

Wound Care Curriculum



Every effort has been made to trace the ownership of copyrighted material and to make full acknowledgement of its use. If errors or omissions have occurred, they will be corrected in subsequent editions, provided that notification is submitted in writing to the publisher.



© 2026, Realityworks, Inc. All rights reserved.

2709 Mondovi Road
Eau Claire, WI 54701 USA
800.830.1416
+1.715.830.2040
www.realityworks.com

1073960-01

Table of Contents

Table of Contents	3
Author	4
Curriculum Structure	4
Lesson Structure	5
Lesson One – Wound Assessment and Classification	6
FOCUS: Name That Wound	8
LEARN: Slide Presentation	22
REVIEW: Quick Practice and Exit Ticket	28
Sources	37
Lesson Two – Infection Prevention and Control	38
FOCUS: Hand Hygiene Awareness	39
LEARN: Post-Op Incision Infection-Control Simulation	44
REVIEW: Infection Control Knowledge Check	50
Sources	55
Lesson Three – Wound Healing Process	56
FOCUS: Introduction to Wound Healing	57
LEARN: Wound Healing Stages	61
REVIEW: Practice and Knowledge-Check of Wound Healing	63
Sources	69
Lesson Four – Wound Care Techniques and Dressing Selection	70
FOCUS: Getting to Know Your Dressings	72
LEARN: Slide Presentation	76
REVIEW: Practice and Assessment	78
Sources	84

This curriculum and the Wound Care Simulator give students hands-on practice assessing, cleaning, packing, and dressing six common wounds to apply safe, evidence-based care with real patients.

Author



Becky Olamide is a seasoned healthcare professional with several years of experience as a Registered Nurse (RN), Advanced Practice Registered Nurse (APRN), and Certified Nurse-Midwife (CNM). She brings a wealth of expertise to patient care, including six years of critical care experience in the Intensive Care Unit (ICU), where she provided comprehensive nursing services.

Becky's academic background includes a Master of Science in Nursing (MSN) with a focus on nursing education, which she applies to developing clinical summaries, continuing education modules, and proficiency exam questions such as those for the NCLEX. She has served as a Clinical Instructor in Advanced Clinical Practice at the University of Texas Health Science Center.

In addition to her clinical and instructional roles, Becky holds certifications as a Trauma-Informed Care Practitioner (TICP) and in Instructional Design for Healthcare. She earned her BSN from Northwestern Health Sciences University, a master's degree in psychology from Fitchburg State University, and a Master of Public Health (MPH) from Cape Cod Community College.

Curriculum Structure

The *Wound Care Curriculum* is composed of the following lessons. Approximate lesson times are included.

Lesson	Title	Approximate Time
One	Wound Assessment and Classification	45 minutes
Two	Infection Prevention and Control	45 minutes
Three	Wound Healing Process	45 minutes
Four	Wound Care Techniques and Dressing Selection	50 minutes
	Total	3-4 hours

Lesson Structure

Each lesson begins with a Lesson Overview, Lesson Objectives, and a Lesson at a Glance table, which lists lesson activities, materials required, suggested preparation steps, and approximate class time.

Lesson Sections

The actual lesson follows the overview, which contains the sections described below.

FOCUS

Every lesson begins with a FOCUS activity intended to capture participants' attention. This may be in the form of a small or large class discussion, game, demonstration, or review of previous lesson information. During this activity, participants are introduced to the topic of the lesson.

LEARN

The LEARN activity in each lesson varies in its presentation mode. It may be a slide presentation, group activity, or demonstration.

REVIEW

The lessons end with a REVIEW activity intended to briefly review the lesson's key messages or main points.

Lesson One – Wound Assessment and Classification

Lesson Overview

In this lesson, students learn how to inspect a wound, decide its type, stage a pressure injury, measure size, and document findings with a standardized tool. The simulator's modular wounds let each learner practice on realistic tissue, depth, and drainage.

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify the six wound types supplied with the simulator
- Stage pressure injuries one through four with accuracy
- Measure wound length, width, and depth within two millimeters
- Record findings on the Bates–Jensen Wound Assessment Tool (BWAT)

Lesson at a Glance

Activity	Materials	Preparation	Approximate Class Time
FOCUS	• <i>Name That Wound</i> visuals • <i>Name That Wound</i> – Answer Key • <i>Introduction to Wound Assessment</i> worksheet • <i>Introduction to Wound Assessment</i> – Answer Key • <i>Wound Type Quick Reference</i>	1. Print/photocopy the <i>Introduction to Wound Assessment</i> worksheet as well as the <i>Wound Type Quick Reference</i> (one of each per participant). 2. Access the worksheet answer keys. 3. Prepare to display the <i>Name That Wound</i> visuals.	10 minutes
LEARN	• Wound Care Simulator • Pressure sore and laceration modules • Sterile rulers • Cotton-tipped probes • <i>Bates-Jensen Wound Assessment Tool</i> • <i>Wound Assessment Quiz</i> • <i>Wound Assessment Quiz</i> – Answer Key • <i>Lesson 1</i> slide presentation	1. Insert the two wound modules into the simulator. 2. Print/photocopy the <i>Bates-Jensen Assessment Tool</i> and <i>Wound Assessment Quiz</i> (one of each per participant). 3. Prepare presentation for viewing.	25 minutes
REVIEW	• Wound Care Simulator • Pressure sore and laceration modules • Sterile rulers • Cotton-tipped probes • <i>Wound Assessment Checklist</i> • <i>Wound Assessment Exit Ticket</i> • <i>Wound Assessment Exit Ticket</i> – Answer Key • Timer • Collection box or envelope • <i>Wound Assessment and Classification Quiz</i>	1. Print/photocopy the <i>Wound Assessment Exit Ticket</i> and <i>Wound Assessment and Classification Quiz</i> (one of each per participant). 2. Access the answer keys 3. Gather materials. 4. Print/photocopy the <i>Wound Assessment Checklist</i> (two per participant).	10 minutes

Wound Care Curriculum

	• <i>Wound Assessment and Classification Quiz</i> – Answer Key		
--	--	--	--

Note: Use either or both of the FOCUS and REVIEW activities, depending on time and learner needs.

Lesson One – Wound Assessment and Classification

FOCUS: Name That Wound

10 minutes

Purpose:

Begin the lesson and test prior knowledge. Students view wound photos, decide the type, and justify their choices.

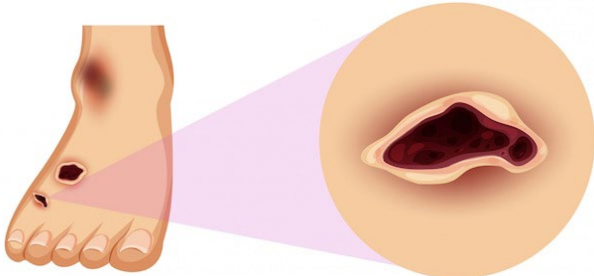
Materials:

- *Name That Wound* worksheet
- *Wound Type Quick Reference*
- *Introduction to Wound Assessment* worksheet
- *Introduction to Wound Assessment – Answer Key*

Facilitation Steps:

1. Distribute the worksheets and display the first photo to begin the *Name That Wound* worksheet.
2. Ask students to write the wound type on scrap paper (30 seconds) before revealing the answer and reasoning.
3. Repeat this process for five photos, moving through them quickly.
4. Write common errors on the board and distribute the *Wound Type Quick Reference* for later use.
5. Have students complete the *Introduction to Wound Assessment* worksheet before pairing up to discuss their answers.

Name That Wound

	Type of Wound	Wound Visual
1		 Source: https://openverse.org/image/9dd8e4cc-c304-4c4e-87c0-3161a8b91e6e?q=pressure+ulcers&p=4
2		 Source: https://www.freepik.com/free-vector/human-foot-with-diabetic_2608088.htm#fromView=search&page=1&position=0&uuid=070abb1e-197f-4af8-a836-6baa2cb5b456&query=diabetic+foot+ulcers

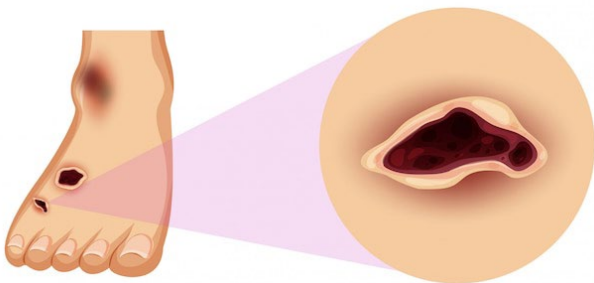
3		 Source: https://www.freepik.com/free-vector/illustration-human-hand-with-different-types-bleeding_62321075.htm#fromView=search&page=1&position=23&uuid=c860cb2c-a044-4c4b-98ae-ed50f87723d3&query=Arterial+Wound
4		 Source: https://www.freepik.com/free-vector/illustration-human-hand-with-different-types-bleeding_62321075.htm#fromView=search&page=1&position=23&uuid=c860cb2c-a044-4c4b-98ae-ed50f87723d3&query=Arterial+Wound

5		 Source: https://www.freepik.com/free-vector/surgical-suture-stitches-realistic-composition-with-isolated-images-human-hand-different-stages-stitching_6862906.htm#fromView=search&page=1&position=20&uuid=6859fb9d-d5eb-446a-8880-e7426b9f0d6f&query=surgical+wounds
6		 Source: https://openverse.org/image/775997dc-9dbd-48e7-84e1-abeb5a3b92da?q=Bruises+wound&p=3

7		 Source: https://openverse.org/image/745802fe-57f9-4a55-a7e0-9e122651b9d3?q=Puncture+wounds&p=22
8		 Source: https://www.freepik.com/free-photo/closeup-young-man-with-knee-injury_10421003.htm#fromView=search&page=4&position=18&uuid=8971136a-543e-4d77-9318-323e9a7766c0&query=Contusion

9		 Source: https://openverse.org/image/db716de5-346f-43cb-aee9-5c3681550bd5?q=Burn+wounds&p=3
---	--	--

Name That Wound – Answer Key

	Type of Wound	Wound Description
1	Pressure Ulcers	 Source: https://openverse.org/image/9dd8e4cc-c304-4c4e-87c0-3161a8b91e6e?q=pressure+ulcers&p=4
2	Diabetic foot ulcers	 Source: https://www.freepik.com/free-vector/human-foot-with-diabetic_2608088.htm#fromView=search&page=1&position=0&uud=070abb1e-197f-4af8-a836-6baa2cb5b456&query=diabetic+foot+ulcers

3	Venous wound	 Source: https://www.freepik.com/free-vector/illustration-human-hand-with-different-types-bleeding_62321075.htm#fromView=search&page=1&position=23&uuid=c860cb2c-a044-4c4b-98ae-ed50f87723d3&query=Arterial+Wound
4	Arterial wound	 Source: https://www.freepik.com/free-vector/illustration-human-hand-with-different-types-bleeding_62321075.htm#fromView=search&page=1&position=23&uuid=c860cb2c-a044-4c4b-98ae-ed50f87723d3&query=Arterial+Wound

5	Laceration/Incision/Surgical wounds	 Source: https://www.freepik.com/free-vector/surgical-suture-stitches-realistic-composition-with-isolated-images-human-hand-different-stages-stitching_6862906.htm#fromView=search&page=1&position=20&uuid=6859fb9d-d5eb-446a-8880-e7426b9f0d6f&query=surgical+wounds
6	Abrasion Wound	 Source: https://openverse.org/image/775997dc-9dbd-48e7-84e1-abe5a3b92da?q=Bruises+wound&p=3

7	Puncture Wound	 Source: https://openverse.org/image/745802fe-57f9-4a55-a7e0-9e122651b9d3?q=Puncture+wounds&p=22
8	Contusion Wound	 Source: https://www.freepik.com/free-photo/closeup-young-man-with-knee-injury_10421003.htm#fromView=search&page=4&position=18&uuid=8971136a-543e-4d77-9318-323e9a7766c0&query=Contusion

9	Burn wound	 Source: https://openverse.org/image/db716de5-346f-43cb-aee9-5c3681550bd5?q=Burn+wounds&p=3
---	-------------------	---

Name: _____ Class: _____

Introduction to Wound Assessment

READ the following:

Accurate wound assessment guides every treatment choice. Begin by identifying the wound type: pressure injury, laceration, surgical, burn, arterial, or venous. Then, stage pressure injuries one through four. Measure the length, width, and depth within two millimeters. Record the tissue type, exudate, peri wound condition, odor, and pain on the Bates–Jensen Wound Assessment Tool (BWAT). Consistent terminology allows all team members to understand progress and spot complications early.

REFLECT on the situation

1. Which observable clues help you decide a wound **type**?
2. What three features determine a pressure injury **stage**?
3. Why must measurements stay within a **two-millimeter margin**?
4. Which five items on the **BWAT** give the clearest picture of healing?
5. Your patient's wound depth suddenly increases. What two **actions** do you take first?

