



WOUND CARE

Principles for Nursing Practice

Assessment • Clinical reasoning • Evidence-informed intervention

Learning outcomes

Use the nursing process to protect skin integrity and promote wound healing.

ASSESS

Complete a structured wound and per wound assessment.

INTERPRET

Differentiate healing progress, infection, and complications.

PLAN

Select nursing interventions based on tissue, moisture, perfusion, and risk.

PERFORM

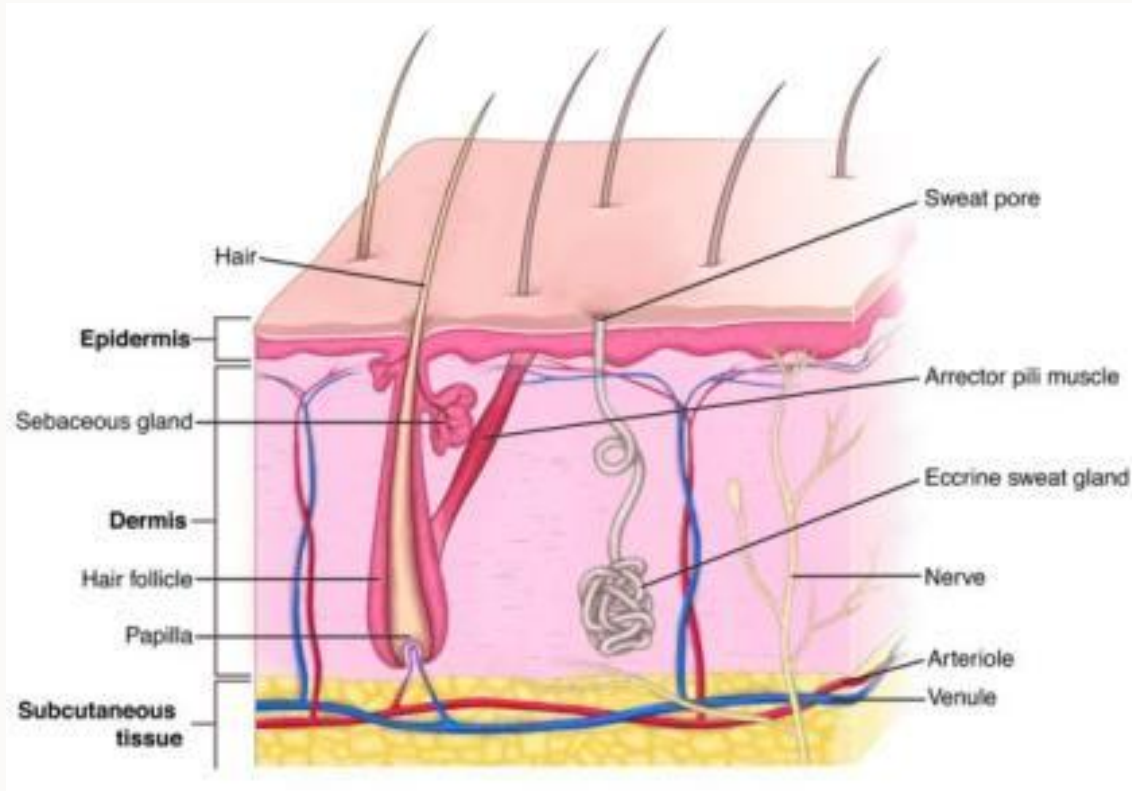
Apply safe cleansing, dressing, drain, and pressure-prevention principles.

EVALUATE

Document response and escalate deterioration promptly.

Skin integrity begins with anatomy

Depth determines what is injured, how the wound heals, and what the nurse must protect.



Epidermis

Avascular barrier; regenerates rapidly when injury remains superficial.

Dermis

Collagen, vessels, nerves, glands, follicles, and immune cells support sensation and repair.

Subcutaneous tissue

Anchors skin and cushions deeper structures; full-thickness injury extends into this layer or beyond.

Wound Care Is Whole-person Nursing

The wound is local; the factors that determine healing are systemic, behavioral, and environmental.

Protect

- Barrier function
- Comfort and dignity
- Mobility and independence

Promote

- Perfusion and oxygenation
- Nutrition and hydration
- Moisture balance

Prevent

- Infection
- Pressure and shear
- Dehiscence and recurrence

Nursing priority

Assess the person, the wound, and the care environment—then reassess the response.

Classify the wound before choosing care

Classification anticipates healing pattern, contamination risk, and monitoring needs.

