HEALTH ASSESSMENT · STUDY GUIDE

Exam 4 Study Guide

This guide covers chapters 7 and 8. First you will learn the three assessments that frame every exam: the general survey, pain, and mental status, where a change of one point can be the first sign of trouble. Then you will learn to look at skin with intent: a fixed route, the right light, color findings in every skin tone, lesions named and measured, and pressure injuries staged correctly. Work one chapter at a time. Read the "what to know" paragraphs, study the tables, then try each worked case with the steps covered. Finish each chapter with its ten self-test items. The cram sheet at the end puts the numbers and rules in one place.

WHAT THIS GUIDE COVERS

- Chapter 7 · the four general survey domains, tripod position and words per breath, inspection, palpation, percussion and auscultation, height, weight, BMI, waist circumference and weight loss, pediatric growth and pregnancy weight gain, pain as the patient defines it, PQRSTU and OLDCARTES, pain scales by age and ability, somatic, visceral and neuropathic pain, reassessment timing, POSS, AVPU, RASS, GCS, pupils, the mental status exam, Mini-Cog, MMSE and MoCA, delirium, dementia and depression, CAM, PINCH ME, PHQ and suicide screening, charting and delegation.
- Chapter 8 · skin layers and appendages, lifespan variations, the exam route and setup, temperature, moisture, texture, turgor, capillary refill and edema grading, color across skin tones, primary and secondary lesions, configuration and distribution, blanching and vascular lesions, ABCDE, hair and scalp, arterial versus venous limbs, nail findings and clubbing, lice and scabies, the Braden Scale, prevention, pressure injury stages, MASD, wound charting, red flags and delegation.

CHAPTER 7

General Survey, Pain and Mental Status

Read it in full: **Chapter 7 in the textbook**. Practice it in the lab: **Pain Assessment Bench** and **Consciousness Console**.

What to know

The **general survey** is a structured first impression run the same way every time, starting at the doorway. Scan four domains in order: **physical appearance** (apparent versus stated age, consciousness, color, expression, grooming, odor), **body structure** (build, nutrition, symmetry, posture, deformity), **mobility** (gait, devices, involuntary movement) and **behavior** (eye contact, mood and affect, speech). Look before you speak; once you ask "How are you?" the patient rearranges. Tripod positioning means accessory muscle use, and words per breath (full sentences, three or four words, single words) is a chartable respiratory measure.

Palpation uses finger pads for texture, pulses and masses; the dorsum for temperature; the ulnar surface for vibration. This chapter gives light palpation as 1 to 2 cm and deep as 4 to 5 cm. Percussion tones: tympany over bowel, resonance over lung, hyperresonance over hyperinflated lung, dullness over liver or consolidation, flatness over bone. The diaphragm is pressed firmly for high sounds; the bell rests lightly for low sounds. The abdomen is inspected, auscultated, percussed, then palpated.

Measure, do not ask, and record weight in kilograms. For daily weights, weigh before breakfast, after voiding, in the same gown. A 1 kg gain is about 1 L of fluid; more than 1 kg in 24 hours or 2.3 kg in a week is reportable in heart failure. **BMI** = kg ÷ m^2: under 18.5 underweight, 18.5 to 24.9 healthy, 25 to 29.9 overweight, 30 and above obesity (class I 30 to 34.9, II 35 to 39.9, III 40 and above). Waist over 102 cm in men or 88 cm in nonpregnant women raises risk. Unintentional loss over 5% in a month or over 10% in six months is significant.

Pain is whatever the person says it is. Vital signs adapt within hours and do not confirm or refute pain, and comfortable behavior is not a lie detector. Never put "but" between the score and your observation. Analyze with **PQRSTU** or OLDCARTES, and ask about treatments already tried and the patient's functional goal ("a 3 so I can walk to the bathroom"). Score pain at rest and with movement.

Self-report is the gold standard: NRS 0 to 10 for about age 8 and up; Wong-Baker FACES from age 3; FPS-R for about 4 to 12. If the patient cannot self-report, use an observational tool: **FLACC** (about 2 months to 7 years and nonverbal adults), NIPS or CRIES for neonates, **CPOT**

for critically ill adults (above 2 is significant), BPS for intubated adults (above 5 unacceptable), **PAINAD** for advanced dementia. Never chart "denies pain" for a patient who cannot answer.