SHARE your thoughts with a peer.

Introduction to Wound Assessment – Answer Key

READ the following:

Accurate wound assessment guides every treatment choice. Begin by identifying the wound type: pressure injury, laceration, surgical, burn, arterial, or venous. Then, stage pressure injuries one through four. Measure the length, width, and depth within two millimeters. Record the tissue type, exudate, peri wound condition, odor, and pain on the Bates–Jensen Wound Assessment Tool (BWAT). Consistent terminology allows all team members to understand progress and spot complications early.

REFLECT on the situation

1. Which observable clues help you decide a wound **type**?
 - Location (over bony prominence suggests pressure injury)
 - Shape and edges (linear cut = laceration; round ulcer = arterial)
 - Color and tissue (yellow slough versus black eschar)
 - History of injury or surgery
2. What three features determine a pressure injury **stage**?
 - Depth of tissue damage
 - Presence or absence of slough/eschar
 - Visible structures (fascia, muscle, bone)
3. Why must measurements stay within a **two-millimeter margin**?
 - Detects subtle changes that signal healing or deterioration
 - Provides reliable data for all team members
 - Meets research-based standard of measurement precision
4. Which five items on the **BWAT** give the clearest picture of healing?
 - Size
 - Depth
 - Necrotic tissue type
 - Exudate amount
 - Granulation tissue
5. Your patient's wound depth suddenly increases. What two **actions** do you take first?
 - Notify the provider for possible debridement or imaging
 - Reassess and document full BWAT to establish a new baseline

SHARE your thoughts with a peer.

Wound Type Quick Reference

Wound Type	What It Is	How It Looks	First Checkpoints
Pressure Ulcer	Local tissue damage from sustained pressure	Round or oval sore over bony area, may tunnel	Stage it, offload pressure, check for infection
Diabetic Foot Ulcer	Neuropathic or ischemic break in skin on foot of person with diabetes	Punched-out edge, callus rim, little pain	Probe to bone, test glucose control, offload weight
Venous Wound	Skin breakdown from chronic venous hypertension	Irregular margin, shallow, moist, red base, ankle region, edema	Elevate leg, manage edema, use absorbent dressing
Arterial Wound	Ischemic skin loss from poor arterial flow	Punched-out edge, pale base, minimal exudate, distal toes	Check pulses, keep foot warm, avoid compression
Laceration/Incision/Surgical Wound	Open cut through skin layers	Linear or jagged gap with exposed tissue	Control bleeding, irrigate, close or dress per depth
Abrasion	Superficial scrape of epidermis	Raw, oozing surface with pinpoint bleeding	Clean gently, cover with non-adherent dressing
Puncture	Deep track from sharp object	Small skin opening, unknown depth	Assess depth, update tetanus, monitor for infection
Contusion (Bruise)	Closed injury from blunt force	Discolored intact skin, swelling, tenderness	Ice, elevate, rule out hematoma or fracture
Burn	Tissue injury from heat, chemicals, or electricity	Redness to char, blister or eschar, pain varies	Determine depth, cool with water, cover loosely

Lesson One – Wound Assessment and Classification

LEARN: Slide Presentation

25 minutes

Purpose:

Participants gain hands-on experience identifying wound types, staging pressure injuries, taking accurate measurements, and documenting findings on the Bates-Jensen Wound Assessment Tool.

Materials:

- Wound Care Simulator
- Pressure sore and laceration modules
- Sterile rulers
- Cotton-tipped probes
- *Bates-Jensen Wound Assessment Tool*
- *Wound Assessment Quiz*
- *Wound Assessment Quiz – Answers Key*

Facilitation Steps:

Share the following information as you show the slide presentation.

Slide 1: Intro slide

Slide 2: Why Accurate Wound Assessment Matters
Open with a case where mis-staging delayed healing.

Ask: How could earlier accuracy have changed the outcome?

Early accuracy can prevent tissue loss, speed healing, and reduce costs. Precise identification, measurement, and documentation drive correct dressing choice, timely referral, and shorter length-of-stay for every patient

Slide 3: Wound Types

Show each type that comes with the simulator.

Slides 4-7: Pressure Injury Staging 1-4

Present NPIAP criteria with photos. Learners call out the stage and state one key feature.

Slide 8: Moisture-Associated Skin Damage (MASD) Versus Pressure Injury (PI)

Contrast signs. Pose the question: *Which cues guide your decision?*

Slide 9: Measuring Length and Width (Clock-Face Method)

Demonstrate the “clock-face” method. Have pairs of students practice on the simulator, aiming for two-millimeter precision.

Slide 10: Measuring Depth and Undermining

Show probe use and documentation. Have pairs of students repeat and record.

Slide 11: Assessing Wound Bed Tissue

Display photos of slough, granulation, eschar. Have learners choose descriptors and percentages.

Slide 12: Periwound and Exudate Assessment

List common findings. Ask: *What does heavy serous drainage suggest?*

Slide 13: Completing the BWAT (Bates-Jensen)

Walk line by line and highlight common errors such as skipped items or unclear terms. Have learners complete a BWAT for one assigned wound.

Slide 14: Putting it All Together

Run a timed practice in which learners must identify, stage, measure, and document one new wound. Close with: *Which step do you need more practice with? Why?*

Gather responses to shape follow-up practice.

Name: _____ Class: _____

BATES-JENSEN WOUND ASSESSMENT TOOL (BWAT)

Instructions: Complete the rating sheet to assess wound status. Evaluate each item by picking the response that best describes the wound and entering the score in the item-score column for the appropriate date.

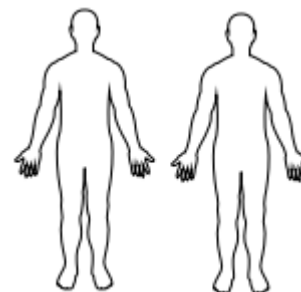
Location: Anatomic site. Circle, identify right (R) or left (L), and use "X" to mark the site on body diagrams.

___ Sacrum and coccyx ___ Lateral ankle
 ___ Trochanter ___ Medial ankle
 ___ Ischial tuberosity ___ Heel
 ___ Other Site _____

Shape: Overall wound pattern, assess by observing perimeter and depth.

Circle **and date** appropriate description:

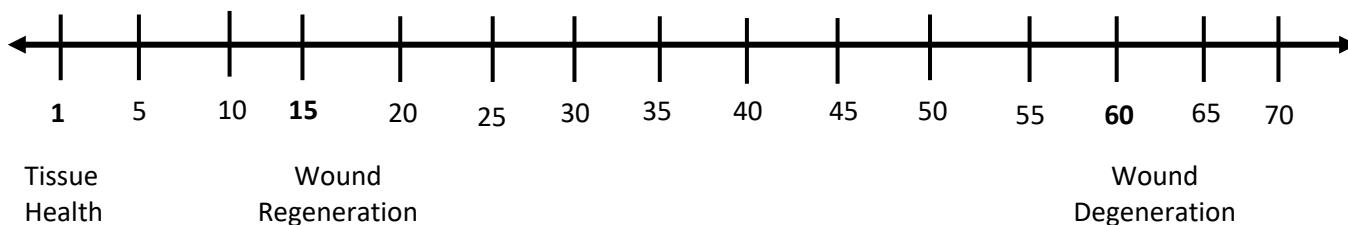
___ Irregular ___ Linear or elongated
 ___ Round/oval ___ Bowl/boat
 ___ Square/rectangle ___ Butterfly ___ Other Shape _____



Item	Assessment	Date Score	Date Score	Date Score
1. Size	1 = Length × width < 4 sq cm 2 = Length × width 4–<16 sq cm 3 = Length × width 16.1–<36 sq cm 4 = Length × width 36.1–<80 sq cm 5 = Length × width ≥ 80 sq cm			
2. Depth	1 = Non-blanchable erythema on intact skin 2 = Partial-thickness skin loss involving epidermis and/or dermis 3 = Full-thickness skin loss involving damage or necrosis of subcutaneous tissue, may extend down to but not through underlying fascia, and/or mixed partial and full-thickness tissue layers obscured by granulation tissue 4 = Obscured by necrosis 5 = Full-thickness skin loss with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures			

3. Edges	1 = Indistinct, diffuse, none clearly visible 2 = Distinct, outline clearly visible, attached, even with wound base 3 = Well-defined, not attached to wound base 4 = Well-defined, not attached to base, rolled under, thickened 5 = Well-defined, fibrotic, scarred, or hyperkeratotic			
4. Undermining	1 = None present 2 = Undermining < 2 cm in any area 3 = Undermining 2–4 cm involving ≤ 50% wound margins 4 = Undermining 2–4 cm involving > 50% wound margins 5 = Undermining > 4 cm or tunneling in any area			
5. Necrotic Tissue Type	1 = None visible 2 = White/gray non-viable tissue and/or non-adherent yellow slough 3 = Loosely adherent yellow slough 4 = Adherent, soft, black eschar 5 = Firmly adherent, hard, black eschar			
6. Necrotic Tissue Amount	1 = None visible 2 = < 25% of wound bed covered 3 = 25–50% of wound bed covered 4 = > 50% and < 75% of wound bed covered 5 = ≥ 75% to 100% of wound covered			
7. Exudate Type	1 = None 2 = Bloody 3 = Serosanguineous 4 = Serous 5 = Purulent			
8. Exudate Amount	1 = None, dry wound 2 = Scant, wound moist but no observable exudate 3 = Small 4 = Moderate 5 = Large			
9. Skin Color Surrounding Wound	1 = Pink or normal for ethnic group 2 = Bright red and/or blanches to touch 3 = White or gray pallor or hypopigmented 4 = Dark red or purple and/or non-blanchable 5 = Black or hyperpigmented			

10. Peripheral Tissue Edema	1 = No swelling or edema 2 = Non-pitting edema extends < 4 cm around wound 3 = Non-pitting edema extends ≥ 4 cm around wound 4 = Pitting edema extends < 4 cm around wound 5 = Crepitus and/or pitting edema extends ≥ 4 cm around wound			
11. Peripheral Tissue Induration	1 = None present 2 = Induration < 2 cm around wound 3 = Induration 2–4 cm extending ≤ 50% around wound 4 = Induration 2–4 cm extending ≥ 50% around wound 5 = Induration > 4 cm in any area around wound			
12. Granulation Tissue	1 = Skin intact or partial-thickness wound 2 = Bright, beefy red; 75%–100% of wound filled and/or tissue overgrowth 3 = Bright, beefy red; < 75% and > 25% of wound filled 4 = Pink and/or dull, dusky red and/or fills ≤ 25% of wound 5 = No granulation tissue present			
13. Epithelialization	1 = 100% wound covered, surface intact 2 = ≥ 75% to < 100% wound covered and/or epithelial tissue extends > 0.5 cm into wound bed 3 = 50% to < 75% wound covered and/or epithelial tissue extends < 0.5 cm into wound bed 4 = ≥ 25 % to < 50 % wound covered 5 = ≤ 25 % wound covered			
TOTAL SCORE				
SIGNATURE				

Wound Status Continuum

Name: _____ Class: _____

Wound Assessment Quiz

Instructions: Select the best answer for each multiple-choice question below.

1. Which simulator wound type normally presents with rolled edges and often requires packing?
 - a. Laceration
 - b. Pressure sore
 - c. Burn
 - d. Gunshot wound
2. A shallow, open ulcer with a pink wound bed that exposes no slough or fat best fits which NPIAP stage?
 - a. Stage 1
 - b. Stage 2
 - c. Stage 3
 - d. Stage 4
3. When using the clock-face method, wound width is measured from:
 - a. 12 o'clock to 6 o'clock
 - b. 3 o'clock to 9 o'clock
 - c. Any 2 longest points
 - d. Top left to bottom right diagonal
4. Heavy serous drainage with minimal odor usually suggests:
 - a. Normal inflammatory response
 - b. Established bacterial infection
 - c. Fistula formation
 - d. Full-thickness skin loss with bone exposed
5. On the *Bates–Jensen Wound Assessment Tool*, the item “necrotic tissue amount” asks you to record:
 - a. Millimeters of undermining depth
 - b. Percentage of slough or eschar covering the wound bed
 - c. Color of periwound skin
 - d. Volume of drainage in milliliters

Wound Assessment Quiz – Answer Key

Instructions: Select the best answer for each multiple-choice question below.