CAUSE

- Surgical / traumatic
- Pressure related
- Arterial / venous
- Neuropathic / diabetic

EXPOSURE

- Open or closed
- Clean to infected
- Intentional or unintentional

DEPTH

- Partial thickness
- Full thickness
- Complex / deep structure

TIME

- Acute
- Chronic / stalled healing

Clinical cue

Do not let the wound label replace assessment: two “surgical wounds” may have very different tissue, exudate, pain, and risk.

Healing Is A Coordinated Biologic Sequence

The phases overlap; nursing assessment focuses on whether the trajectory is expected.

1

HEMOSTASIS

Immediate

Vasoconstriction, platelet action, clot formation

2

INFLAMMATION

~2–3 days

Leukocytes and macrophages clear debris; redness, heat, edema

3

PROLIFERATION

Several weeks

Granulation, angiogenesis, epithelialization, contraction

4

MATURATION

Weeks to years

Collagen remodeling and increasing tensile strength

Interpretation rule

Inflammatory signs should diminish—not intensify—over time. A stalled or reversing trajectory requires reassessment.

Local and systemic conditions shape healing

Correct reversible barriers while protecting the wound bed.

LOCAL FACTORS

- Perfusion and oxygen at the wound
- Infection or bioburden
- Foreign material and necrotic tissue
- Moisture imbalance
- Pressure, friction, shear, edema

SYSTEMIC FACTORS

- Age and skin fragility
- Nutrition, hydration, and glycemic control
- Chronic disease and immune status
- Medications, smoking, stress, and sleep
- Mobility, cognition, and social support

Ask: What can nursing modify today?

Use the same wound assessment sequence every time

Consistency makes change visible and documentation clinically meaningful.

LOCATION & ETIOLOGY	Site, onset, mechanism, classification	SIZE & DEPTH	Length × width × depth; undermining/tunneling
WOUND BED	Granulation, slough, eschar, epithelial tissue	EDGES & SKIN	Attachment, maceration, erythema, edema
EXUDATE	Amount, color, consistency, odor after cleansing	SYMPTOMS	Pain, sensation, temperature, function
INFECTION	Local, spreading, and systemic indicators	TRAJECTORY	Compare with prior assessment and goals

Read the wound bed and exudate together

Tissue appearance and moisture guide intervention—neither should be interpreted alone.



GRANULATION

Red/pink, moist, vascular

Protect; avoid trauma.



EPITHELIAL

Pale pink, fragile surface

Protect edges and new tissue.



SLOUGH

Yellow/tan, stringy

Assess need for debridement.



ESCHAR

Brown/black, dry or moist

Assess perfusion and stability.

Exudate language

- Amount: none, scant, moderate, large
- Type: serous, sanguineous, serosanguineous, purulent
- Color and consistency
- Odor assessed after cleansing
- Effect on wound edges and surrounding skin

Pressure Injury Prevention Is Active Nursing Care

Risk identification must trigger a personalized prevention bundle.

ASSESS RISK

- Mobility and activity
- Moisture and continence
- Nutrition and perfusion
- Sensation and cognition
- Devices and bony prominences

REDUCE LOAD

- Reposition based on risk and tolerance
- Offload heels
- Use pressure-redistributing surfaces
- Minimize friction and shear
- Inspect beneath medical devices

PROTECT SKIN

- Cleanse gently
- Manage moisture
- Use barrier products when indicated
- Optimize intake
- Teach patient and caregivers

Document risk, intervention, tolerance, and skin response—not only that the patient was “turned.”

Recognize deterioration early

Infection may present locally, spread beyond the wound, or produce systemic illness.

LOCAL

- Increasing pain or tenderness
- Delayed or stalled healing
- Friable tissue or pocketing
- Increasing/purulent drainage
- Malodor after cleansing

SPREADING

- Expanding erythema
- Warmth and edema
- Lymphangitic streaking
- Wound breakdown
- New functional decline