Somatic pain is well localized (aching, sharp). **Visceral** pain is deep, poorly localized, cramping and refers (cardiac to jaw and arm, gallbladder to right scapula, diaphragm to shoulder tip). **Neuropathic** pain burns, shoots or feels electric and responds poorly to opioids. Chronic pain lasts more than 3 months. Reassess about 15 to 30 minutes after IV, 30 to 60 after IM or subcut, and about 60 after oral. **Sedation precedes respiratory depression.** On POSS, S, 1 and 2 are acceptable; 3 (drifts off mid-conversation) means hold or reduce the opioid and notify; 4 is an emergency.

Level of consciousness is the most sensitive neurologic sign. Describe it by behavior. AVPU is a quick screen. RASS runs from +4 combative to −5 unarousable. The **Glasgow Coma Scale** scores eyes 1 to 4, verbal 1 to 5 and motor 1 to 6 for a total of 3 to 15; chart "E3 V4 M5 = GCS 12." 8 or less is severe, and the airway may not be protected. A drop of 2 or more is an emergency. Decorticate (abnormal flexion, M3) is better than decerebrate (extension, M2). Pupils normally 3 to 5 mm in room light, equal and reactive; a new difference over 1 mm or a fixed dilated pupil is an emergency.

The mental status exam covers appearance and behavior, speech (dysarthria is motor; aphasia is language), mood (reported) and affect (observed), thought process and content, perception, insight and judgment, and cognition. Orientation is lost time first, then place, then situation, with person last. Attention is tested with months backward or digit span. **Mini-Cog** totals 0 to 5 and under 3 is positive. MMSE below 24 suggests impairment; MoCA 26 or more is normal. Fix glasses, hearing aids, pain and language first, and never chart a score as a diagnosis.

Delirium is acute and fluctuating, with impaired attention and altered consciousness, from a medical cause; it is an emergency and usually reversible. **Dementia** is slow, progressive and stable through the day. **Depression** is weeks to months, with "I don't know" answers and intact insight. The quiet **hypoactive** delirium is the most common and most often missed. CAM is positive with feature 1 (acute onset or fluctuation) AND feature 2 (inattention) plus feature 3 (disorganized thinking) OR feature 4 (altered consciousness). Look for causes with PINCH ME and check glucose and SpO_2 first.

PHQ-2 of 3 or more leads to the PHQ-9 (10 or more is at least moderate); GDS-15 of 5 or more suggests depression in older adults. Any positive item 9 means a direct suicide question, a structured tool such as the C-SSRS, not leaving the patient alone and immediate notification; 988 is the crisis line. Red flags: any acute change in mental status, GCS drop of 2 or more, new pupil asymmetry, BE-FAST stroke signs with last known well, pain out of proportion (compartment syndrome), POSS 3 or 4. UAP may report what a patient says, but pain, GCS, CAM and POSS scoring stay with the RN.

LOCK THESE IN

- General survey: appearance, structure, mobility, behavior. Look before you speak.
- BMI = kg ÷ m^2; loss over 5% in a month is significant.
- Pain is what the patient says it is; normal vital signs do not refute it.
- Match the tool: FLACC, CPOT, PAINAD when the patient cannot self-report.
- Sedation precedes respiratory depression; POSS 3 means act now.
- GCS: E 1 to 4, V 1 to 5, M 1 to 6; total 3 to 15; 8 or less, protect the airway.
- Orientation lost: time, place, situation, person last.
- CAM: 1 AND 2, plus 3 OR 4. The quiet patient is the one most missed.

Glasgow Coma Scale: score each part, then add

Eye opening (E)	Verbal (V)	Motor (M)
4 Spontaneous	5 Oriented	6 Obeys commands
3 To sound	4 Confused	5 Localizes
2 To pressure	3 Words	**4 Normal flexion**
1 None	**2 Sounds**	3 Abnormal flexion
	1 None	2 Extension
		1 None

Example: opens eyes to nail pressure, moans, withdraws
E2 + V2 + M4 = GCS 8

8 or less	9 to 12	13 to 15
Severe; airway may not be protected	Moderate	Mild

Lowest possible total is 3. A drop of 2 or more points is an emergency. Chart E, V and M separately.

