

**THAMES VALLEY & WESSEX NEONATAL OPERATIONAL DELIVERY NETWORK**

## Guideline for Neonatal Wound Care

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Related documents	<p><b>References</b></p> <p>Alberta (2018) Neonatal skin assessment and injury prevention. Alberta Health Services. Found at; <a href="https://extranet.ahsnet.ca/teams/policydocuments/1/clp-neonatology-skin-assess-ps-99-01.pdf">https://extranet.ahsnet.ca/teams/policydocuments/1/clp-neonatology-skin-assess-ps-99-01.pdf</a></p> <p>August.D.L et al (2014) Pressure injuries to the skin in a Neonatal Unit: Fact or Fiction. Journal of Neonatal Nursing, 2014, Vol 20, pp129-137.</p> <p>Baharestani et al (2007) The national pressure ulcer advisory panel. Pressure sores in neonates and children. An NPUAP white paper. <u>Advanced skin wound care</u> Vol 20, No 4, pp208-220.</p> <p>Baharestani.MM (2007) An overview of paediatric and neonatal wound care knowledge and considerations. <u>Ostomy wound management</u>. Vol 53, No 6, pp34-6, 38, 40.</p> <p>Bartles.M et al (2017) <u>Neonatal Wound Management</u>. Nottingham's Children's Hospital, Guideline no G10.</p> <p>Beall.V et al (2013) Neonatal Extravasation. Newborn and Infant Nursing Reviews, 2013, Vol 13, No 4, pp189-95.</p> <p>BNF (2018) <u>Silver</u>. Found at <a href="http://bnf.nice.org.uk/wound-management/silver.html">http://bnf.nice.org.uk/wound-management/silver.html</a></p> <p>Cisler-Cahill.L (2006) A protocol for the use of amorphous hydrogel- to support wound healing in neonatal patients. An adjunct to nursing skin care. <u>Neonatal Network</u>, Vol 25, No 4, pp267-73.</p> <p>Clifton-Koeppel R. (2006) Woundcare after peripheral intravenous extravasation: What is the evidence? Newborn and Infant Nursing reviews. Dec, Vol 6, No 4, pp202-12.</p>

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<p>Implications of race, equality &amp; other diversity duties for this document</p>	<p><b>This guideline must be implemented fairly and without prejudice whether on the grounds of race, gender, sexual orientation or religion.</b></p>
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## 1.0 Aim of Guideline Framework

To provide an evidence base for practice, seeking to ensure highest quality wound care for all neonates within the Thames Valley & Wessex Neonatal Network.

## 2.0 Scope of Guideline Framework

The guideline applies to all neonatal units and maternity units covered by Thames Valley & Wessex Neonatal Network. This includes the following hospitals:

<b>Thames Valley</b>		
<b>TRUST</b>	<b>Hospital</b>	<b>Designation</b>
Oxford University Hospitals NHS Foundation Trust	- John Radcliffe Hospital, Oxford	NICU
Buckinghamshire Healthcare NHS Trust	- Stoke Mandeville Hospital, Aylesbury	LNU
Frimley Health NHS Foundation Trust	- Wexham Park Hospital, Slough	LNU
Milton Keynes University Hospital NHS Foundation Trust	- Milton Keynes General Hospital	LNU
Royal Berkshire NHS Foundation Trust	- Reading	LNU

<b>Wessex</b>		
<b>TRUST</b>	<b>Hospital</b>	<b>Designation</b>
University Hospital Southampton NHS Foundation Trust	- Princess Anne Hospital	NICU
Portsmouth Hospitals University NHS Trust	- Queen Alexandra Hospital	NICU
University Hospitals Dorset NHS Foundation Trust	- Royal Bournemouth Hospital	LNU
Salisbury NHS Foundation Trust	- Salisbury District Hospital	LNU
Hampshire Hospitals NHS Foundation Trust	- Basingstoke and North Hampshire Hospital	SCU (Temporary designation)
Hampshire Hospitals NHS Foundation Trust	- Royal Hampshire County Hospital, Winchester	SCU (Temporary designation)
Dorset County Hospital NHS Foundation Trust	- Dorset County Hospital, Dorchester	SCU
Isle of Wight NHS Trust	- St Mary's Hospital	SCU
University Hospitals Sussex NHS Foundation Trust	- St Richard's Hospital, Chichester	SCU

### 3.0 Guideline Summary

All wounds should be assessed and clearly documented using a wound assessment tool. This should include;

- Site of the wound
- Size of the wound
- Thickness
- Wound bed 'colour'
- Exudate
- Odour
- Surrounding skin
- Skin maturity/ current gestation of the baby
- Wound pain

Goals of wound management are;

- Prevent breakdown
- Objective assessment
- Gentle cleansing- where necessary
- Dressing for protection and to promote healing
- Culture and treat if infected.