1. Which simulator wound type normally presents with rolled edges and often requires packing?
 - a. Laceration
 - b. Pressure sore**
 - c. Burn
 - d. Gunshot wound
2. A shallow, open ulcer with a pink wound bed that exposes no slough or fat best fits which NPIAP stage?
 - a. Stage 1
 - b. Stage 2**
 - c. Stage 3
 - d. Stage 4
3. When using the clock-face method, wound width is measured from:
 - a. 12 o'clock to 6 o'clock
 - b. 3 o'clock to 9 o'clock**
 - c. Any 2 longest points
 - d. Top left to bottom right diagonal
4. Heavy serous drainage with minimal odor usually suggests:
 - a. Normal inflammatory response**
 - b. Established bacterial infection
 - c. Fistula formation
 - d. Full-thickness skin loss with bone exposed
5. On the *Bates–Jensen Wound Assessment Tool*, the item “necrotic tissue amount” asks you to record:
 - a. Millimeters of undermining depth
 - b. Percentage of slough or eschar covering the wound bed**
 - c. Color of periwound skin
 - d. Volume of drainage in milliliters

Lesson One – Wound Assessment and Classification

REVIEW: Quick Practice and Exit Ticket

10 minutes

Purpose:

Learners confirm they can identify, stage, measure, and document wounds without guidance.

Materials:

- Wound Care Simulator torso with pressure sore and laceration modules inserted
- Sterile rulers
- Cotton-tipped probes
- *Wound Assessment Checklist*
- *Wound Assessment Exit Ticket*
- *Wound Assessment Exit Ticket* – Answer Key
- Timer
- Collection box or envelope

Facilitation Steps:

1. Distribute the *Wound Assessment Checklist* and set the timer for two minutes. Learners must examine the simulator, name the wound type, stage it, and record the length, width, and depth.
2. Repeat the timed check for the second wound module.
3. Distribute the *Wound Assessment Exit Ticket* and have learners complete it.
4. Collect the completed *Wound Assessment Exit Ticket* in the collection box or envelope and go over the answers as a class
5. Ask: Which step still feels tough? Note replies to plan the next practice.

Wound Assessment Checklist

(Use one sheet per wound)

A. PATIENT & DATE

Patient name _____

Date ____ / ____ / ____ Time _____

Assessor _____

B. WOUND IDENTIFICATION

Anatomic site (circle R / L) _____

Wound number (if multiple) ____

Suspected etiology

☐ Pressure ☐ Diabetic ☐ Venous ☐ Arterial

☐ Surgical/Incision ☐ Laceration ☐ Abrasion ☐ Burn

☐ Puncture ☐ Contusion ☐ Other _____

C. MEASUREMENTS

Length _____ cm Width _____ cm Depth _____ cm

Undermining present? ☐ No ☐ Yes Clock position _____ Depth _____ cm

Tunnelling present? ☐ No ☐ Yes Clock position _____ Depth _____ cm

Area (L x W) _____ cm²

D. TISSUE APPEARANCE (estimate % of wound bed)

_____ % Granulation _____ % Slough _____ % Eschar/necrosis

Edges ☐ Attached ☐ Rolled ☐ Fibrotic ☐ Macerated

E. EXUDATE

Amount ☐ None ☐ Scant ☐ Small ☐ Moderate ☐ Large

Type ☐ Serous ☐ Serosanguineous ☐ Bloody ☐ Purulent ☐ Other _____

Odor after cleaning ☐ None ☐ Faint ☐ Moderate ☐ Strong

F. PERIWOUND SKIN

Color ☐ Normal ☐ Erythema ☐ Pallor ☐ Cyanosis ☐ Hyperpigmentation

Edema ☐ None ☐ <4 cm ☐ ≥4 cm ☐ Pitting ☐ Crepitus

Induration ☐ None ☐ <2 cm ☐ 2–4 cm ☐ >4 cm

G. PAIN & SIGNS OF INFECTION

Pain (0-10) _____

Signs of infection (check all present)

☐ ↑ Pain ☐ ↑ Drainage ☐ Odor ☐ Redness ☐ Heat

☐ Swelling ☐ Fever >38 °C ☐ Delayed healing ☐ Friable tissue

H. CURRENT DRESSING

Removed intact? ☐ Yes ☐ No

Type removed _____

Periound intact after removal? ☐ Yes ☐ No

I. INTERVENTIONS PERFORMED

Cleansing solution _____ ml _____

Debridement ☐ None ☐ Sharp ☐ Mechanical ☐ Enzymatic ☐ Autolytic

Packing/filler _____

New dressing applied _____

Pressure offloading / compression? _____

Patient education given? ☐ Yes ☐ No Topic _____

J. DOCUMENTATION

BWAT (if used) score _____ PI stage (if applicable) _____

Additional notes _____

Verifier / signature _____ Date _____

Wound Assessment Exit Ticket

Wound Type: PRESSURE ULCER

1. One visual clue that helped me identify this wound type: _____
2. Stage (1-4 or Unstageable) I would assign: _____
3. First care priority I would address: _____

Wound Type: DIABETIC FOOT ULCER

1. One visual clue that helped me identify this wound type: _____
2. Likely underlying cause I would document: _____
3. First care priority I would address: _____

Wound Type: VENOUS WOUND

1. One visual clue that helped me identify this wound type: _____
2. Edema present? ☐ Yes ☐ No
3. First care priority I would address: _____

Wound Type: ARTERIAL WOUND

1. One visual clue that helped me identify this wound type: _____
2. Pedal pulse strength I observed: _____
3. First care priority I would address: _____

Wound Type: LACERATION/INCISION/SURGICAL WOUND

1. One visual clue that helped me identify this wound type: _____
2. Closure status (sutures, staples, open): _____
3. First care priority I would address: _____

Wound Care Curriculum

Wound Type: ABRASION

1. One visual clue that helped me identify this wound type: _____
2. Depth category (superficial/partial): _____
3. First care priority I would address: _____

Wound Type: PUNCTURE WOUND

1. One visual clue that helped me identify this wound type: _____
2. Tetanus status checked? ☐ Yes ☐ No
3. First care priority I would address: _____

Wound Type: CONTUSION

1. One visual clue that helped me identify this wound type: _____
2. Color stage observed (red/purple/green/yellow): _____
3. First care priority I would address: _____

Wound Type: BURN

1. One visual clue that helped me identify this wound type: _____
2. Depth classification (superficial/partial /full): _____
3. First care priority I would address: _____

Wound Assessment Exit Ticket – Answer Key

Wound Type: PRESSURE ULCER

1. One visual clue that helped me identify this wound type: **Round ulcer over a bony area, rolled edges, slough in base**
2. Stage (1-4 or Unstageable) I would assign: **Stage 3**
3. First care priority I would address: Offload pressure and clean the wound

Wound Type: DIABETIC FOOT ULCER

1. One visual clue that helped me identify this wound type: **Punched-out ulcer on plantar foot with callus rim**
2. Likely underlying cause I would document: **Neuropathy with poor blood flow**
3. First care priority I would address: **Offload weight and check glucose control**

Wound Type: VENOUS WOUND

1. One visual clue that helped me identify this wound type: **Shallow, irregular, moist ulcer at medial ankle, red base, edema**
2. Edema present? ☐ **Yes** ☐ No
3. First care priority I would address: **Elevate leg and start compression wrap**

Wound Type: ARTERIAL WOUND

1. One visual clue that helped me identify this wound type: **Punched-out pale ulcer on distal toe, little drainage**
2. Pedal pulse strength I observed: **Weak/absent**
3. First care priority I would address: **Improve limb perfusion and keep foot warm**

Wound Type: LACERATION/INCISION/SURGICAL WOUND

1. One visual clue that helped me identify this wound type: **Linear cut with clean edges and sutures in place**
2. Closure status (sutures, staples, open): **Closed with sutures**
3. First care priority I would address: **Keep dressing dry and watch for infection**

Wound Care Curriculum

Wound Type: ABRASION

1. One visual clue that helped me identify this wound type: **Superficial scrape with pinpoint bleeding**
2. Depth category (superficial/partial): **Superficial**
3. First care priority I would address: **Gently clean and apply non-adherent dressing**

Wound Type: PUNCTURE WOUND

1. One visual clue that helped me identify this wound type: **Small round entry point, unknown depth**
2. Tetanus status checked? ☐ **Yes** ☐ No
3. First care priority I would address: **Irrigate track and update tetanus if needed**

Wound Type: CONTUSION

1. One visual clue that helped me identify this wound type: **Purple bruise under intact skin, mild swelling**
2. Color stage observed (red/purple/green/yellow): **Purple**
3. First care priority I would address: **Apply ice and elevate area**

Wound Type: BURN

1. One visual clue that helped me identify this wound type: **Blistered red skin, clear fluid under blister**
2. Depth classification (superficial/partial /full): **Partial thickness**
3. First care priority I would address: **Cool with running water and cover loosely**

Name _____ Date _____

Wound Assessment and Classification Quiz

1. A sacral wound shows intact but **non-blanchable erythema** over a bony prominence with no skin break. What is the correct NPIAP stage?
 - a. Stage 1
 - b. Stage 2
 - c. Stage 3
 - d. Unstageable
2. Using the clock-face method, you record **7 cm (12→6) × 5 cm (3→9) × 1.2 cm depth**. Which figure represents the **width**?
 - a. 7 cm
 - b. 5 cm
 - c. 1.2 cm
 - d. 35 cm²
3. When 60% of a wound bed is covered with **yellow slough** and 40% is pink granulation, which BWAT tissue descriptor is **most** accurate?
 - a. >50% granulation
 - b. Clean granulating
 - c. >50% necrotic/slough
 - d. Closed/epithelial
4. Which finding below signals a **possible arterial ulcer** rather than venous or neuropathic origin?
 - a. Irregular shallow ankle ulcer, moderate serous exudate, pitting edema
 - b. Punched-out pale ulcer on distal toe, minimal drainage, weak pedal pulse
 - c. Plantar ulcer with thick callus rim, painless, palpable pulse present
 - d. Shallow ulcer at medial malleolus, heavy exudate, hemosiderin staining
5. On the *Wound Assessment Checklist*, where should you record that the **dressing was removed intact with scant serous drainage**?
 - a. Section C – Measurements
 - b. Section E – Exudate
 - c. Section H – Current Dressing
 - d. Section I – Interventions Performed

Name _____ Date _____

Wound Assessment and Classification Quiz – Answer Key

1. A sacral wound shows intact but **non-blanchable erythema** over a bony prominence with no skin break. What is the correct NPIAP stage?
 - a. **Stage 1**
 - b. Stage 2
 - c. Stage 3
 - d. Unstageable
2. Using the clock-face method, you record **7 cm (12→6) × 5 cm (3→9) × 1.2 cm depth**. Which figure represents the **width**?
 - a. 7 cm
 - b. **5 cm**
 - c. 1.2 cm
 - d. 35 cm²
3. When 60% of a wound bed is covered with **yellow slough** and 40% is pink granulation, which BWAT tissue descriptor is **most** accurate?
 - a. >50% granulation
 - b. Clean granulating
 - c. **>50% necrotic/slough**
 - d. Closed/epithelial
4. Which finding below signals a **possible arterial ulcer** rather than venous or neuropathic origin?
 - a. Irregular shallow ankle ulcer, moderate serous exudate, pitting edema
 - b. **Punched-out pale ulcer on distal toe, minimal drainage, weak pedal pulse**
 - c. Plantar ulcer with thick callus rim, painless, palpable pulse present
 - d. Shallow ulcer at medial malleolus, heavy exudate, hemosiderin staining
6. On the *Wound Assessment Checklist*, where should you record that the **dressing was removed intact with scant serous drainage**?
 - a. Section C – Measurements
 - b. Section E – Exudate
 - c. **Section H – Current Dressing**
 - d. Section I – Interventions Performed

Sources

1. Bates-Jensen, B. M. (2014). *Bates-Jensen Wound Assessment Tool: User Manual*. UCLA School of Nursing.
2. National Pressure Injury Advisory Panel. (2016). *Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline*.
3. Perry, A., Potter, P., & Ostendorf, W. (2014). *Clinical Nursing Skills and Techniques* (8th ed.). Elsevier Mosby.
4. European Wound Management Association. (2019). *Measuring Healing Outcomes in Chronic Wounds*.

Lesson Two – Infection Prevention and Control

Lesson Overview

In this lesson, students practice evidence-based steps that prevent wound infection and stop the spread of pathogens in clinical settings.

