INTEGUMENTARY · PERIOPERATIVE · INFECTION CONTROL

Wound *Care*

A high-yield visual review of wound classification, healing phases, dressing technique, drain management and priority safety rules — aligned to the NGN NCLEX 2026 Test Plan and the NCSBN Clinical Judgment Measurement Model.

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HIGH-YIELD FACTS
NGN NCLEX · 2026
REVIEW CARD · WOUND CARE

Day 7	*1 in*	*Inside →Out*	*Dark · Warm · Moist*
SUTURE REMOVAL	ADVANCE PENROSE	CLEANSING FLOW	BACTERIAL TRIAD

01 — Definition & Overview

WOUND VOCABULARY

Disrupted tissue integrity demands *meticulous, sterile, and stepwise* nursing care.

A **wound** is any break in the integrity of skin or underlying tissue. Nursing priorities center on three goals: **protect from infection**, **promote healing**, and **preserve function**.

Healing is threatened anywhere bacteria can thrive — in **dark, warm, moist** spaces. Every dressing, drain, and cleansing decision is really a decision to eliminate those three conditions.

Contusion — **A bruise** — closed, internal injury from blunt force. No skin break.

Laceration — **A cut** — open wound with torn/jagged tissue edges.

Wound care questions test **sequence**, **direction**, *and* **technique** *— not just anatomy.*

Debridement — **Removal of necrotic tissue** from a wound bed — required for healing.

02 — Pathophysiology — Phases of Wound Healing

SIMPLIFIED MECHANISM

Phase 01
Hemostasis
Vasoconstriction → platelet plug → clot formation. **Bleeding stops within minutes.**

Phase 02
Inflammation
Redness, warmth, swelling & pain. WBCs clear debris. **Lasts 1–4 days.**

Phase 03
Proliferation
Granulation tissue forms, wound contracts & epithelializes. **4 days–3 weeks.**

Phase 04
Remodeling
Collagen reorganizes; scar matures & strengthens. **Weeks to 2 years.**

TYPE I
First Intention
Clean surgical incision with approximated edges. Minimal tissue loss, fastest healing, minimal scar.

Edges held by sutures or steri-strips

TYPE II
Second Intention
Wound left open — pressure injuries, dehisced incisions, infected wounds. Larger scar, longer course.

Heals by granulation from the bottom up

TYPE III
Third Intention / Delayed Primary
Wound left open temporarily (for drainage/infection control), then surgically closed later.

Combines granulation + sutured closure

03 — Signs & Symptoms

HEALING VS. COMPLICATION

✅ Healthy Healing

🚨 RED FLAGS — Infection & Complication

- **Red, beefy granulation tissue** in the wound bed
- Wound **edges approximated**, intact sutures/steri-strips
- **Mild serous drainage** (clear/pale yellow) that decreases daily
- Decreasing redness, warmth, and swelling after day 3–5
- Pain trending down; **patient afebrile**
- WBC count returning to normal range

- **Purulent drainage** (yellow / green / foul-smelling)
- Increased **redness, warmth, induration** around wound
- **Fever > 100.4°F (38°C)** & elevated WBCs
- **Dehiscence** — wound edges separate
- **Evisceration** — viscera protrude 🚨 *surgical emergency*
- **Sudden "popping" sensation** or gush of drainage (suspect dehiscence)
- Saturated dressing → bacteria wick inward via **capillary action**

If **evisceration** occurs: cover with **sterile saline-moistened gauze**, low-Fowler's with knees bent, NPO, call surgeon STAT. *Do not push organs back in.*

04 — Priority Nursing Interventions

ABC · SAFETY · ASEPSIS

A	B	C	S
Airway — evisceration = NPO	Bleeding — pressure first	Circulation / perfusion to wound	Sterile technique & safety

DRESSING CHANGE — PRIORITY SEQUENCE `in order`

1. **REMOVE CONTAMINATED DRESSING WITH CLEAN GLOVES**
   Pull tape **toward the wound** to protect fragile skin and prevent dehiscence.
2. **WASH HANDS & APPLY STERILE GLOVES**
   This is the very **first action after removing a contaminated dressing** — before touching the wound.
3. **CLEANSE FROM INCISION OUTWARD**
   Start **at the incision** and move **outward in concentric circles** — clean to dirty, one stroke per gauze.