Wound care principles

- Wounds that are healthy and free from debris do not require ritualistic cleansing.
- If dead tissue or foreign debris is present the wound should be cleaned
- Sterile 0.9% saline is 'the most physiological' wound cleanser and can be used for all wound types.
- Moist wound healing is the most important principle, dry dressings can cause repeated trauma to the wound bed and retard healing
- Optimizing nutritional needs of each neonate will positively impact wound healing
- Adequate oxygenation of the wound tissues is required for wound healing to occur. So physiological stability of the baby should be optimized.

Neonatal skin has unique characteristics that make it especially vulnerable to damage;

- fragile and immature
- dermis is only 60% of thickness of adult skin
- vulnerable to shearing forces and more easily removed
- no subcutaneous fat is evident until 29 weeks, and this is not fully thickened until term
- risk of percutaneous absorption is increased
- before 28 weeks the skin is thin and poorly keratinised, so its barrier function is very limited
- 
- Staff should offer all parents information about their baby's wound and its care, based on assessment of the parent's information needs and level of understanding. This should include honest discussion about cause, if iatrogenic.
- Involve and support parents to care for their baby with a wound, as appropriate.

## 4.0 Guideline Framework

### 4.1 General principles of caring for patients with wounds

#### 4.1.1 Process of Healing (Baranoski, S. and Ayello, 2016)

Wound healing is a complex sequence of events, starting from the time of injury and ending with wound closure and successful, functional scar tissue. Whilst tissue repair is often described in a series of stages, the reality is a continuous process whereby the body undergoes several biological changes that can take up to 18 months to complete.

The 4 phases used to describe wound healing are:

- 1) Hemostasis: a biochemical process to stop haemorrhage and blood loss at the site of injury. Involving platelet aggregation enabling the formation of a fibrinous clot to 'plug' the site.
- 2) Inflammation: The removal of bacteria and debris through the process of phagocytosis, by neutrophils and macrophages. This occurs for 0-4 days but can last up to 2 weeks and may be identified by redness and swelling.
- 3) Proliferation: Usually begins 3 days after the injury and is characterised by the formation of granulation tissue.
- 4) Maturation/Remodelling: Starts 7 days after injury and last for 1 year or more. Collagen is remodelled and forms an organised structure along lines of stress to increase strength of the skin and wound.

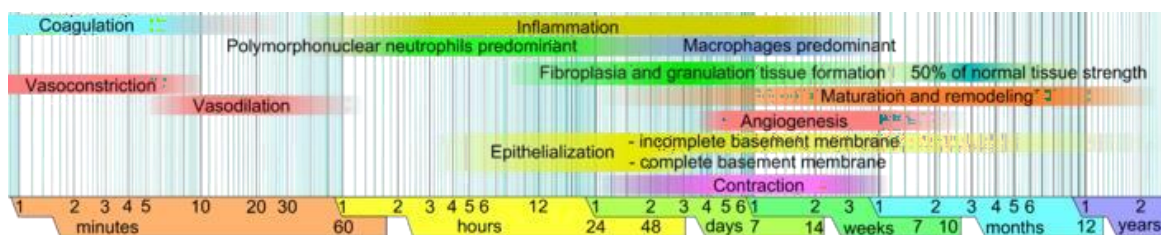


Diagram showing approximate times of the different phases of wound healing, with faded intervals marking substantial variation, depending mainly on wound size and healing conditions.

#### 4.1.2 Goals of wound management:

1. Prevent breakdown
2. Objective assessment
3. Gentle cleansing- where necessary
4. Dressing for protection and to promote healing
5. Culture and treat if infected.

