an overall decline in the patient's health and wellbeing.



[Click here to learn more about monitoring patient and wound progression](#)



The glossary will provide you with definitions of the terms used in the Wound Care Pathway

## Glossary

### Acute wound

An acute wound is a wound that progresses through the phases of normal healing resulting in closure of the wound, without complications.

### Antimicrobial dressing properties

Antimicrobial dressings can be divided into simple and composite dressings. Simple antimicrobial dressings exert only antimicrobial activity, whereas composite dressings exert, not only the main antimicrobial action also other functions, including exudate normalization, debridement or bioactivity.

### Biofilm

Biofilms are microorganisms embedded in a thick, slimy barrier of sugars and proteins that acts as a barrier that shields microorganisms from the patient's natural immune system and from many antimicrobial agents. Biofilms are a structured community of microbes with genetic diversity and variable gene expression (phenotype) that creates behaviours and defences used to produce unique infections (chronic infection). Biofilms are characterised by significant tolerance to antibiotics and biocides while remaining protected from host immunity. Biofilm can develop within 2-4 days of initial colonisation, and become very tightly attached to extracellular matrix components or the wound bed, making them difficult to remove by surface irrigation or superficial debridement.



Wound infection in clinical practice, IWII 2022



Preventing and treating infection in wounds: translating evidence and recommendations into practice, WINT 2020

## Chronic wound

Wounds with delayed healing of any etiology. Hard to heal wounds that have not healed or progressed, or are not expected to heal, within 4–6 weeks of proper wound care.

Chronic wounds do not follow normal healing process, usually remain stuck in inflammatory stage which results in clinical challenges that these recommendation address.

Chronic wounds are greater than 30 days despite best practice intervention. Wounds in the course of diabetes mellitus, chronic venous insufficiency, peripheral arterial disease and pressure injuries are regarded as chronic from their very beginning.

## Co-morbidities

Presence of additional diseases in relation to an index disease in one individual. Comorbidity technically indicates a condition or conditions that coexist in the context of an index disease.



Defining Comorbidity,  
ANNFAMMED 2009

## Conformability

In the context of a wound dressing, conformability means that the dressing should closely follow the contours of the wound bed, to eliminate the gap between the wound bed and the dressing. Close conformability enables effective exudate management, protects the wound edges and periwound skin from maceration and reduces the risk of infection.



An investigation into the conformability of wound dressings, WUK 2011



Dressing conformability and silver-containing wound dressings, WUK 2010

## Debridement

The European Wound Management Association defines debridement as the “act of removing necrotic material, eschar, devitalized tissue, serocrusts, infected tissue, hyperkeratosis, slough, pus, hematomas, foreign bodies, debris, bone fragments, or any other type of bioburden from a wound with the objective to promote wound healing.



Debridement,  
EWMA 2013

## Exudate

Exudate is the fluid that leaks from a wound and is the result of the inflammatory process. Exudate is usually clear or amber coloured and contains proteins, enzymes (especially matrix metalloproteinases /metalloproteinases or MMPs), leucocytes (granulocytes, macrophages), sugar, tissue cells, bacteria, and fungi. While exudate production is a normal feature of healing wounds, over or under production of exudate or exudate of the wrong composition can delay healing. In chronic wounds, exudate slows down or even blocks cell proliferation, interferes with growth factor availability and contains elevated levels of inflammatory mediators and activated MMPs 8-10. Effective exudate management allows moist wound healing and prevents maceration of the wound edge and periwound skin.



Closing the gap between the evidence and clinical practice – a consensus report on exudate management, WINT 2020

## Exudate pooling

The accumulation of exudate in the gap between the wound bed and the wound dressing. Exudate pooling is likely in wounds with irregular topographies, pockets, or cavities and this can impact negatively on wound healing by causing maceration and potential infection. Exudate pooling can also occur when the exudate is not absorbed by the wound dressing or the volume of fluid exceeds the dressing's absorptive capacity. Choosing an appropriate dressing can help manage exudate and reduce the risk of exudate pooling.



Closing the gap between the evidence and clinical practice – a consensus report on exudate management, WINT 2020



## Healable wounds

Wounds that physiologically have the potential to heal in a timely fashion.

### Local infection

An infection that only affects the wound. Local infection is contained in one location, system or structure. Microbes are replicating at a rate that invokes a host response.