Lesson Objectives

After completing this lesson, participants will be able to:

- Perform correct hand hygiene technique using WHO 5 Moments
- Set up and maintain a sterile field without contamination
- List local and systemic signs of wound infection
- Outline the first-response protocol when infection is suspected

Lesson at a Glance

Activity	Materials	Preparation	Approximate Class Time
FOCUS	• UV-reactive lotion or powder (Glo Germ™ or equivalent) • Portable UV lamp/flashlight • <i>Hand Hygiene Reflection</i> • <i>Hand Hygiene Reflection – Answer Key</i> • <i>Hand Hygiene Safety Check</i> worksheet • <i>Hand Hygiene Safety Check – Answer Key</i>	1. Print/photocopy the <i>Hand Hygiene Reflection</i> and <i>Hand Hygiene Safety Check</i> worksheet (one of each per participant). 2. Access the answer keys. 3. Gather the UV supplies.	10 minutes
LEARN	• Wound Care Simulator • Incision module • Personal protective equipment (PPE) • Sterile swab kit • Normal saline • Gauze • Trash bin • <i>Lesson 2</i> slide presentation • <i>Hand Hygiene Checklist</i> • <i>C.U.R.E. Protocol for Suspected Wound Infection</i> • <i>Infection Prevention and Control Quiz</i> • <i>Infection Prevention and Control Quiz – Answer Key</i>	1. Insert the wound module into the simulator. 2. Print/photocopy the <i>Hand Hygiene Checklist</i>, <i>C.U.R.E. Protocol for Suspected Wound Infection</i>, and <i>Infection Prevention and Control Quiz</i> (one of each per participant). 3. Prepare presentation for viewing. 4. Gather supplies.	25 minutes
REVIEW	• <i>Empathy</i> worksheet • <i>Empathy – Answer Key</i> • <i>Review Quiz</i> • <i>Review Quiz – Answer Key</i>	1. Print/photocopy the <i>Empathy</i> worksheet and <i>Review Quiz</i> (one of each per participant). 2. Access the answer keys.	10 minutes

Note: You may have students complete both or only one of the FOCUS and REVIEW activities. FOCUS can also be assigned before class to save time.

Lesson Two – Infection Prevention and Control

FOCUS: Hand Hygiene Awareness

10 minutes

Purpose:

Let students “see” how invisible microbes spread and reflect on both the safety and empathy aspects of infection control.

Materials:

- UV-reactive lotion or powder (Glow Germ™ or equivalent)
- Portable UV flashlight/lamp
- *Hand Hygiene Reflection*
- *Hand Hygiene Safety Checks* worksheet
- *Hand Hygiene Reflection* – Answer key
- *Hand Hygiene Safety Checks* – Answer Key

Facilitation Steps:

1. Before class, apply a pea-size drop of UV lotion to your hands. Keep them dry.
2. Distribute the worksheets as students enter. Ask them not to write on them yet.
3. Shake two students’ hands and touch a desk and a doorknob.
4. Darken the lights and shine the UV lamp on your hands, the students’ hands, the desk, and the doorknob.
5. Discuss what students observe (germs travel fast and cannot be seen under normal light).
6. Instruct students to complete both worksheets.
7. Pair students up to share answers.
8. Collect the worksheets or review with answer keys.

Name: _____

Class: _____

Hand Hygiene Reflection

READ

You enter a room to change a patient's dressing. The patient watches you walk in, place your phone on the over-bed table, and don gloves without washing your hands. The patient looks uneasy and asks, "Do you think my wound will heal? I am scared of infection."

REFLECT

1. How might the patient feel after seeing you skip hand washing?
2. Write one sentence you could say to reassure the patient after you perform proper hand hygiene.
3. In your own words, explain why empathy matters while conducting infection-control tasks.

Hand Hygiene Reflection – Answer Key

READ

You enter a room to change a patient's dressing. The patient watches you walk in, place your phone on the over-bed table, and don gloves without washing your hands. The patient looks uneasy and asks, "Do you think my wound will heal? I am scared of infection."

REFLECT

1. How might the patient feel after seeing you skip hand washing?

The patient may feel anxious, unsafe, or mistrustful.

1. Write one sentence you could say to reassure the patient after you perform proper hand hygiene.

"I'm sorry, let me wash my hands first to keep you safe from infection."

2. In your own words, explain why empathy matters while conducting infection-control tasks.

Empathy builds trust, reduces anxiety, and improves cooperation with care.

Name: _____

Class: _____

Hand Hygiene Safety Checks

Instructions: Match each letter in the mnemonic **SOAP** to the correct safety check. Write the letter in the Letter column below.

Safety Check	Letter
1. Hands rubbed for 20 seconds with all surfaces covered	
2. Remove jewelry and keep nails short	
3. Use alcohol rub only if your hands are not visibly soiled	
4. Turn off tap with paper towel after rinsing	

Mnemonic ChoicesS = **Scrub** every surfaceO = **Observe** visible soilA = **Accessories** offP = **Paper-towel** tap off

Hand Hygiene Safety Checks – Answer Key

Instructions: Match each letter in the mnemonic **SOAP** to the correct safety check. Write the letter in the Letter column below.

Safety Check	Letter
1. Hands rubbed for 20 seconds with all surfaces covered	S
2. Remove jewelry and keep nails short	A
3. Use alcohol rub only if your hands are not visibly soiled	O
4. Turn off tap with paper towel after rinsing	P

Mnemonic Choices

S = **Scrub** every surface

O = **Observe** visible soil

A = **Accessories** off

P = **Paper-towel** tap off

Lesson Two – Infection Prevention and Control

LEARN: Post-Op Incision Infection-Control Simulation

10 minutes

Purpose:

Students practice hand hygiene, build a sterile field, spot wound infection cues, and act fast when infection is likely.

Materials:

- Wound Care Simulator
- Incision module
- PPE (gloves, mask, gown)
- Sterile swab kit
- Normal saline
- Gauze
- Trash bin
- *Lesson 2* slide presentation
- *Hand Hygiene Checklist*
- *C.U.R.E. Protocol for Suspected Wound Infection*
- *Infection Prevention and Control Quiz*
- *Infection Prevention and Control Quiz – Answer Key*

Facilitation Steps:

Slide 1: Intro slide

Slide 2: Why Infection Control Matters

A clean wound heals faster, saves money, and prevents suffering. When microbes enter, tissue breaks down, dressings change more often, and antibiotics follow.

Hospitals track every post-operation infection because each one doubles the length of stay. How will strict control today change your patient's week?

Slide 3: WHO 5 Moments

You clean your hands before you touch a patient. You clean again before any clean or aseptic task. After a body fluid exposure, you wash your hands immediately.

You also wash your hands after you touch the patient. You finish by washing after you touch the patient's surroundings. If you do not wash your hands at all five of these moments, you risk infecting the patient.

Slide 4: Hand Hygiene Technique

Wet both hands and wrists. Add soap and rub for 20 seconds while you hum the alphabet twice. Scrub backs, thumbs, webs, and under nails. Rinse from fingertips down so water carries germs away.

Dry with a single towel and use that towel to turn off the tap. Miss a spot and the germs will remain.

Slide 5: Donning and Doffing PPE

Put the gown on first, tying at the neck and waist. Place the mask so it seals over the nose and chin. Add eye protection to guard mucous membranes. Gloves go on last and cover the gown cuffs.

To remove PPE, peel off the gloves, lift the goggles, untie the gown, and take the mask off. The correct order keeps clean gear clean and dirty gear contained.

Have students practice donning and doffing PPE.

Slide 6: Setting a Sterile Field

Open the wrap away from you, then the sides, and the flap nearest you last. Keep one-inch edges as your safety zone and never let supplies cross it.

Pour sterile solutions by tipping the bottle so liquid flows and the cap stays up. Move slowly and keep your hands above waist height. If you turn your back, you will break sterility.

Have student practice setting a sterile field.

Slide 7: Breaks in Sterility

Touching sterile gauze with a bare finger plants bacteria. Leaning an elbow over the field rains lint and sleeve particles. Talking without a mask sends droplets onto forceps. Identify each slip in advance and stop it before it happens.

Show images of common mistakes that break sterility. Ask students which mistake have they have caught most often?

Slide 8: Local Infection Signs

Red skin that spreads is a sign of inflammation. Heat under the dressing signals localized vascular activity and bacterial growth. Swelling lifts the edges and stresses sutures.

Pain sharpens when pressure rises in the tissue. Thick yellow exudate replaces clear fluid as bacteria grow. Spot these early and act.

Have students examine the simulator's incision module for signs of infection.

Slide 9: Systemic Red Flags

A fever above 38 degrees Celsius means the infection moved beyond the wound. Rapid heart rate and chills follow as the body fights back. Confusion tells you toxins have reached the brain.

When any pair of these signs appear, you escalate immediately. Delay costs lives.

Slide 10: First-Response Protocol

Stop the dressing change and keep the soiled supplies for culture. Swab the wound before antibiotics to preserve culture accuracy. Notify the provider with full vital signs and what you see.

Start prescribed empiric therapy and draw ordered labs. Document each action and timestamp it.

Slide 11: Day-Three Incision Case Study

The patient's suture line looks pink this morning. By afternoon warmth spreads one centimeter beyond the edges and pain rises. You note a low-grade fever and pulse at 100.

What steps will you follow now and in what order? Pair up, decide, and share.

Slide 12: Key Takeaways and Next Steps

Collect the *Hand Hygiene Checklist* for rapid feedback.

Name: _____ Date: _____

Hand Hygiene Checklist

Instructions: Check off each step as it is completed. Circle any step that is missed or performed incorrectly.

Part A: WHO 5 Moments for Hand Hygiene

Place a ✓ in each box when the moment is correctly identified or performed.

WHO Moment	Performed? (✓)
Before touching a patient	
Before a clean or aseptic procedure	
After body fluid exposure risk	
After touching a patient	
After touching the patient's surroundings	

Part B: Handwashing Technique

Instructions: Observe or perform proper handwashing. Tick each box only if the step is completed thoroughly.

Step	Performed? (✓)
Wet hands and wrists with water	
Apply soap	
Rub palms together	
Rub back of each hand	
Rub between fingers	
Rub thumbs	
Rub fingertips and under nails	
Rinse from fingertips down	
Dry hands with a single-use towel	
Use towel to turn off faucet	

Part C: Final Reflection (Complete in 1-2 sentences)

Which step is easiest to forget or skip? Why?

C.U.R.E. Protocol for Suspected Wound Infection

Step	Action	Rationale
C – Culture	Collect a wound culture (swab or aspirate) before antibiotics are started	Identifies the causative organism and guides targeted therapy
U – Update	Notify the provider immediately, giving a concise SBAR (situation, background, assessment, recommendation)	Ensures timely clinical decisions and orders
R – Reinforce	Apply a clean, sterile dressing to control drainage and protect surrounding skin	Limits further contamination and contains exudate
E – Educate	Explain infection signs the patient should report (increasing pain, fever, drainage changes) and document all actions taken	Engages the patient in monitoring and provides a complete legal record

Name: _____ Class: _____

Infection Prevention and Control Quiz

Instructions: Select the best answer for each multiple-choice question.

1. The World Health Organization's "before clean/aseptic task" moment for hand hygiene occurs:
 - a. After touching a patient's surroundings
 - b. Before touching a patient
 - c. Before opening a sterile dressing tray
 - d. After removing gloves
2. Which action contaminates a sterile field during a dressing change?
 - a. Keeping hands above waist level
 - b. Pouring normal saline with the bottle lip held over the field
 - c. Opening the farthest wrapper flap first
 - d. Touching the 2.5-cm edge of the drape with clean gloves
3. You note redness that has spread 1 cm beyond the incision edges, warmth, and thick yellow drainage. These findings are best described as:
 - a. Normal inflammatory response
 - b. Local signs of wound infection
 - c. Systemic signs of infection
 - d. Chemical-burn irritation
4. Which systemic finding requires immediate escalation for possible sepsis?
 - a. Temperature 37.4°C
 - b. Pulse 78 beats/min
 - c. New confusion and chills
 - d. Respiratory rate 14 breaths/min
5. What is the **first** step in the C.U.R.E. protocol when you suspect a post-operative wound infection?
 - a. Begin prescribed empirical antibiotics
 - b. Reinforce the dressing with sterile gauze
 - c. Collect a wound culture swab
 - d. Educate the patient about warning signs

Infection Prevention and Control Quiz – Answer Key

Instructions: Select the best answer for each multiple-choice question.

1. The World Health Organization's "before clean/aseptic task" moment for hand hygiene occurs:
 - a. After touching a patient's surroundings
 - b. Before touching a patient
 - c. Before opening a sterile dressing tray**
 - d. After removing gloves
2. Which action contaminates a sterile field during a dressing change?
 - a. Keeping hands above waist level
 - b. Pouring normal saline with the bottle lip held over the field**
 - c. Opening the farthest wrapper flap first
 - d. Touching the 2.5-cm edge of the drape with clean gloves
3. You note redness that has spread 1 cm beyond the incision edges, warmth, and thick yellow drainage. These findings are best described as:
 - a. Normal inflammatory response
 - b. Local signs of wound infection**
 - c. Systemic signs of infection
 - d. Chemical-burn irritation
4. Which systemic finding requires immediate escalation for possible sepsis?
 - a. Temperature 37.4°C
 - b. Pulse 78 beats/min
 - c. New confusion and chills**
 - d. Respiratory rate 14 breaths/min
5. What is the **first** step in the C.U.R.E. protocol when you suspect a post-operative wound infection?
 - a. Begin prescribed empirical antibiotics
 - b. Reinforce the dressing with sterile gauze
 - c. Collect a wound culture swab**
 - d. Educate the patient about warning signs

Lesson Two – Infection Prevention and Control

REVIEW: Infection Control Knowledge Check

10 minutes

Purpose:

Participants review their knowledge of infection prevention and control measures, wound infection identification, and first-response protocols.