#### 4.1.3 Wound Assessment:

All assessments should be clearly documented using an assessment tool. The more detailed the clinical description and documentation, the easier it will be for health care professionals to assess healing from shift to shift. It is generally agreed that assessment should include;

<b>1: Site of the wound</b>	-Helps to differentiate between wounds and may indicate pathology of wound.
<b>2: Size of the wound</b>	-Measure the maximum width, breadth and depth and record in millimetres. -If the wound is an unusual shape, consider tracing it's outline for the records.
<b>3: Thickness</b>	-Partial thickness involves tissue damage to the epidermis and dermis. -Full thickness involves damage to the subcutaneous tissue, muscle and bone.
<b>4: Wound bed 'colour'</b>	- Usually identified to be one of 5 colours which help to indicate the stage of healing and the health of the wound. The type of tissue identified will indicate the treatment objective. <ul style="list-style-type: none"> <li>• Pink: new skin growth (the wound is being covered by epithelial cells.)</li> <li>• Red: granulating (the wound is being filled with vascular connective tissue.)</li> <li>• Yellow: slough (accumulated dead cell debris on the surface.)</li> <li>• Green/yellow: infected. (various indicators that organisms in the wound have provoked 'a reaction' in the host. e.g. purulent discharge/ abscess, malodour, localised redness, swelling, pyrexia.)</li> <li>• Black: necrotic (dead tissue, which is black or brown in colour.)</li> </ul> -As tissue is identified as a 'type', identify how much of each is present- i.e. 60% granulation, 25% slough 15% echar.
<b>5: Exudate</b>	Type and quantity, will influence dressing choice.  <u>Type.</u> <ul style="list-style-type: none"> <li>• Serous: clear fluid with no visible pus, blood or debris</li> <li>• Sanguinous: bloody, appearing to be entirely blood.</li> <li>• Serosanguinous: blood mixed with clear fluid.</li> <li>• Purulent: pus like appearance, cloudy and viscous.</li> </ul> <u>Quantity.</u> <ul style="list-style-type: none"> <li>• Dry: no exudates produced.</li> <li>• Low: wound bed is moist (scant or small exudates)</li> <li>• Moderate: surrounding skin is wet and there are exudates in the wound bed.</li> <li>• High: surrounding skin is saturated and wound is bathed in fluid.</li> </ul>
<b>6: Odour</b>	-Subjective and difficult to quantify. <ul style="list-style-type: none"> <li>• None</li> <li>• Smell noticeable on dressing removal</li> <li>• Smell spreads away from patient</li> </ul>
<b>7: Surrounding skin</b>	-Assess skin for colour, moisture (maceration), intactness, induration, oedema, pain, presence of a rash, trophic skin changes and infection.

<b>8: Skin maturity/ current gestation of the baby</b>	-State baby's current gestation and describe translucency, friability and intactness of baby's skin generally.
<b>9: Wound pain</b>	-All the time, intermittent or only at dressing time.

#### 4.1.4 Wound Cleansing:

'The object of wound cleansing is to break the bond between tissue and the particle of dirt, foreign debris or bacteria and to assist in the removal of necrosis'. (Taquino, 2000, p109)

- Wounds that are healthy and free from debris do not require ritualistic cleansing.
- If dead tissue or foreign debris is present the wound should be cleaned, as these may support the growth of pathogenic organisms.
- Sterile 0.9% saline is 'the most physiological' wound cleanser and can be used for all wound types.
- Saline should be at least room temperature and ideally warmed to body temperature. Cold fluids reduce the temperature of the wound bed and cause polymorphic and macrophagic activity to cease, until the wound's temperature increases again. (Irving et al, 2006)
- When cleansing is indicated the wound should be irrigated (for example with a syringe) and not swabbed, as swabbing may damage fragile epithelialising/ granulating tissue.
- To perform wound irrigation, use a medium sized syringe, (e.g 20mls) and using the syringe trickle saline onto wound, minimising the pressure of fluid exerted onto the wound. Deliberate 'piston' irrigation' can be performed using a 20 ml syringe and a blunt needle or catheter tip, but this should always be at the direction of a wound specialist.
- Antiseptic solutions should not be used for wound cleansing. It is generally agreed that applying topical antiseptics directly on the wound bed is counterproductive, and likely to be toxic to newly forming tissues, causing a delay in active healing.

**Note. Vigilant infection control precautions should be applied, when caring for neonates with wounds. Hand washing, plastic aprons and gloves should always be used.**

#### 4.1.5 Wound Treatment Objectives:

##### **Table of wound healing objectives.**

(Treatment objectives of a wound are determined by the wound bed's classification)