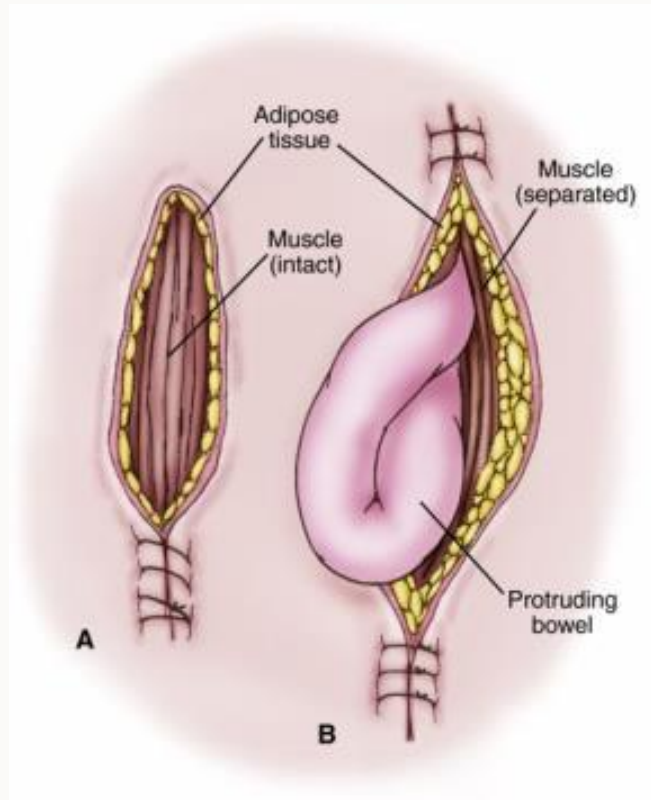
SYSTEMIC

- Fever or hypothermia
- Tachycardia
- Malaise or confusion
- Hemodynamic instability
- Sepsis concern

Escalate promptly when findings are new, worsening, spreading, or systemic.

Dehiscence And Evisceration Are Emergencies

Sudden separation, increased drainage, or visible organs requires immediate action.



NURSING RESPONSE

- Stay with the patient and call for help
- Position to reduce tension on the incision
- Cover exposed tissue with sterile saline-moistened dressings
- Keep the patient NPO if surgery is anticipated
- Monitor vital signs and signs of shock
- Do not attempt to reinsert organs

Follow institutional emergency protocol and notify the surgical team immediately.

Choose Dressings By Clinical Purpose

The best product supports the wound goal while protecting surrounding skin.

GAUZE

Packing, cleansing, secondary cover

Variable moisture; avoid adherence to fragile tissue.

TRANSPARENT FILM

Protection and visualization

For low exudate; not absorptive.

HYDROCOLLOID

Moisture-retentive autolysis

For selected low–moderate exudate wounds.

FOAM

Absorption and cushioning

Useful with moderate–heavy exudate.

ALGINATE

High absorption / hemostatic support

Requires exudate; usually needs secondary cover.

ANTIMICROBIAL

Reduce local microbial burden

Use for defined indication and reassess.

Always match the product to exudate, tissue, depth, infection risk, comfort, and care setting.

Safe Wound Care Protects Both Patient And Tissue

Technique is determined by the wound, orders, institutional policy, and contamination risk.

1

PREPARE

Verify order; explain; assess pain; gather supplies; position and protect privacy.

2

REMOVE

Hand hygiene and PPE; remove dressing gently; observe drainage and odor.

3

ASSESS

Measure and inspect the wound, edges, periwound skin, pain, and infection signs.

4

CLEANSE

Use prescribed solution; move from least to more contaminated area; avoid tissue trauma.

5

DRESS

Apply prescribed product, fill dead space without overpacking, protect skin, secure safely.

6

DOCUMENT

Record findings, care, patient tolerance, education, response, and escalation.

Assess The Whole Drainage System

Evaluate the insertion site, tubing, collection device, output, and patient together.



Assess and maintain

- Order and type of drain
- Patency and secure connections
- Suction or compression as prescribed
- Insertion-site skin and dressing
- Amount, color, character, and trend of output
- Pain, leakage, fever, and patient understanding

Never force, irrigate, milk, clamp, or reposition a drain unless specifically ordered and supported by policy.

Documentation Should Make The Wound Visible

Use objective, consistent language that another clinician can compare over time.

EXAMPLE NURSING NOTE

Sacral pressure injury assessed at 10:00. Wound measures $3.2 \times 2.0 \times 0.4$ cm. Wound bed 70% red granulation and 30% yellow slough. Moderate serosanguineous exudate; no odor after cleansing. Edges attached; periwound skin mildly macerated from 4–7 o'clock. Pain 3/10 during care. Cleansed with prescribed solution; barrier applied to periwound skin and ordered foam dressing secured. Patient repositioned and educated on offloading. Wound-care provider notified of increased exudate compared with prior assessment.

Include comparison with prior findings and the action taken when status changes.

Apply Clinical Reasoning: What Matters First?

An older adult with diabetes has a plantar wound, new malodor, increased drainage, and reduced sensation.

NOTICE

What assessment data are missing?

INTERPRET

Which findings suggest infection, ischemia, or neuropathy?

RESPOND

What immediate nursing actions and escalation are indicated?

EVALUATE

What outcomes show improvement?

Priority synthesis

Protect from pressure, complete neurovascular and wound assessment, address glycemic and infection risk, follow local protocols, and escalate promptly. Do not select a dressing before perfusion, depth, tissue, and exudate are understood.

THE NURSING STANDARD

**Assess systematically.
Protect viable tissue.
Address the whole person.
Escalate deterioration.**

Consistent assessment + individualized care + evaluation of trajectory