Materials:

- *Review Quiz*
- *Review Quiz – Answer Key*
- *Empathy* worksheet
- *Empathy – Answer Key*

Facilitation Steps:

1. Distribute the *Review Quiz* to each participant and give them five minutes to complete it.
2. Once completed, go over the answer key as a class and discuss commonly missed questions.
3. Collect complete quizzes and distribute the *Empathy* worksheet.
4. Give them time to work on it before they pair up and share their thoughts with a peer.

Name: _____ Class: _____

Empathy

READ the following:

Every year more than 600,000 patients in the United States develop a healthcare-associated infection.

A single surgical-site infection can double the length of a hospital stay and cost an extra \$20,000.

For a patient, the impact is personal:

- "I felt dirty, like something dangerous was hiding in my own wound."
- "The dressing change burned, and I worried the nurses might miss something."
- "I did not want visitors to see the drainage or smell anything."

When patients were asked what mattered most, 70 percent said feeling safe and being heard were more important than pain control.

REFLECT on the above.

1. Imagine your patient asks, "Could this wound get infected again?" Write one sentence you could say after performing hand hygiene that shows both competence and empathy.

2. List two ways your own actions while setting up a sterile field can increase the patient's feeling of safety.
 - a. _____
 - b. _____
3. Family and visitors can either support or hinder infection prevention.
 - One helpful behavior they can show: _____
 - One behavior that puts the patient at risk: _____

SHARE your thoughts with a peer.

Empathy – Answer Key

READ the following:

Every year more than 600,000 patients in the United States develop a healthcare-associated infection. A single surgical-site infection can double the length of a hospital stay and cost an extra \$20,000.

For a patient, the impact is personal:

- “I felt dirty, like something dangerous was hiding in my own wound.”
- “The dressing change burned, and I worried the nurses might miss something.”
- “I did not want visitors to see the drainage or smell anything.”

When patients were asked what mattered most, 70 percent said feeling safe and being heard were more important than pain control.

REFLECT on the above.

1. Imagine your patient asks, “Could this wound get infected again?” Write one sentence you could say after performing hand hygiene that shows both competence and empathy.

I have just cleaned my hands and will use a fully sterile setup so we can protect your wound and help it heal safely.

2. List two ways your own actions while setting up a sterile field can increase the patient’s feeling of safety.

a. **I open the sterile tray away from the field so no wrapper edges dangle over the supplies**

b. **I keep my gloved hands above waist level and in full view, so the patient sees nothing touches unsterile surfaces**

3. Family and visitors can either support or hinder infection prevention.

One helpful behavior they can show: A family member reminds everyone to use hand sanitizer before they touch the bed rails.

One behavior that puts the patient at risk: A visitor sets a handbag on the bedside table where sterile dressings are stored.

SHARE your thoughts with a peer.

Name: _____ Date: _____

Review Quiz

1. List three local signs of wound infection:

a. _____

b. _____

c. _____

2. What is one systemic sign of infection?

3. Describe one step to maintain a sterile field:

4. When should you perform hand hygiene according to WHO 5 Moments? List two moments:

a. _____

b. _____

5. What should you do first if you suspect a wound infection?

Review Quiz – Answer Key

1. Local signs of wound infection:
 - Redness
 - Swelling
 - Warmth
 - Pain or tenderness
 - Discharge
 - Delayed healing
2. Systemic signs of infection:
Fever, chills, increased heart rate, low blood pressure, confusion, general malaise (anyone)
3. Maintaining a sterile field step example:
 - Do not turn your back or reach over the sterile field
 - Open sterile packages away from your body
4. Moments for hand hygiene (any two):
 1. Before touching a patient
 2. Before clean/aseptic procedures
 3. After body fluid exposure
 4. After touching a patient
 5. After touching patient surroundings
5. First step if infection is suspected:
 - Document signs clearly and notify a healthcare provider immediately

Sources

1. World Health Organisation (WHO). (2021). Five moments for hand hygiene. Retrieved May 12, 2025, from Who.int website: <https://www.who.int/publications/m/item/five-moments-for-hand-hygiene>
2. World Health Organization (WHO) [@who]. (2015). WHO: How to handwash? With soap and water. Retrieved May 12, 2025, from <https://www.youtube.com/watch?v=3PmVJUCm4E>
3. Siegel, J. D., Rhinehart, E., Jackson, M., Chiarello, L., & Healthcare Infection Control Practices Advisory Committee. (2019, May). *2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Health Care Settings*.
4. Center for Disease Control and Prevention. (2024). Sequence for Putting on Personal Protective Equipment (PPE). Retrieved May 12, 2025, from Cdc.gov website: <https://www.cdc.gov/infection-control/media/pdfs/Toolkits-PPE-Sequence-P.pdf>
5. European Wound Management Association. (2011). Effective Management of Wound Infection and Quality of Life with Suprasorb® X+PHMB. Wounds UK, London. Retrieved May 12, 2025, from Google.com website: <https://wounds-uk.com/wp-content/uploads/2023/02/519e0ca3c1e1d9585956c878b5ab78c6.pdf>
6. European Centre for Disease Prevention and Control. Healthcare-associated infections: surgical site infections. In: ECDC. Annual epidemiological report for 2018-2020. Stockholm: ECDC; 2023.
7. National Institute for Health and Care Excellence (NICE). (2020). *Surgical site infections: prevention and treatment*. National Institute for Health and Care Excellence (NICE).
8. Boyce JM, Pittet D. *Guideline for Hand Hygiene in Health-Care Settings*. MMWR 2002;51(RR-16). <https://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf>
9. Moudatsou, M., Stavropoulou, A., Philalithis, A., & Koukouli, S. (2020). The role of empathy in health and social care professionals. *Healthcare (Basel, Switzerland)*, 8(1), 26. doi:10.3390/healthcare8010026

Lesson Three – Wound Healing Process

Lesson Overview

In this lesson, students explore how wounds heal and what factors help or delay that healing. They learn the three main stages of healing and how patient-specific factors like nutrition, medications, and chronic conditions influence outcomes.

Lesson Objectives

After completing this lesson, participants will be able to:

- Name the three stages of wound healing
- Describe factors that speed or delay healing
- Identify signs that a wound is healing normally
- Recognize when a wound needs further medical attention

Lesson at a Glance

Activity	Materials	Preparation	Approximate Class Time
FOCUS	• Timer • <i>Introduction to Wound Healing</i> worksheet • <i>Introduction to Wound Healing – Answer Key</i> • <i>Introduction to the 4 Stages of Wound Healing</i>	1. Print/photocopy the <i>Introduction to Wound Healing</i> (one of each per participant). 2. Access the answer key. 3. Print/photocopy or project the <i>Introduction to the 4 Stages of Wound Healing</i>.	10 minutes
LEARN	• Wound Care Simulator • Sterile gloves (1 pair per participant) • Sterile rulers • Cotton-tipped probes • Alcohol swabs • Sticky notes • <i>Lesson 3</i> slide presentation • <i>Wound Stage Reference Poster</i>	1. Print/photocopy the <i>Wound Stage Reference Poster</i> (one per table). 2. Prepare presentation for viewing. 3. Gather supplies.	25 minutes
REVIEW	• Wound Care Simulator • 4 pre-set healing-stage wounds • Sterile rulers • Cotton-tipped probes • Green and red sticky dots • Clipboards (1 per participant) • Timer • <i>Wound Stage Check-Off</i> worksheet • <i>Wound Healing Quiz</i> • <i>Wound Healing Quiz – Answer Key</i>	1. Print/photocopy the <i>Wound Stage Check-Off</i> worksheet and <i>Wound Healing Quiz</i> (one of each per participant). 2. Access the answer key. 3. Label the wounds H, I, P, and R (hemostasis, inflammation, proliferation, and remodeling). 4. Place rulers and probes at each wound station.	10 minutes

Lesson Three – Wound Healing Process

FOCUS: Introduction to Wound Healing

10 minutes

Purpose:

Students consider the patient's lived experience of wound healing, then connect that perspective to the four scientific stages they will study in depth.

Materials:

- *Introduction to Wound Healing* worksheet
- *Introduction to Wound Healing* – Answer Key
- *Introduction to the 4 Stages of Wound Healing* (projected or printed)
- Timer

Facilitation Steps:

1. Distribute worksheets to each student and ask them to read the short patient story and background paragraph.
2. Have learners write brief answers to the two reflection questions.
3. Start the timer for 90 seconds and pair students up to share one sign that a wound is troubling a patient as well as one action a nurse can take to support healing.
4. Project the *Introduction to the 4 Stages of Wound Healing* and ask volunteers to connect their empathetic actions to the stage pictured (hemostasis, inflammation, proliferation, remodeling).

Name: _____ Class: _____

Introduction to Wound Healing

READ the following:

Mrs. M. is a 68-year-old woman with diabetes who has lived with a painful foot ulcer for six weeks. She says, “It looks angry every day. I am scared it will never close.” She dreads each dressing change because removing the old gauze pulls at the tissue. She avoids going out, worries about the smell, and has begun sleeping in a chair to keep weight off her heel.

Patients with slow-healing wounds often describe:

- Fear that the wound will worsen or lead to amputation
- Embarrassment over drainage, odor, or appearance
- Isolation when appointments and limited mobility reduce social time
- Frustration with repeated procedures that seem to hurt without progress

REFLECT on the situation

1. What non-physical sign tells you healing is affecting Mrs. M.’s quality of life?

2. List one small action during a dressing change that could lessen her fear.

CONNECT to the science

3. Which of the four wound-healing stages do you think her ulcer is in today (hemostasis, inflammation, proliferation, or remodeling)? Why?

Stage: _____ Reason: _____

4. Write one sentence you could say to explain the next stage her wound should enter.

SHARE your thoughts with a peer.

Introduction to Wound Healing – Answer Key

READ the following:

Mrs. M. is a 68-year-old woman with diabetes who has lived with a painful foot ulcer for six weeks. She says, “It looks angry every day. I am scared it will never close.” She dreads each dressing change because removing the old gauze pulls at the tissue. She avoids going out, worries about the smell, and has begun sleeping in a chair to keep weight off her heel.

Patients with slow-healing wounds often describe:

- Fear that the wound will worsen or lead to amputation
- Embarrassment over drainage, odor, or appearance
- Isolation when appointments and limited mobility reduce social time
- Frustration with repeated procedures that seem to hurt without progress

REFLECT on the situation

1. What non-physical sign tells you healing is affecting Mrs. M.’s quality of life?

Non-physical sign: She is avoiding social activities and sleeping in a chair, showing isolation and anxiety.

2. List one small action during a dressing change that could lessen her fear.

Pre-medicate for pain and explain each step while using a gentle, non-adherent dressing to minimize trauma.

CONNECT to the science

3. Which of the four wound-healing stages do you think her ulcer is in today (hemostasis, inflammation, proliferation, or remodeling)? Why?

Stage: Inflammation. Reason: The wound “looks angry,” has pain, and has not begun obvious granulation.

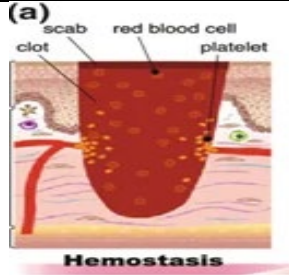
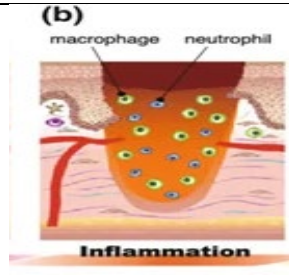
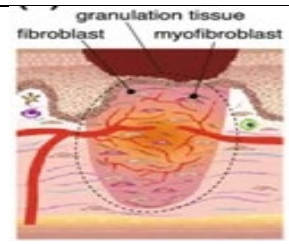
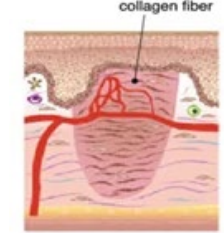
4. Write one sentence you could say to explain the next stage her wound should enter.

If we keep the infection away and pressure off, your wound should enter the proliferation stage, where new pink tissue fills in and the edges start to close

SHARE your thoughts with a peer.

Introduction to the Four Stages of Wound Healing

Wound healing follows a predictable path with four overlapping stages. Knowing what should happen helps you spot normal progress and catch problems early.