<p><b><u>PINK:</u></b> New skin growth/ Epithelialising</p>	<p>-Keep wound warm and moist (as epithelialisation occurs 2-3 times quicker in a warm moist environment.) -Manage exudate <b>-Protection from trauma.</b></p> <ul style="list-style-type: none"> <li>• Use a dressing that maintains a warm moist environment (e.g.-low adherent dressings/ vapour permeable films/hydrogels/hydrocolloids/ alginates/foams).</li> <li>• Dressing choice will depend on the level of exudate.</li> </ul>
<p><b><u>RED:</u></b> Granulating.</p>	<p>-Keep wound warm and moist -Manage exudate <b>-Protection from trauma.</b></p> <ul style="list-style-type: none"> <li>• Use a dressing that maintains a warm moist environment (e.g. hydrogels / hydrofibre / hydrocolloids / alginates / foam dressings).</li> <li>• Dressing choice will depend on the depth of the wound and amount of exudate.</li> </ul>
<p><b><u>Yellow:</u></b> Slough.</p>	<p>-Management of exudate and debridement. -Dressings which promote autolysis (e.g. hydrogels, hydrocolloids, -alginates, larvae).</p> <ul style="list-style-type: none"> <li>• -Dressing choice will depend on the depth of the wound and amount of exudate.</li> </ul>
<p><b><u>Green:</u></b> Infected.</p>	<p>-Promote wound healing -For patient to be free from pain, discomfort and infection.</p> <ul style="list-style-type: none"> <li>• Swab for organisms and sensitivities</li> <li>• 'All wounds are colonised, but not all wounds are infected', so do not diagnose a wound infection on the wound swab alone. Look for signs of local and systemic infection, ensuring that the inflammatory stage of healing is not confused as a sign of infection.</li> <li>• <b>Wounds that show evidence of clinical infection will require systemic antibiotics.</b></li> </ul>
<p><b><u>Black:</u></b> Necrotic</p>	<p>-Debridement and management of exudate.</p> <ul style="list-style-type: none"> <li>• Necrotic tissue prolongs healing, and in most cases should be removed, but always in a controlled environment under the guidance of trained, experienced professionals –usually a surgeon in neonatal patients.</li> </ul>

#### 4.1.6 Practical management:

**See section 4.3 (page 14 to 16) - Wound dressing grid,  
(Showing products, characteristics and neonatal applications.**

- Moist wound healing is the most important principle. When a wound bed is kept moist;
  1. Phagocytes and epithelial cells can more easily migrate into place and perform their functions.
  2. Growth factors and chemo-attractants are better able to interact with their target cells.
  3. Pain is significantly reduced.

- Dry dressings can cause repeated trauma to the wound bed and retard healing.
- Concern is often expressed that use of occlusive dressings will promote the growth of bacteria underneath the dressing. However, research has shown that such dressings actually minimize infection rates (Taquino, 2000).

#### 4.1.7 Holistic patient care:

##### 4.1.7.1 Pain

- There are two sources of pain. Firstly, the ongoing pain resulting from the presence of the wound and secondly the more short-term pain that may be caused during and after dressing change.
- Both sources of pain need to be considered, assessed and treated according to local pain management guidelines. (See Thames Valley and Wessex Neonatal ODN, Guideline Framework for Pain Minimisation.)

##### 4.1.7.2 Nutrition

- Individualised care will include consideration of nutritional needs as they relate to wound healing.

##### 4.1.7.3 Physiological support

- Adequate oxygenation of the wound tissues is required for wound healing to occur. Thus, physiological stability of the baby will have an impact upon wound healing and should be optimised.

##### 4.1.7.4 Patient/ Parents

- A wound can have multiple impacts and concerns for a patient and their family, including.
  - Pain and distress,
  - Compromise to general health status of patient,
  - Possibility of long term scarring,
  - Unpleasant appearance of wound
  - Distress or anger at cause of wound, if iatrogenic.
  - Altered body image
- Health care professionals should aim to overcome these by;
  - Providing information about the wound and its care, based on assessment of information needs and level of understanding.
  - Honest discussion about cause if iatrogenic, including Duty of Candor, where applicable.
  - Involve patient/ parents as appropriate.

## 4.2 Neonatal wound care principles

### 4.2.1 Neonatal wounds:

1. Neonatal wounds tend to be restricted to only a few types.
2. Neonate often have an intact and rapid healing mechanisms.