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APPLY PROTECTANT → FRESH STERILE DRESSING

Tincture of benzoin is applied to surrounding skin **before tape** to protect skin and improve adhesion.

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DOCUMENT & AVOID MEALTIME CHANGES

Mealtime is a **bad time** to change dressings — odors and sights decrease appetite.

WOUND CLEANSING & IRRIGATION `direction matters`

- **Clean → dirty:** start at incision, move outward
- Use a **new gauze for each stroke** — never retrace
- Irrigate with 0.9% normal saline at **low pressure** (avoid driving bacteria deeper)
- Patient positioned so fluid **flows from clean area into a collection basin**
- Document wound bed color, drainage, odor, size & tissue type

OPEN-TO-AIR RULE `when appropriate`

- Leaving a wound open to air **decreases infection**
- It eliminates the bacterial triad: **dark, warm, and moist**
- Appropriate for clean, dry, granulating wounds — not exudating or draining wounds
- For protected wounds, an **occlusive dressing** creates an **airtight, watertight seal** that blocks microbes from entering

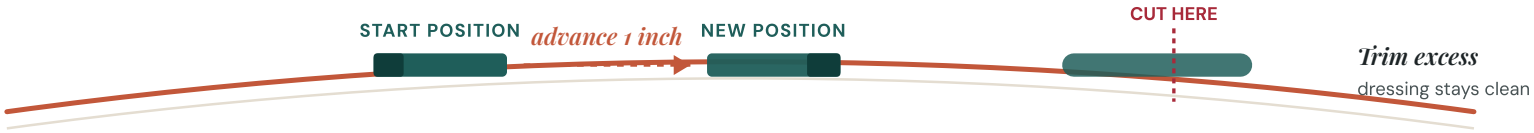
MONTGOMERY STRAPS `frequent dressing changes`

- Let the nurse **remove and replace dressings without tape**
- **Protects skin** from repeated tape trauma
- Ideal for abdominal wounds, drains, and large exuding wounds that need daily care
- Tie ends together over the dressing; retie for each change

SUTURES & STAPLES `timing`

- **Sutures are generally removed by day 7**
- Facial sutures: earlier (3–5 days) to minimize scarring
- Joint / high-tension areas: later (10–14 days)
- Assess approximation before removal — if edges gap, notify HCP

WOUND DRAINS & THE PENROSE PULL `advance 1 inch`



Penrose drain · soft, passive, radiopaque rubber tube

PULL OUT 1 INCH · CUT THE EXCESS · NEVER ADVANCE WITHOUT ORDER

05 — Pharmacology & Topical Agents

HIGH-YIELD PRODUCTS

TINCTURE OF BENZOIN `skin protectant`

Use: applied to intact skin **before tape** to protect and improve adhesion.

- Allow to **dry fully** before applying tape
- Keep **off the wound bed itself**
- Assess for skin sensitivity / allergy

0.9% NORMAL SALINE `irrigant of choice`

Use: cleansing and irrigation — isotonic, non-cytotoxic to granulating tissue.

- Used at **low pressure** to avoid tissue damage
- Warm to room temperature for comfort and vasodilation
- Preferred over antiseptics, which can impair granulation

TOPICAL ANTIMICROBIALS `infected wounds`

Examples: silver sulfadiazine, bacitracin, mupirocin.

- Apply using **sterile technique**
- Thin layer — not packed into the wound
- Monitor for **hypersensitivity** & signs of systemic absorption (esp. large wounds)

06 — NCLEX Test Traps

WHERE STUDENTS LOSE POINTS

⚠ **Trap #1 — Tape direction.** Many students pull tape *away* from the wound, thinking it is gentler. It is not.

~~Pull tape away from wound~~ → Pull tape TOWARD the wound — protects skin and suture line.

⚠ **Trap #2 — Cleansing direction.** The stem may bait you with "sterile site first."

~~Clean from outer skin toward incision~~ → Always clean FROM the incision OUTWARD (clean → dirty).

⚠ **Trap #3 — First action after removing a contaminated dressing.** The test loves "what first."

~~Inspect wound / call HCP / document~~ → WASH HANDS and apply STERILE GLOVES first.

⚠ **Trap #4 — Penrose drain management.** Distractors suggest leaving the whole drain in place or removing it entirely.

~~Remove drain completely / leave untouched~~ → Advance 1 inch, then cut off the excess.

⚠ **Trap #5 — Saturated dressing assumption.** Students assume a saturated dressing is still a barrier.