### Maceration

Maceration occurs when skin has been exposed to moisture for too long. A telltale sign of maceration is skin that looks soggy, feels soft, or appears whiter than usual. There may be a white ring around the wound in wounds that are too moist or have exposure to too much drainage.

### MMPs

Matrix metalloproteinases (MMPs), also known as matrix metalloproteinases or matrixins, are metalloproteinases that are calcium-dependent zinc-containing endopeptidases; other family members are adamalysins, serralyins, and astacins. The MMPs belong to a larger family of proteases known as the metzincin superfamily.

## Non-healable wounds

Does not have the potential to heal without surgical intervention, due to factors such as vascular supply or malignancy.



Wound infection in clinical practice, IWII 2022



Preventing and treating infection in wounds: translating evidence and recommendations into practice, WINT 2020

## Non-healing wounds

Non-healing – has the potential to heal but is not healing due to patient or system factors. For example, a venous leg ulcer is not healing because the patient is unwilling or unable to use compression therapy or compression therapy is not available.

### Patient concordance

Also referred to as patient adherence, or patient acceptance, and means how a patient is following the treatment plan. Patient compliance is a term used in the same context, however there is a move away from the term compliance due to its negative connotations.

### Periwound skin

Tissue surrounding a wound. Periwound area is traditionally limited to 4cm outside the wound's edge but can extend beyond this limit if outward damage to the skin is present.

### PHMB

Polyhexamethylene Biguanide / Polyhexanide is an active component used to treat local wound infections.



Patient-Centred Clinical Method, 2013



Preventing and treating infection in wounds: translating evidence and recommendations into practice, WINT 2020



## PSI

The force, or pounds, per square inch that will adequately disengage bacteria detritus from the wound surface. A range of 4-15 psi has been determined to be the safest and most effective range depending on the perceived need to clean. As a general rule, lower pressures are adequate for cleansing clean granulating wounds with higher pressures reserved for those wounds requiring deeper cleansing.



Ten top tips: wound cleansing, WINT 2019

## Spreading infection

The invasion of surrounding tissue by infective organisms that have spread from a wound. Microorganisms proliferate and spread, to a degree that signs and symptoms extend beyond the wound boarder. Spreading infection may involve deep tissue, muscles, fascia, organs or body cavities.



Wound infection in clinical practice, IWII 2022

## Systemic infection

Microorganisms spreading throughout the body via the vascular or lymphatic systems invoking responses in the person and/or metabolically.



Wound infection in clinical practice, IWII 2022

## The gap

The space between the dressing and the wound bed. A gap between the wound bed and the wound dressing, or dead space, should be avoided as it negatively influences wound healing. Increased bacterial invasion and impaired healing results from unfilled dead-space between the wound bed and the wound dressing.



Managing the gap to promote healing in chronic wounds – an international consensus, WINT 2020

## Undermining

Undermining is caused by erosion under the wound edges. Wound undermining occurs when the tissue under the wound edges becomes eroded, resulting in a pocket beneath the skin at the wound's edge. Undermining is measured by inserting a probe under the wound edge directed almost parallel to the wound surface until resistance is felt.

## Undermining with depth or tunneling

Serration of tissue at deeper levels in the wound bed or where the edge of the wound is not attached and a probe will extend into the underlying space.

## Vertical absorption

When referring to dressing properties, vertical absorption means the fluid or exudate is taken upward or wicked from the wound bed into the dressing. The dressing then holds the exudate meaning it doesn't spread laterally or to the sides to leak onto the wound edges or periwound skin. Vertical wicking decreases the chance of maceration of the wound edges and periwound skin.



Quality of wound dressings, JOWC 2016

## Wound etiology

Wound etiology refers to the cause of the wound and includes co-morbidities.

## Wound progression

Progression, or lack thereof, is improved, unchanged or deteriorated.



Coloplast was founded on passion, ambition, and commitment. We were born from a nurse's wish to help her sister and the skills of an engineer.

Guided by empathy, our mission is to make life easier for people with intimate healthcare needs. Over decades, we have helped millions of people live more independent lives and continue to do so through innovative products and services.

Globally, our business areas include Ostomy Care, Continence Care, Wound and Skin Care, Interventional Urology and Voice and Respiratory Care.