### Table of most common causes of neonatal wounds

Traumatic wounds	- epidermal stripping - tearing from adhesives/ friction
Surgical wounds	- incisions - primary repairs - surgically placed drains - rarely a dehisced surgical wound
Contact excoriation	- exposure to chemicals - prolonged exposure to moisture (especially in skin folds) - irritant contact dermatitis (nappy rash)
Extravasation injury.	- TPN - high concentration dextrose solutions - ionic, acid and alkali solutions. - Inotropes
Thermal injury	- heat from probes - illuminated laryngoscope bulb inadvertently touching skin
Pressure injuries	- neonates are at relatively low risk of pressure ulcer type skin breakdown, even over bony prominences, due to their large surface area to weight ratio. The risk is elevated, however, when pharmacological muscle relaxants are used or there is significant oedema/ poor tissue perfusion. -saturation probes -nasal septum if receiving nasal CPAP or nasal High Flow Therapy. -laid on tubing -knees, occiput and ears are particularly vulnerable.
Ischaemic Injuries	-arterial line effects. -amniotic banding in-utero
Congenital conditions.	-epidermolysis bullosa (see separate GOSH protocol for care) -gastroschisis -spina bifida

#### 4.2.2 Neonatal Skin:

Neonatal skin has unique characteristics that make it especially vulnerable to damage and require adaptation of 'normal' adult wound care practices.

- It is both fragile and immature, increasing the risk of iatrogenic tissue damage.
- The dermis is only 60% of thickness of adult skin, when baby full term.
- The fibrils connecting the epidermis and the dermis are reduced in number and more widely spaced, making it vulnerable to shearing forces and more easily removed, especially by adhesive products.
- No subcutaneous fat is evident until 29 weeks, and this is not fully thickened until term.
- Risk of percutaneous absorption is increased in neonates.
- Before 28 weeks the skin is thin and poorly keratinised, so its barrier function is very limited and exposes the infant to.

- High transepidermal water loss
- Risk of excessive heat loss

#### 4.2.3 Management Factors:

- Additional thermoregulatory support may be required for neonates with a significant wound, to minimise heat loss caused by evaporation and conduction.
- Most wound care products are designed for and tested on adults. So the choice of wound care products for neonates must consider active and inert ingredients that may cause systemic effects on absorption, or local irritation to skin.
- 'Management of pain is hindered by a lack of awareness amongst healthcare professionals that neonates feel pain, in part since they may not show vigorous behavioural responses to pain. Also, there may be anxiety about the possible adverse effects of analgesia' (IAG report, 2005)
- Pain assessment must be carried out using local pain management policy. The findings of the assessment must also be acted upon. Refer to unit pain management protocol for further advice and guidance.
- Alginate type dressings should NOT be used in neonates as the calcium and sodium contained within them can be absorbed systemically
- Collagen dressings are made of bovine connective tissue and should NOT be used in neonates because of their immature immune system.
- The use of silver sulfadiazine-impregnated dressings is contra-indicated in neonates.
- The use of medical grade honey dressings is safe to use in neonatal care and provides both antimicrobial and anti-inflammatory properties for acute and chronic wounds.
- Consider urinary catheterisation if a wound is repeatedly contaminated. Especially in the smaller neonates when their small size may mean a wound is close to groin, peri-anal or perineum area.

#### 4.2.4 Dressing procedures:

- Have two people to assist (the second person may be a colleague or the baby's parent). One to do the dressing change and one to contain/ offer non-nutritive sucking.
- Avoid bright lighting and too much handling to reduce stress to the baby.
- Assess potential for pain prior to procedure and if administering pharmacological pain relief or oral sucrose, allow time for it to take effect.
- Keep dressing changes to the minimum required.
- Prepare dressing and equipment before disturbing or exposing baby, both to minimize distress and assist with thermoregulation.
- Consider using tubular stretchy gauze to hold non adhesive dressings in place.
- Take photograph (with consideration for the local Trust's photographic policy) at change of dressing, to avoid extra changes for those not present to see the wound.
- Encourage parents to be involved in dressing the wound(s), if they wish to be.

#### 4.25 Seeking further advice and care.

- When a wound is severe, not responding to treatment or complexities arise it would be usual for help and advice to be sought from other health care professionals. These would include.
  - Tissue Viability specialist/ team
  - Plastic surgeons
  - Tertiary Neonatal Unit – if the baby is in an LNU
  - Paediatric surgeons