~~"It's a dressing, so it is protecting the wound"~~ → Saturation allows bacteria to reach the wound via CAPILLARY ACTION — change immediately.

⚠ **Trap #6 — Contusion vs. laceration.** Easy confusion on terminology items.

Contusion = bruise (closed) · Laceration = cut (open)

07 — Patient Education

HOME & DISCHARGE TEACHING

HAND HYGIENE FIRST

Wash hands with soap & water before and after every dressing change. Keep supplies on a clean, flat surface.

WATCH FOR INFECTION

Report redness spreading beyond wound edges, purulent drainage, foul odor, fever > 100.4°F, or increasing pain.

KEEP THE WOUND DRY (UNLESS ORDERED OTHERWISE)

Most surgical incisions stay covered 24–48 hours. Pat — do not rub — when showering is allowed.

NUTRITION PROMOTES HEALING

Encourage **protein, vitamin C, zinc, and adequate fluids**. Control blood sugar in diabetic patients.

DON'T PICK, PULL, OR SOAK

Do not pull off scabs, soak in a bathtub, or apply ointments/powders unless prescribed.

SPLINT & PROTECT

For abdominal/chest incisions, splint the wound with a pillow when coughing, sneezing, or moving — prevents dehiscence.

NO SMOKING

Nicotine causes vasoconstriction and slows wound healing dramatically.

KEEP APPOINTMENTS

Sutures typically come out **by day 7**. Do not skip follow-up — delayed removal causes tracking and scarring.

WHEN TO CALL 911

Sudden wound separation with visible organs (evisceration), heavy bleeding not controlled by pressure, or signs of sepsis.

08 — Memory Boosters & Mnemonics

PATTERN RECOGNITION

RYB Wound Bed Colors

A classic NCLEX color-coded wound assessment tool.

- ***R*** **Red** — healthy granulation. Gently cleanse & cover.
- ***Y*** **Yellow** — slough & exudate. Cleanse and absorb drainage.
- ***B*** **Black** — eschar / necrotic. **Debride** (usually).

TIME Wound bed prep

Framework for wound assessment & prep for healing.

- ***T*** **Tissue** — viable? Debride if necrotic.
- ***I*** **Infection / inflammation** — identify & treat.
- ***M*** **Moisture balance** — neither too wet nor too dry.
- ***E*** **Edges** — non-advancing or undermined? Reassess.

DAMP What bacteria love

Conditions we *eliminate* by open-to-air / occlusive technique.

- ***D*** **Dark** — no light
- ***A*** **Airless** — limited oxygen
- ***M*** **Moist** — fluid buildup
- ***P*** **Warm (temP)** — body heat

CLEAN Dressing priorities

Order-of-operations reminder.

- ***C*** **Contaminated dressing off** with clean gloves
- ***L*** **Lather** hands, don sterile gloves
- ***E*** **Examine** wound — color, drainage, edges
- ***A*** **Apply** saline cleansing **inside→outside**
- ***N*** **New** sterile dressing → document

Quick-recall pairs → **Contusion = bruise** · **Laceration = cut** · **Debridement = dead tissue out** *Inside → Outside · Clean → Dirty*

09 — Clinical Judgment — NCJMM Applied

NGN · LAYERED THINKING

A 62-year-old post-op day 4 abdominal surgery patient

Case applied through the NCSBN Clinical Judgment Measurement Model.

Scenario · *The patient reports a sudden "popping" sensation after coughing. The abdominal dressing is now saturated with serosanguinous fluid. Vital signs: HR 108, BP 118/74, RR 22, T 99.8°F. The wound bed is visible through separated skin edges.*

RECOGNIZE CUES

See

Popping sensation, saturated dressing, serosanguinous drainage, tachycardia, visible wound separation → signs of **dehiscence**.

ANALYZE / PRIORITIZE

Think

Risk of progression to **evisceration**; saturated dressing = infection risk by **capillary action**. Safety & sterility are now priorities.

GENERATE & TAKE ACTION

Act

Stay with patient, call surgeon, position **low-Fowler's with knees bent**, cover with **sterile saline-moistened gauze**, NPO, monitor VS, prepare for OR.

EVALUATE OUTCOMES

Check

Reassess VS, pain, bleeding, wound appearance. Did dressing stay moist & sterile? Was surgeon notified? Is patient stabilized pre-transport?