	Description of Stage	Image of Stage
1	Hemostasis: Bleeding stops in minutes. Within minutes, the wound surface seals. Platelets stick to exposed collagen and form a clot/scab packed with red blood cells. This plug stops bleeding and traps growth factors that call in immune cells.	
2	Inflammation: First the neutrophils come in, which kill bacteria and digest debris. They are soon joined and replaced by macrophages , expert “clean-up” cells that also release cytokines to launch the next phase. Redness, heat, swelling, and pain are expected.	
3	Proliferation: Fibroblasts lay down new collagen and proteoglycans. Capillaries sprout, forming bright-pink granulation tissue. Myofibroblasts pull wound edges together, and epithelial cells crawl over the surface.	
4	Remodeling: Collagen III is replaced by stronger collagen I. Vessels regress, the scar flattens, and tensile strength rises, yet rarely exceeds 80% of uninjured skin. The scaffold of weaker collagen III is gradually replaced by stronger collagen fibers (mostly type I). Vascularity fades, the scar flattens, and tensile strength climbs, though it seldom exceeds 80% of uninjured skin.	

Kawasumi, A., Sagawa, N., Hayashi, S., Yokoyama, H., & Tamura, K. (2012). Wound healing in mammals and amphibians: Toward limb regeneration in mammals. In *Current Topics in Microbiology and Immunology* (pp. 33–49). Berlin, Heidelberg: Springer Berlin Heidelberg.

Lesson Three – Wound Healing Process

LEARN: Wound Healing Stages

10 minutes

Purpose:

Students receive a clear, stage-by-stage review of wound healing, practice stage recognition on the simulator, and relate nutrition, comorbidities, and medications to healing speed.

Materials:

- *Lesson 3* slide presentation
- Wound Care Simulator (with appropriate wound modules)
- *Wound Stage Reference Poster* (one per table)
- Sterile gloves (1 pair per learner)
- Sterile rulers
- Cotton-tipped probes
- Alcohol swabs for tool cleanup
- Sticky notes to label wound stages on the torso

Facilitation Steps:

Share the following information as you show the slide presentation. Put the simulator where the class can see each wound module. Let students know they will name the four wound-healing stages and spot normal versus delayed healing cues.

Slide 1: Intro slide

Slide 2: Why Wound Healing Stages Matter

Slide 3: Stage 1: Hemostasis

Bleeding stops within minutes. Platelets stick to exposed collagen and form a fibrin clot. The clot traps growth factors that summon immune cells and seals vessels to prevent further blood loss.

Slide 4: Stage 2: Inflammation

Neutrophils arrive first to kill bacteria and digest debris. Macrophages follow to continue cleanup and release cytokines that launch repair. Normal signs are redness, warmth, swelling, and mild pain for up to five days.

Slide 5: Stage 3: Proliferation

Fibroblasts build pink granulation tissue. Capillaries sprout to deliver oxygen and nutrients. Myofibroblasts pull wound edges together, while epithelial cells crawl across the surface.

Slide 6: Stage 4: Remodeling

Collagen III is replaced by stronger collagen I. Vessels regress, the scar flattens, and tensile strength climbs toward 80 percent of unwounded skin over months. Scar massage and mobilization help fibers align.

Slide 7: Nutrition Heals

Adequate protein drives collagen synthesis. Vitamin C cross-links collagen. Zinc supports cell division. Hydration maintains perfusion. Malnutrition lengthens every stage.

Slide 8: Comorbidities and Medications

Uncontrolled diabetes, vascular disease, steroids, and cytotoxic drugs delay inflammation resolution and collagen deposition. Smoking reduces tissue oxygen by 15 percent.

Ask: Which patient in your care fits one of these risk groups?

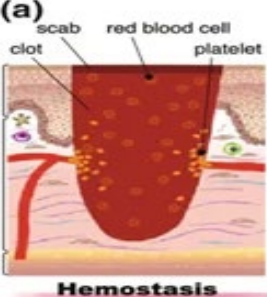
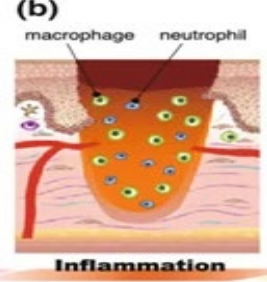
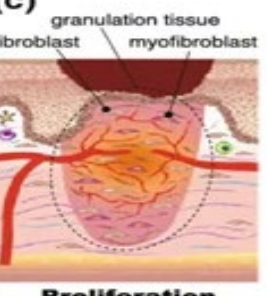
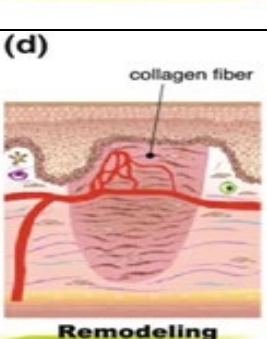
Slide 9: When Healing Slows

Slide 10: Simulator Practice Directions

Glove up. Move to each wound module, measure length/width/depth with the ruler and probe, and place a color-coded sticky note showing the stage you believe it is in.

Slide 11: Questions

Wound Stage Reference Poster

Stages	What You Should See and Do	
1. Hemostasis	 Hemostasis	- First minutes to hours - Fresh clot, red-brown scab - No drainage after clot forms - You protect the clot, avoid re-bleeding - Red Flag → persistent oozing or large swell
2. Inflammation	 Inflammation	- Day 1-5 - Red halo, mild heat, light serous fluid - Normal pain that eases each day - You clean gently, keep moist, control edema - Red Flag → foul odor, purulent exudate, spreading erythema > 2 cm
3. Proliferation	 Proliferation	- Day 6-21 - Bright-pink “bumpy” granulation tissue - Minimal serosanguinous fluid - Wound edges contract, new epithelial rim - You support with moisture-balance dressing - Red Flag → dark granulation, friable bleed, tunnelling or increased size
4. Remodeling	 Remodeling	- Week 3 to 12+ - Flat, pale-pink scar progresses to light tan - No drainage, no heat - Tensile strength climbs toward 80% - You protect from shear, massage if ordered - Red-Flag → re-opening, hypertrophic ridge, keloid itch or pain

Lesson Three – Wound Healing Process

REVIEW: Practice and Knowledge-Check of Wound Healing

10 minutes

Purpose:

Learners prove they can spot the correct healing stage on real-feel wounds, measure and record length $\times$ width $\times$ depth with accuracy and answer five rapid-fire questions that test stage facts and healing factors.

Materials:

- Wound Care Simulator with 4 pre-set healing-stage wounds
- Sterile rulers
- Cotton-tipped probes
- Sticky dots (green = normal sign, red = red flag)
- Clipboard for each learner
- Timer
- *Wound Stage Check-Off* worksheet
- *Wound Healing Quiz*
- *Wound Healing Quiz – Answer Key*

Facilitation Steps:

1. Distribute the *Wound Stage Check-Off* worksheet and a clipboard.
2. Explain that there are four marked stations around the simulator and learners are to move clockwise through the stations. They get one minute per station.

3. Start the timer and have learners inspect the wound, record the stage, and add $L \times W \times D$.
4. Before rotating, learners should place a green or red dot beside any sign they see.
5. Call “Switch” every minute until all four wounds are assessed.
6. Collect worksheets and distribute the *Wound Healing Quiz*, giving students time to complete it.
7. Project the answer key and have learners mark their own papers.
8. Ask: “Which stage or sign did you struggle with?” Gather two fast examples.
9. Pass back the check-off worksheet with brief verbal feedback on measurement accuracy.

Wound Stage Check-Off

1. Visual Inspection

Item	Observation	Box ✓
Tissue color		☐
Exposed structures (bone, tendon)		☐
Slough or eschar present		☐
Undermining/tunneling		☐

2. Measure

Dimension	Record (cm)	Box ✓
Length		☐
Width		☐
Depth		☐

3. Stage Decision

Circle one and check the box when confident.

Stage I Stage II Stage III Stage IV Unstageable

Confirmed: ☐

4. Local Infection Signs

Sign	Present? (Y/N)	Box ✓
Redness extending >1 cm		☐
Heat		☐
Swelling		☐
Pain ↑		☐
Exudate change		☐

5. Systemic Red Flags

Fever > 38°C ☐ Tachycardia ☐ Chills ☐ Confusion ☐

If any red flags are present, report them now.

6. Learner Self-Check

I washed hands before and after assessment ☐

I kept tools sterile ☐

I documented within 2 mm accuracy ☐

Name: _____ Class: _____

Wound Healing Quiz

1. Which list shows the wound-healing stages in their correct order?
 - a. Inflammation → Hemostasis → Remodeling → Proliferation
 - b. Hemostasis → Inflammation → Proliferation → Remodeling
 - c. Proliferation → Inflammation → Hemostasis → Remodeling
 - d. Inflammation → Proliferation → Remodeling → Hemostasis
2. Hemostasis normally lasts:
 - a. Seconds to minutes
 - b. 6-12 hours
 - c. 2-5 days
 - d. 7-21 days
3. Bright pink, “bumpy” granulation tissue first appears during the:
 - a. Hemostasis stage
 - b. Inflammation stage
 - c. Proliferation stage
 - d. Remodeling stage
4. Which finding **most** suggests the wound is moving from proliferation into remodeling?
 - a. Serous drainage increases
 - b. Edges pull together and the surface becomes pale and flat
 - c. Heat and swelling peak around the wound
 - d. Darker granulation tissue develops with easy bleeding
5. Which pair correctly matches a factor and its usual effect on healing speed?
 - a. Adequate protein – Delays healing
 - b. Uncontrolled diabetes – Speeds healing
 - c. Smoking – Delays healing
 - d. Moist wound surface – Delays epithelialization
6. A red halo that spreads more than 2 cm beyond the wound edge on day 4 is **best** classified as:
 - a. Normal inflammatory response
 - b. Sign of proliferative overgrowth
 - c. Potential infection red flag
 - d. Early remodeling color change
7. In the remodeling stage, tensile strength of the scar typically plateaus at about:
 - a. 40% of normal skin strength
 - b. 60% of normal skin strength
 - c. 80% of normal skin strength
 - d. 100% of normal skin strength

8. Which of the following medications are **most** likely to slow collagen formation?
 - a. High-dose corticosteroids
 - b. Short-course antibiotics
 - c. Oral antihistamines
 - d. Acetaminophen (paracetamol)
9. Select the dressing principle that **best** supports the proliferation stage.
 - a. Keep the wound as dry as possible to prevent maceration
 - b. Maintain a moist environment to promote fibroblast activity
 - c. Pack tightly with dry gauze to absorb exudate and compress tissue
 - d. Leave uncovered so epithelial cells receive maximum oxygen
10. A patient's incision is three weeks old. Which single observation below would prompt immediate provider notification?
 - a. Fine, closed epithelial line that is pale pink
 - b. Itching at the scar with no drainage
 - c. Sudden separation of 1 cm at center with serosanguinous fluid
 - d. Flat, flexible scar that blanches with gentle pressure

Wound Healing – Answer Key

1. Which list shows the wound-healing stages in their correct order?
 - a. Inflammation → Hemostasis → Remodeling → Proliferation
 - b. Hemostasis → Inflammation → Proliferation → Remodeling**
 - c. Proliferation → Inflammation → Hemostasis → Remodeling
 - d. Inflammation → Proliferation → Remodeling → Hemostasis
2. Hemostasis normally lasts:
 - a. Seconds to minutes**
 - b. 6-12 hours
 - c. 2-5 days
 - d. 7-21 days
3. Bright pink, “bumpy” granulation tissue first appears during the:
 - a. Hemostasis stage
 - b. Inflammation stage
 - c. Proliferation stage**
 - d. Remodeling stage
4. Which finding **most** suggests the wound is moving from proliferation into remodeling?
 - a. Serous drainage increases
 - b. Edges pull together and the surface becomes pale and flat**
 - c. Heat and swelling peak around the wound
 - d. Darker granulation tissue develops with easy bleeding
5. Which pair correctly matches a factor and its usual effect on healing speed?
 - a. Adequate protein – Delays healing
 - b. Uncontrolled diabetes – Speeds healing
 - c. Smoking – Delays healing**
 - d. Moist wound surface – Delays epithelialization
6. A red halo that spreads more than 2 cm beyond the wound edge on day 4 is **best** classified as:
 - a. Normal inflammatory response
 - b. Sign of proliferative overgrowth
 - c. Potential infection red flag**
 - d. Early remodeling color change
7. In the remodeling stage, tensile strength of the scar typically plateaus at about:
 - a. 40% of normal skin strength
 - b. 60% of normal skin strength
 - c. 80% of normal skin strength**
 - d. 100% of normal skin strength