### 4.3 Wound dressing grid

Colour classification	Aim of care	Recommended Dressing	Nature of dressing	Comments
<b>Pink: Epithelialising wound</b>	<ul style="list-style-type: none"> <li>-Keep wound warm and moist.</li> <li>-Manage exudate.</li> <li>-Protect wound.</li> </ul>	<b>Hydrocolloid sheets. If surrounding skin intact</b>	<ul style="list-style-type: none"> <li>-self adhesive</li> <li>-absorbs liquid</li> <li>-impermeable to bacteria</li> </ul> (duoderm/ comfeel/ granuflex)	<ul style="list-style-type: none"> <li>-leave in place for up to 7 days if exudate level will allow</li> <li>-should not be used on wounds infected with anaerobic organisms</li> <li>-Hydrocolloid sheets should be removed with caution.</li> </ul>
		<b>Soft silicone dressing. If surrounding skin broken</b>	<ul style="list-style-type: none"> <li>-soft silicone wound contact layer</li> <li>-non adhesive</li> <li>-non absorbent</li> </ul> (mepitel)	<ul style="list-style-type: none"> <li>-requires gauze pad layer as secondary dressing to absorb exudate</li> <li>-change dressing pad when saturated</li> <li>-silicone layer to be changed if pores are blocked, affecting passage of exudate- usually 3-4 days</li> </ul>
<b>Red: Granulating wound</b>	<ul style="list-style-type: none"> <li>-Keep wound warm and moist.</li> <li>-Manage exudate.</li> <li>-Promote granulation.</li> <li>-Protect wound.</li> </ul>	<b>Amorphous hydrogel if low exudate</b>	<ul style="list-style-type: none"> <li>-colourless</li> <li>-odourless</li> <li>-facilitates autolytic debridement</li> <li>-rehydrates slough</li> <li>-absorbs exudate</li> </ul> ( medi-honey wound gel)	<ul style="list-style-type: none"> <li>apply sufficient gel to cover wound area</li> <li>-change gel every 1-3 days</li> <li>-gel can be removed with sterile saline</li> </ul>
			<ul style="list-style-type: none"> <li>-thin transparent sheet with one adhesive side.</li> </ul> (opside/ biocclusive/ tegaderm)	<ul style="list-style-type: none"> <li>-use recommended technique for removal to avoid skin trauma</li> </ul>
			Consider glove/boot method to contain hydrogel when semi-permeable adhesive dressing not practical or inappropriate.	<ul style="list-style-type: none"> <li>-risk of maceration of healthy surrounding skin</li> </ul>
		<b>Soft silicone dressing if moderate to high exudate.</b>	<ul style="list-style-type: none"> <li>-soft silicone wound contact layer</li> <li>-non adhesive</li> <li>-non absorbent</li> </ul> (mepitel)	<ul style="list-style-type: none"> <li>-requires gauze layer as secondary dressing to cover and protect silicone layer and absorb exudate.</li> <li>-change gauze when loose or soiled.</li> <li>-silicone layer to be changed every 4 days, sooner if required.</li> </ul>

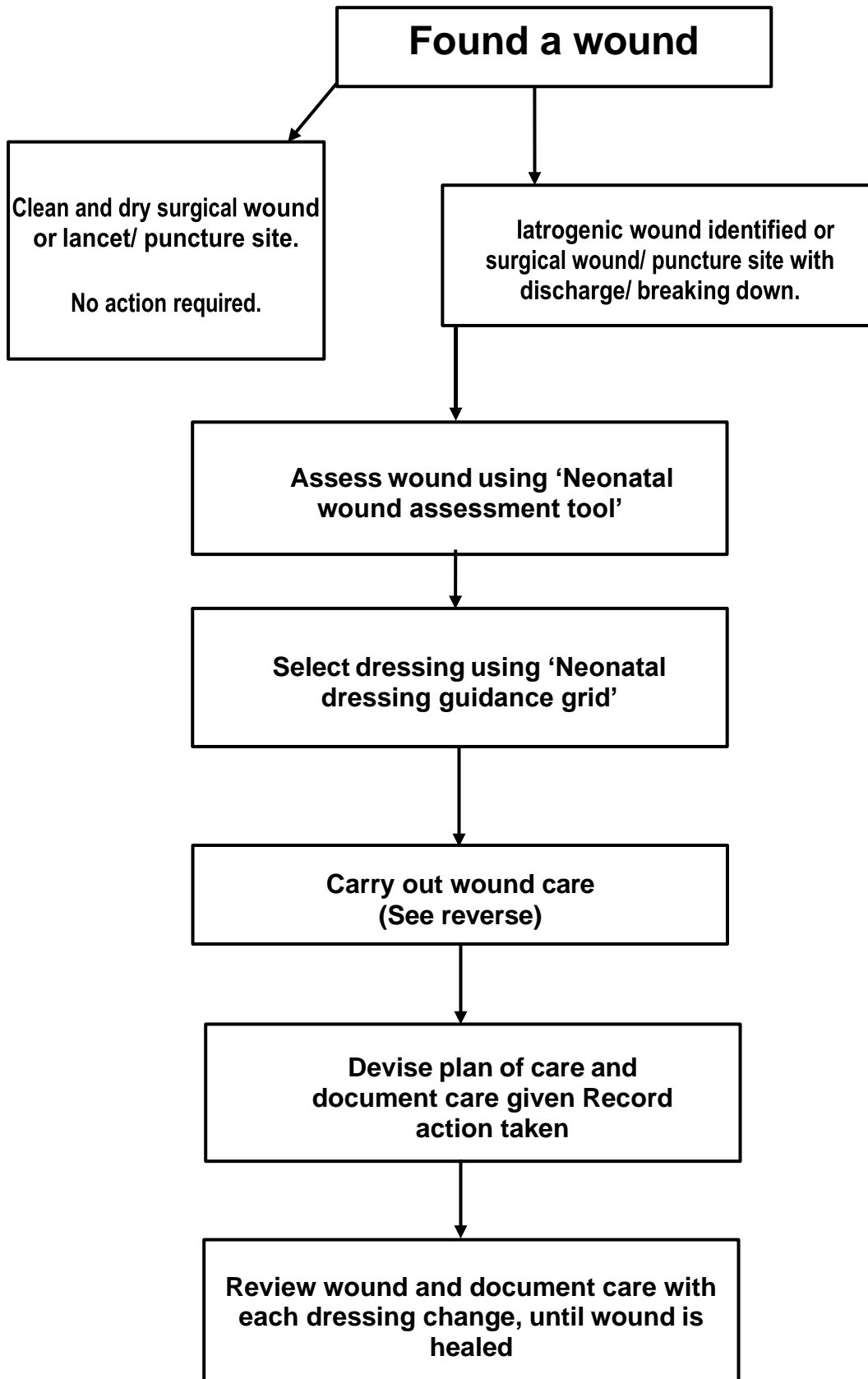
Colour classification	Aim of care	Recommended Dressing	Nature of dressing	Comments
<b>Yellow: Sloughy wound</b>	-debridement -management of exudate	<b>Hydrocolloid sheets or hydrocolloid paste for fragile skin. For flat or shallow wounds</b>	-self adhesive -absorbs liquid -impermeable to bacteria -facilitates autolytic debridement  (duoderm/ comfeel/ granuflex)	-leave in place for up to 7 days if exudate level will allow -should not be used on wounds infected with anaerobic organisms -if paste is used a secondary non adhesive dressing would be required (eg Atrauman)
		<b>Amorphous hydrogel with semi-permeable adhesive dressing. For deeper wounds.</b>	-colourless -odourless -facilitates autolytic debridement -rehydrates slough -absorbs exudate  (purilon/ intrasitegel/ granugel)	-apply sufficient gel to cover wound area and fill depression if present -change gel every 1-3 days -gel can be removed with sterile saline
			-thin transparent sheet with one adhesive side  -(opside/ biocclusive/ tegaderm)	-use recommended technique for removal to avoid skin trauma
<b>Green: Infected wounds</b>	-prevent further infection -promote wound healing	<b>Hydrocolloid fibrous dressing with polyurethane foam dressing or dressing products containing honey.</b>	-soft sterile non-woven sheet composed of hydrocolloid fibres -absorbs liquid on contact and retains -maintains moist environment -aids autolytic debridement  (aquacel, honey impregnated gauze, activon tulle, medi honey wound gel for cavities)	-to be changed daily as infected wound
			-hydrophilic contact layers -hydrophobic outer layer  (lyofoam/ tielle/ allevyn/ mepilex,)	-ensure waterproof surface is positioned to the outside -secure using tubigrip where possible -or with layer of gauze and minimal adhesive

Colour classification	Aim of care	Recommended Dressing	Nature of dressing	Comments
<b>Black: Necrotic wounds</b>	-debridement -management of exudate	<b>Hydrocolloid sheets.</b> For flat or shallow wounds	-self adhesive -absorbs liquid -impermeable to bacteria -facilitates autolytic debridement  (duoderm/ comfeel/ granuflex)	-leave in place for up to 7 days if exudate level will allow -should not be used on wounds infected with anaerobic organisms
		<b>Amorphous hydrogel with semi-permeable adhesive dressing.</b> For deeper wounds.	-colourless -odourless -facilitates autolytic debridement -rehydrates slough -absorbs exudate -maintains wound bed moisture  (purilon/ intrasitegel/ granugel)	-apply sufficient gel to cover wound area and fill depression if present -change gel every 1-3 days -gel can be removed with sterile saline
			-thin transparent sheet with one adhesive side  -(opsite/ biocclusive/ tegaderm)	-use recommended technique for removal to avoid skin trauma

For any wound other than 'pink' epithelialising wounds, refer wound and its care to specialist advice.