8. Which of the following medications are **most** likely to slow collagen formation?
- a. **High-dose corticosteroids**
 - b. Short-course antibiotics
 - c. Oral antihistamines
 - d. Acetaminophen (paracetamol)
9. Select the dressing principle that **best** supports the proliferation stage.
- a. Keep the wound as dry as possible to prevent maceration
 - b. **Maintain a moist environment to promote fibroblast activity**
 - c. Pack tightly with dry gauze to absorb exudate and compress tissue
 - d. Leave uncovered so epithelial cells receive maximum oxygen
10. A patient's incision is three weeks old. Which single observation below would prompt immediate provider notification?
- a. Fine, closed epithelial line that is pale pink
 - b. Itching at the scar with no drainage
 - c. **Sudden separation of 1 cm at center with serosanguinous fluid**
 - d. Flat, flexible scar that blanches with gentle pressure

Sources

1. Wallace, H. A., Basehore, B. M., & Zito, P. M. (2025). Wound healing phases. In *StatPearls*. Treasure Island (FL): StatPearls Publishing.
2. Leonard, C., DO, & MHI. (2020). Four Stages of Wound Healing. Retrieved May 12, 2025, from Vohra Wound Care website: <https://cert.vohrawoundcare.com/the-four-stages-of-wound-healing-an-updated-overview-for-clinicians/>
3. Kawasumi, A., Sagawa, N., Hayashi, S., Yokoyama, H., & Tamura, K. (2012). Wound healing in mammals and amphibians: Toward limb regeneration in mammals. In *Current Topics in Microbiology and Immunology* (pp. 33–49). Berlin, Heidelberg: Springer Berlin Heidelberg.
4. Bechara, N., Flood, V. M., & Gunton, J. E. (2022). A systematic review on the role of vitamin C in tissue healing. *Antioxidants (Basel, Switzerland)*, 11(8), 1605. doi:10.3390/antiox11081605
5. Seth, I., Lim, B., Cevik, J., Gracias, D., Chua, M., Kenney, P. S., ... Cuomo, R. (2024). Impact of nutrition on skin wound healing and aesthetic outcomes: A comprehensive narrative review. *JPRAS Open*, 39, 291–302. doi:10.1016/j.jpra.2024.01.006
6. Fan Chiang, Y.-H., Lee, Y.-W., Lam, F., Liao, C.-C., Chang, C.-C., & Lin, C.-S. (2023). Smoking increases the risk of postoperative wound complications: A propensity score-matched cohort study. *International Wound Journal*, 20(2), 391–402. doi:10.1111/iwj.13887
7. McDaniel, J. C., & Browning, K. K. (2014). Smoking, chronic wound healing, and implications for evidence-based practice. *Journal of Wound, Ostomy, and Continence Nursing*, 41(5), 415–423; quiz E1-2. doi:10.1097/WON.0000000000000057
8. Stevens, D. L., Bisno, A. L., Chambers, H. F., Dellinger, E. P., Goldstein, E. J. C., Gorbach, S. L., ... Wade, J. C. (2014). Practice guidelines for the diagnosis and management of skin and soft tissue infections: 2014 update by the infectious diseases society of America. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 59(2), 147–159. doi:10.1093/cid/ciu296
9. Swanson, T., Angel, D., Sussman, G., Cooper, R., Haesler, E., Ousey, K., ... & Call, E. (2016). Wound infection in clinical practice: principles of best practice. <https://woundinfection-institute.com/wp-content/uploads/IWII-CD-2022-web-1.pdf>
10. Zabaglo, M., Leslie, S. W., & Sharman, T. (2025). Postoperative wound infections. In *StatPearls*. Treasure Island (FL): StatPearls Publishing.
11. Schultz, G. S., Chin, G. A., Moldawer, L., & Diegelmann, R. F. (2011). Principles of wound healing. In *Mechanisms of Vascular Disease: A Reference Book for Vascular Specialists*. Adelaide (AU): University of Adelaide Press.
12. Wallace, H. A., Basehore, B. M., & Zito, P. M. (2025). Wound healing phases. In *StatPearls*. Treasure Island (FL): StatPearls Publishing.

Lesson Four – Wound Care Techniques and Dressing Selection

Lesson Overview

In this lesson, students learn how to clean wounds, choose an appropriate dressing, and apply it correctly on the Wound Care Simulator. Emphasis is placed on matching dressing function to wound characteristics and practicing aseptic technique while changing dressings.

Lesson Objectives

After completing this lesson, participants will be able to:

- List the five key goals of wound dressing (moisture balance, protection, insulation, exudate control, patient comfort)
- Differentiate at least five common dressing categories (gauze, hydrocolloid, foam, alginate, antimicrobial)
- Select the most appropriate dressing for a given wound type and healing stage
- Demonstrate correct sterile technique when cleaning, packing, and covering a simulated wound
- Document the dressing change in the patient record, including exudate amount and tissue appearance

Lesson at a Glance

Activity	Materials	Preparation	Approximate Class Time
FOCUS	• Zipper bags (1 per participant) • Dressings for each zipper bag: gauze pad, hydrocolloid wafer, foam square, alginate rope, and silver-impregnated antimicrobial pad • Timer • <i>Introduction to Wound Dressing</i> worksheet • <i>Introduction to Wound Dressing</i> – Answer Key	1. Place each dressing in a zipper bag and number the bags one through five with all the gauze pad bags numbered “1”, all the hydrocolloid wafers numbered “2”, etc. 2. Print/photocopy the <i>Introduction to Wound Dressing</i> worksheet. 3. Access the answer key.	10 minutes
LEARN	• Wound Care Simulator • Pressure sore, laceration, and burn wound modules • Sterile gloves (1 pair per participant) • Sterile normal saline • 4 x 4 gauze • Cotton-tipped applicators • <i>Lesson 4</i> slide presentation • Dressing sample board (gauze, transparent film, hydrocolloid, foam, alginate/hydrofiber, hydrogel, silver foam)	1. Prepare presentation for viewing. 2. Prime the burn module for light serous exudate and pressure sore for mod seropurulent. 3. Set supply table with all dressing types.	25 minutes

Wound Care Curriculum

REVIEW	• Wound Care Simulator • Pressure sore, laceration, and burn wound modules • Dressing supply cart stocked with sterile gauze, hydrocolloid wafers, foam square, alignate ropes, silver/antimicrobial pods, transparent films, tape, ABD pads • Sterile saline • Irrigation syringes • Sterile gloves (2 pairs per participant) • Sterile forceps • Cotton-tipped applicators • Timer • Clipboards • Alcohol hand-rub • Sharps container • <i>Clean-Pack-Cover</i> worksheet • <i>Clean-Pack-Cover</i> – Instructor Resource • <i>Wound Dressing Selection Quiz</i> • <i>Wound Dressing Selection Quiz</i> – Answer Key	1. Print/photocopy the <i>Clean-Pack-Cover</i> worksheet and <i>Wound Dressing Selection Quiz</i> (one of each per participant). 2. Access the answer key and instructor resource. 3. Clear tables for testing.	10 minutes
--------	---	---	------------

Note: For FOCUS and REVIEW you may have students complete both or just one of the two activities. FOCUS may also be assigned before class.

Lesson Four – Wound Care Techniques and Dressing Selection

FOCUS: Getting to Know Your Dressings

10 minutes

Purpose:

Activate prior knowledge and stimulate curiosity. Working individually, learners use sight and touch to identify five common dressing categories and infer the purpose of each, setting the stage for deeper learning in the next part of the lesson.

Materials:

- *Introduction to Wound Dressing* worksheet
- Numbered zipper bags with dressings in them
- *Introduction to Wound Dressing – Answer Key*
- Timer

Facilitation Steps:

1. Distribute one sealed bag and the worksheet to every student as they enter.
2. Explain the challenge. Without opening the bags, students should examine each dressing through feel and appearance. They are to record on their worksheet the likely category (gauze, hydrocolloid, etc.) and one key purpose (e.g., high exudate absorption). They have six minutes to complete the worksheet.
3. Start the timer, giving a three-minute warning halfway through the activity.
4. Circulate, prompting with questions such as, “What makes 4 different from 1?”
5. Call “Time!” and project/read the answer key. For each item, briefly state how its structure links to function (e.g., Alginate becomes great for packing a tunneling ulcer).
6. Ask two rapid-fire reflection questions:
 - a. Which dressing surprised you most and why?
 - b. Where might using that dressing not be appropriate?
7. Note two responses on the board to segue into the next section of the lesson.

Name: _____ Class: _____

Introduction to Wound Dressing

READ the following:

The ideal wound dressing meets five key goals:

1. Moisture Balance: Keeps the wound bed moist but the surrounding skin dry.
2. Protection: Shields the tissue from trauma, contaminants, and temperature swings.
3. Insulation: Maintains a warm environment that speeds cellular activity.
4. Exudate Control: Absorbs (or donates) fluid to prevent maceration or desiccation.
5. Patient Comfort: Minimizes pain, odor, and the number of dressing changes.

Choosing a dressing starts with three questions:

1. What does the wound need right now?
2. What will protect the periwound skin?
3. What can this patient tolerate and manage?

The main dressing categories are gauze, transparent films, hydrocolloids, foams, alginates/hydrofibers, hydrogel sheets or amorphous gels, and antimicrobial/impregnated products (e.g., silver, honey). No single product is “best.” Selection depends on wound depth, drainage amount, infection risk, and cost-to-benefit for the patient.

REFLECT on the information above.

1. List two reasons a moist wound environment is better than a dry scab.
2. Your patient has a shallow ulcer producing heavy serous drainage. Which dressing category would likely manage the fluid best, and why?
3. Identify one patient-centered factor (not wound-centered) that could influence dressing choice.
4. What sign tells you a dressing has become saturated and must be changed?
5. Write one question you still have about dressing selection:

SHARE your thoughts with a peer.

Introduction to Wound Dressing – Answer Key

READ the following:

The ideal wound dressing meets five key goals:

6. Moisture Balance: Keeps the wound bed moist but the surrounding skin dry.
7. Protection: Shields the tissue from trauma, contaminants, and temperature swings.
8. Insulation: Maintains a warm environment that speeds cellular activity.
9. Exudate Control: Absorbs (or donates) fluid to prevent maceration or desiccation.
10. Patient Comfort: Minimizes pain, odor, and the number of dressing changes.

Choosing a dressing starts with three questions:

4. What does the wound need right now?
5. What will protect the periwound skin?
6. What can this patient tolerate and manage?

The main dressing categories are gauze, transparent films, hydrocolloids, foams, alginates/hydrofibers, hydrogel sheets or amorphous gels, and antimicrobial/impregnated products (e.g., silver, honey). No single product is “best.” Selection depends on wound depth, drainage amount, infection risk, and cost-to-benefit for the patient.

REFLECT on the information above.

1. List two reasons a moist wound environment is better than a dry scab.

Moisture prevents desiccation and cell death, allowing keratinocytes to migrate more rapidly across the wound.

It reduces pain and scarring by limiting nerve-ending exposure and excessive inflammation.

Other valid points: decreases dressing-change trauma, supports growth-factor activity, lowers infection risk by maintaining an intact barrier.

2. Your patient has a shallow ulcer producing heavy serous drainage. Which dressing category would likely manage the fluid best, and why?

Foam or alginate/hydrofiber dressing because both have high absorptive capacity. A foam cushions and manages moderate-to-heavy exudate while maintaining moisture balance. An alginate/hydrofiber can absorb even heavier drainage and form a gel that conforms to the wound bed, preventing maceration of periwound skin.

3. Identify one patient-centered factor (not wound-centered) that could influence dressing choice.

Skin sensitivity/allergies (e.g., adhesive intolerance)

Financial/insurance coverage or product availability

Patient dexterity/ability to change the dressing at home

Pain tolerance (select atraumatic, non-adherent options)

Any reasonable factor focused on the individual rather than the wound alone is acceptable.

4. What sign tells you a dressing has become saturated and must be changed?

Visible “strike-through” or leakage onto the secondary layer/tape, dressing feels heavy or begins to lift, malodor/drainage on linens, or manufacturer’s timing limits reached (e.g., foam edges dark/wet).

5. Write one question you still have about dressing selection:

Lesson Four – Wound Care Techniques and Dressing Selection

LEARN: Slide Presentation

10 minutes

Purpose:

Participants receive a concise, practical overview of evidence-based cleaning/debridement methods and learn how to match dressing categories to specific wound needs and healing stages.

Materials:

- Wound Care Simulator with pressure-sore, laceration, burn modules in place
- Sterile gloves (1 pair per learner)
- Sterile normal saline
- 4 × 4 gauze
- Cotton-tipped applicators
- Dressing sample board (gauze, transparent film, hydrocolloid, foam, alginate/hydrofiber, hydrogel, silver foam)
- *Lesson 4* slide presentation

Facilitation Steps:

Share the following information as you show the slide presentation. Put the simulator where the class can see each wound module.