#### 4.4 Basic Wound Care Procedure – algorithm

### Basic Wound Care Procedure



#### 4.5 Wound assessment action plan

### Wound Assessment and Action Plan

Patient sticker

#### Initial wound assessment findings:

<b>Date:</b> .....	Gestation at birth: .....
	Current gestation: .....
<u>Colour of wound bed-</u>	Wound location: .....
-Pink (new skin growth) ( )	Wound description: .....
-Red (granulating) ( )	.....
-Yellow (sloughy) ( )	Peri-wound appearance: .....
-Green/ yellow (infected) ( )	Wound size in mm: .....
-Black (necrotic) ( )	Type of exudate (if any): .....
	Cause of wound (if known): .....
Photograph taken ( )	
<b>Is referral to specialist required? YES/NO</b> Referral made ( ) date: .....	
(i.e. Tissue viability, Plastic surgeons, Tertiary NNU, Paediatric Surgeons)	

#### Plan of care:

Goal of wound care: .....	Anticipated frequency of dressing change: .....
Primary dressing: .....	.....
Secondary dressing: .....	.....

Ongoing wound review	Care documentation.
<b>Date</b> ..... Reviewed by..... Pain assessment..... Pain relief given..... Appearance..... Size..... Colour..... Exudate..... Comment..... .....	Swabbed..... Cleaned with..... Dressed with..... ..... Photograph taken ( ) placed in medical notes. Tolerance (physiological/ thermoregulatory/ pain) ..... Next dressing due.....
<b>Date</b> ..... Reviewed by..... Pain assessment..... Pain relief given..... Appearance..... Size..... Colour..... Exudate..... Comment..... .....	Swabbed..... Cleaned with..... Dressed with..... ..... Photograph taken ( ) placed in medical notes. Tolerance (physiological/ thermoregulatory/ pain) ..... Next dressing due.....

Ongoing review	Action taken and plan
<p><b>Date</b> ..... Reviewed by.....</p> <p>Pain assessment.....</p> <p>Pain relief given.....</p> <p>Appearance.....</p> <p>Size.....</p> <p>Colour.....</p> <p>Exudate.....</p> <p>Comment.....</p> <p>.....</p>	<p>Swabbed.....</p> <p>Cleaned with.....</p> <p>Dressed with.....</p> <p>.....</p> <p>Photograph taken ( ) placed in medical notes.</p> <p>Tolerance (physiological/ thermoregulatory/ pain)</p> <p>.....</p> <p>.....</p> <p>Next dressing due.....</p>
<p><b>Date</b> ..... Reviewed by.....</p> <p>Pain assessment.....</p> <p>Pain relief given.....</p> <p>Appearance.....</p> <p>Size.....</p> <p>Colour.....</p> <p>Exudate.....</p> <p>Comment.....</p> <p>.....</p>	<p>Swabbed.....</p> <p>Cleaned with.....</p> <p>Dressed with.....</p> <p>.....</p> <p>Photograph taken ( ) placed in medical notes.</p> <p>Tolerance (physiological/ thermoregulatory/ pain)</p> <p>.....</p> <p>.....</p> <p>Next dressing due.....</p>
<p><b>Date</b> ..... Reviewed by.....</p> <p>Pain assessment.....</p> <p>Pain relief given.....</p> <p>Appearance.....</p> <p>Size.....</p> <p>Colour.....</p> <p>Exudate.....</p> <p>Comment.....</p> <p>.....</p>	<p>Swabbed.....</p> <p>Cleaned with.....</p> <p>Dressed with.....</p> <p>.....</p> <p>Photograph taken ( ) placed in medical notes.</p> <p>Tolerance (physiological/ thermoregulatory/ pain)</p> <p>.....</p> <p>.....</p> <p>Next dressing due.....</p>

## Version Control:

Version	Date	Details	Author(s)	Comments
1	June 2012	New	KR/Team	Neonatal Network Board approved.
2	December 2015	Reviewed with agreed amendments	KR/Team	TV&W Neonatal ODN Governance Group approved 10.01.16
3	Feb 2019	Reviewed and updated.	KR/Team	TV&W Neonatal ODN Governance Group approved 5.6.19
4	Sept 2025	Reviewed and updated. Stoma care guideline now separated into its own guideline, which is still in progress.	Laura Herbert and Guideline Group Team.	Ratified TVW Clinical Governance Forum 25.09.2025
<b>Review Date:</b>	<b>Sept 2028</b>			