Slide 1: Intro Slide

Slide 2: Objectives

Today we will link wound assessment to action by selecting the correct dressing and applying it aseptically.

Slide 3: 5 Goals of Every Dressing

Keep these in mind during the demo.

Slide 4: Cleaning and Debridement Quick Guide

Cover gentle irrigation (saline 4-8 psi), mechanical versus autolytic debridement, and when to refer for sharp debridement.

Put on gloves. Using the burn module, flush with saline via 30-mL syringe and splash-shield. Learners should note technique.

Slide 5: Dressing Categories at a Glance

This table lists indications, absorption level, and wear time for six major categories.

Pass the dressing sample board around and ask: Which would you choose for heavy serous drainage?

Confirm alginate/hydrofiber answers.

Slide 6: Gauze and Films

Cheap and versatile versus moisture retention. Show when a film becomes a “windowpane” for a Stage I pressure injury.

Slide 7: Hydrocolloids and Foams

Show wafer and foam square. Discuss partial-thickness wounds and moderate exudate. Emphasize edge rolling with hydrocolloids on heels.

Slide 8: Alginates and Hydrofibers

Think seaweed ropes that turn to gel. Stress need for secondary cover dressing.

Slide 9: Hydrogels

Demonstrate adding gel to the dry laceration module. Mention pain reduction for burns.

Slide 10: Antimicrobial/Impregnated Dressings

Show the silver foam. Explain bioburden control and when to limit use (no routine prophylaxis).

Slide 11: Interactive Scenario

Teams of students should write the ideal clean-pack-cover plan on sticky notes and post it under the image.

Slide 12: Rationale

Walk through recommended irrigation, cadexomer iodine gel, alginate fill, foam cover, and silicone border.

Slide 13: Pack and Cover

Using pressure-sore module, model spiral alginate packing (not tighter than a shoelace) and foam/silicone securement.

Wound Care Curriculum

Slide 14: Dressing Change Documentation

Highlight exudate color/amount, tissue types, periwound, and patient tolerance.

Slide 15: Common Errors and How to Avoid Them

Slide 16: Cost-Conscious Choices

Explain that students will now rotate through simulator stations to perform a full clean-pack-cover under supervision.

Lesson Four – Wound Care Techniques and Dressing Selection

REVIEW: Practice and Assessment

10 minutes

Purpose:

Learners apply sterile technique, choose an evidence-based dressing for three simulated wounds, and complete a short quiz to verify mastery.

Materials:

- *Clean-Pack-Cover* worksheet
- *Clean-Pack-Cover* – Instructor Resource
- *Wound Dressing Selection Quiz*
- *Wound Dressing Selection Quiz* – Answer Key
- Wound Care Simulator with pressure sore, laceration, and burn modules in place
- Dressing supply cart stocked with sterile gauze, hydrocolloid wafers, foam squares, alginate ropes, silver/antimicrobial pads, transparent films, tape, and ABD pads
- Sterile saline
- Irrigation syringes
- Sterile gloves (2 pairs per learner)
- Sterile forceps
- Cotton-tipped applicators
- Timer
- Clipboards
- Alcohol hand-rub
- Sharps container

Facilitation Steps:

1. Distribute the *Clean-Pack-Cover* worksheet and explain that it is a graded worksheet that mirrors clinical documentation
2. Using the answer key, model one complete dressing change on the burn module, narrating key points:
 - Clean (irrigate, pat dry) → Pack/Fill (if needed) → Cover (primary + secondary)
 - Maintain a no-touch sterile field
 - Verbally document exudate type/amount and tissue appearance

3. Pair students up to work on the pressure-sore and laceration modules. One student performs the dressing change while their partner scores each step on the *Clean-Pack-Cover* worksheet. Then, they switch roles.
4. Circulate, spot-check aseptic technique, and initial any critical-step corrections on the worksheets.
5. Distribute the *Wound Dressing Selection Quiz*. Learners should complete this individually.
6. Collect quizzes for grading or facilitate self-grading using the answer key.
7. Have students exchange worksheets, compare scored items, and identify one skill they will practice again in lab.
8. Ask: Which dressing did you pick for the pressure ulcer and why?

Reinforce correct moisture-balance rationale and clarify any misconceptions revealed by quiz results.

Clean-Pack-Cover

Critical Step		✓ Self	✓ Peer
PREPARATION			
1	Verified provider's dressing change order (type and frequency)		
2	Reviewed last assessment and pain level, pre-medicated if ordered		
3	Gathered correct dressing supplies and set up trash/sharps		
4	Performed hand hygiene before patient contact		
5	Introduced self; confirmed 2 patient identifiers , and explained procedure		
6	Raised bed and ensured lighting and privacy		
CLEAN			
7	Donned clean gloves, loosened tape, removed old dressing toward wound		
8	Assessed old dressing for drainage (amount, color, odor) and discarded		
9	Removed gloves, performed hand hygiene, and donned sterile gloves		
10	Irrigated wound with warm NS (4-8 psi) from center to edge		
11	Gently blotted peri-wound skin dry with sterile gauze		
12	Measured wound (L × W × D) and noted undermining/tunneling		
13	Collected culture before antibiotics if ordered		
PACK			
14	Selected packing material appropriate to wound depth/type		
15	Lightly packed wound (no over-stuffing), filled tunnels with applicator		
16	Protected peri-skin with barrier film/ointment		
COVER			
17	Chose primary dressing that maintains moisture balance		
18	Applied secondary dressing for absorption/fixation		
19	Secured with tape or wrap without tension or skin stripping		
20	Labeled dressing with date, time, and initials.		
POST-PROCEDURE			
21	Disposed of supplies and removed gloves safely		
22	Performed hand hygiene and returned bed/call-light		

Wound Care Curriculum

23	Documented wound appearance, exudate, dressing type, and patient tolerance		
Total			

Passing standard: All bold steps (7, 9, 10, 14, 17, 19, 21, 23) **must** be correct. Score 1 point per correct step (23 pts).

Student Signature: _____

Clean-Pack-Cover – Instructor Resource

Supplies Checklist

- Sterile 4 × 4 gauze
- Irrigation syringe and 0.9 % NaCl (room-temp)
- Packing options: alginate rope, hydrofiber, plain gauze
- Primary dressings: non-adherent contact layer, hydrocolloid wafer, foam
- Secondary: abdominal pad/conforming wrap/bordered foam
- Tape or bordered adhesive, skin prep/barrier wipe
- Measuring guide and cotton-tipped applicators
- Clean and sterile gloves, PPE as required
- Sharps container, biohazard trash

Evaluation Tips

- Emphasize “moist but not macerated” principle when selecting dressings
- Learner fails if contamination occurs after establishing sterile field
- Provide immediate coaching, then allow a repeat attempt if time permits

Name _____ Date _____

Wound Dressing Selection Quiz

1. A Stage II pressure injury presents with a pink, shallow wound bed and light serous exudate. Which dressing will best maintain a **moist environment** while protecting against shear?
 - a. Impregnated gauze
 - b. Hydrocolloid wafer
 - c. Calcium alginate rope
 - d. Dry cotton gauze
2. A tunneling abdominal wound is producing **moderate seropurulent drainage**. Which primary dressing is most appropriate to *fill the depth* and absorb exudate without adhering to the tunnel walls?
 - a. Hydrogel sheet
 - b. Alginate ribbon
 - c. Transparent film
 - d. Petroleum-impregnated gauze
3. When selecting a dressing for a partial-thickness burn (clean, low exudate) on the forearm, the priority goals are pain relief and moisture retention. Which option meets these goals with the **fewest dressing changes**?
 - a. Foam island dressing
 - b. Non-adherent contact layer and ABD pad
 - c. Hydrocolloid wafer
 - d. Gauze wrap soaked in saline
4. A wound shows clinical signs of critical colonization (increased exudate, stalled healing, bioburden on swab). Which dressing category provides **broad antimicrobial activity** while maintaining moisture balance?
 - a. Silver-impregnated foam
 - b. Hydrocolloid
 - c. Standard polyurethane film
 - d. Collagen/ORC matrix
5. Which statement about dressing choice is **correct**?
 - a. Transparent films are recommended for heavily draining wounds
 - b. Alginate dressings donate moisture to dry necrotic tissue
 - c. Foam dressings provide thermal insulation and absorb moderate exudate
 - d. Hydrocolloids should be removed and changed daily on intact skin tears

Wound Dressing Selection Quiz – Answer Key

1. A Stage II pressure injury presents with a pink, shallow wound bed and light serous exudate. Which dressing will best maintain a **moist environment** while protecting against shear?
 - a. Impregnated gauze
 - b. Hydrocolloid wafer**
 - c. Calcium alginate rope
 - d. Dry cotton gauze
2. A tunneling abdominal wound is producing **moderate seropurulent drainage**. Which primary dressing is most appropriate to *fill the depth* and absorb exudate without adhering to the tunnel walls?
 - a. Hydrogel sheet
 - b. Alginate ribbon**
 - c. Transparent film
 - d. Petroleum-impregnated gauze
3. When selecting a dressing for a partial-thickness burn (clean, low exudate) on the forearm, the priority goals are pain relief and moisture retention. Which option meets these goals with the **fewest dressing changes**?
 - a. Foam island dressing
 - b. Non-adherent contact layer and ABD pad
 - c. Hydrocolloid wafer**
 - d. Gauze wrap soaked in saline
4. A wound shows clinical signs of critical colonization (increased exudate, stalled healing, bioburden on swab). Which dressing category provides **broad antimicrobial activity** while maintaining moisture balance?
 - a. Silver-impregnated foam**
 - b. Hydrocolloid
 - c. Standard polyurethane film
 - d. Collagen/ORC matrix
5. Which statement about dressing choice is **correct**?
 - a. Transparent films are recommended for heavily draining wounds
 - b. Alginate dressings donate moisture to dry necrotic tissue
 - c. Foam dressings provide thermal insulation and absorb moderate exudate**
 - d. Hydrocolloids should be removed and changed daily on intact skin tears

Sources

1. Britto, E. J., Nezwiek, T. A., Popowicz, P., & Robins, M. (2025). Wound dressings. In *StatPearls*. Treasure Island (FL): StatPearls Publishing.
2. Cutting, K., White, R., & Hoekstra, H. (2009). Topical silver-impregnated dressings and the importance of the dressing technology. *International Wound Journal*, 6(5), 396–402. doi:10.1111/j.1742-481x.2009.00635.x
3. Gardezi, M., Roque, D., Barber, D., Spake, C. S. L., Glasser, J., Berns, E., . . . Garcia, D. R. (2021). Wound irrigation in orthopedic open fractures: A review. *Surgical Infections*, 22(3), 245–252. doi:10.1089/sur.2020.075
4. Gefen, A., Alves, P., Beeckman, D., Cullen, B., Lázaro-Martínez, J. L., Lev-Tov, H., . . . Nygren, E. (2024). Fluid handling by foam wound dressings: From engineering theory to advanced laboratory performance evaluations. *International Wound Journal*, 21(2), e14674. doi:10.1111/iwj.14674
5. Leaper, D. (2012). Appropriate use of silver dressings in wounds: International consensus document. *International Wound Journal*, 9(5), 461–464. doi:10.1111/j.1742-481x.2012.01091.x
6. Lin, Y.-S., Chen, J., Li, Q., & Pan, K.-P. (2009). Moisture vapor transmission rates of various transparent dressings at different temperatures and humidities. *Chinese Medical Journal*, 122(8), 927–930. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/19493416/>
7. Nguyen, N., Dulai, A. S., Adnan, S., Khan, Z.-E.-H., & Sivamani, R. K. (2025). Narrative review of the use of hydrocolloids in dermatology: Applications and benefits. *Journal of Clinical Medicine*, 14(4), 1345. doi:10.3390/jcm14041345
8. Sood, A., Granick, M. S., & Tomaselli, N. L. (2014). Wound dressings and comparative effectiveness data. *Advances in Wound Care*, 3(8), 511–529. doi:10.1089/wound.2012.0401
9. Thomas, S. (2008). Hydrocolloid dressings in the management of acute wounds: a review of the literature. *International Wound Journal*, 5(5), 602–613. doi:10.1111/j.1742-481X.2008.00541.x
10. Vowden, K., & Vowden, P. (2014). Wound dressings: principles and practice. *Surgery*, 32(9), 462–467. doi:10.1016/j.mpsur.2014.07.001
11. Winner Medical. (2022). How to Use Alginate Wound Dressing. Retrieved May 12, 2025, from Winnermedical.com website: https://www.winnermedical.com/how-to-use-alginate-wound-dressing.html?utm_source=chatgpt.com
12. WoundSource Editors. (2021). Wound Dressing Options for Moisture Balance. Retrieved May 12, 2025, from Woundsource.com website: <https://www.woundsource.com/blog/wound-dressing-options-achieving-moisture-balance>