Three responses, scored and charted separately. Score the best response in each column. The worked example sums to 8, the classic threshold for an unprotected airway. Extension (M2) is worse than abnormal flexion (M3).

Pain scales by patient

Tool	Who it fits	Range and reading
NRS	About 8 years and up, can self-report	0 to 10; 1 to 3 mild, 4 to 6 moderate, 7 to 10 severe
Wong-Baker FACES	3 years and up; limited literacy	0 to 10 in steps of 2
FPS-R	About 4 to 12 years	0 to 10, neutral faces
FLACC	About 2 months to 7 years; nonverbal adults	0 to 10; five items scored 0 to 2
NIPS / CRIES	Neonates	NIPS 0 to 7; CRIES 0 to 10
CPOT	Critically ill adults unable to self-report	0 to 8; above 2 significant
BPS	Intubated, sedated adults	3 to 12; above 5 unacceptable
PAINAD	Advanced dementia	0 to 10

Delirium, dementia and depression

Feature	Delirium	Dementia	Depression
Onset	Hours to days	Months to years	Weeks to months
Course	Fluctuates, worse at night	Stable through the day	Often worse in the morning
Attention	Impaired: the hallmark	Normal until late	Distractible but can attend
Consciousness	Altered	Normal until late	Normal
Typical answer	Wrong or incoherent	Near miss or confabulation	"I don't know"
Hallucinations	Visual common	Usually absent until late	Usually absent
Reversible?	Usually, if the cause is treated	No	Treatable
Priority	Find and treat the cause now	Support function and caregiver	Screen suicide risk

Worked cases

WORKED CASE 1 · BMI AND WEIGHT CHANGE

Mr. Shaw is 178 cm tall and weighs 71.2 kg. Six weeks ago he weighed 79.0 kg, and he was not trying to lose weight.

STEP 1 · SQUARE THE HEIGHT

$1.78 \times 1.78 = 3.168\ m^2$.

STEP 2 · FIND BMI

$71.2 \div 3.168 = 22.5$, in the healthy range.

STEP 3 · FIND THE LOSS

$79.0 - 71.2 = 7.8$ kg; $7.8 \div 79.0 = 9.9\%$ in six weeks.

STEP 4 · JUDGE IT

The BMI looks fine, but almost 10% unintentional loss in six weeks is significant. Refer to nutrition and look for a cause. BMI alone would have missed it.

WORKED CASE 2 · SCORING THE GCS

Ms. Price opens her eyes only to nail bed pressure, makes moaning sounds without words, and pulls her arm quickly away from the stimulus.

STEP 1 · EYES

Opens to pressure: E2.

STEP 2 · VERBAL

Sounds only: V2.

STEP 3 · MOTOR

Normal flexion (withdrawal): M4.

STEP 4 · ADD AND CHART

E2 V2 M4 = GCS 8. Severe, and the airway may not be protected. Escalate now and chart all three parts.

WORKED CASE 3 · POSS BEFORE THE RESPIRATORY RATE FALLS

Mr. Cole, 74, on IV hydromorphone, keeps drifting off mid-sentence while you talk to him. His respiratory rate is 14.

STEP 1 · SCORE SEDATION

Frequently drowsy, drifts off in conversation: POSS 3.

STEP 2 · DO NOT WAIT FOR THE RATE

Sedation comes first; the respiratory rate falls later.

STEP 3 · ACT

Hold or reduce the opioid per order (often by 25 to 50%), stay and stimulate, monitor sedation and breathing closely, oxygen per protocol, notify the prescriber.

WORKED CASE 4 · RUNNING THE CAM

Mrs. Rowe, 81, was oriented ×4 this morning. This afternoon she thinks it is 1998, cannot say the months backward past November, rambles, and sees children at the window. She is awake, RASS 0.

STEP 1 · FEATURE 1

Acute change from the morning baseline, fluctuating: present.

STEP 2 · FEATURE 2

Inattention, cannot do months backward: present.

STEP 3 · FEATURE 3 OR 4

Disorganized, rambling thinking: feature 3 present. RASS 0, so feature 4 is absent, but only one is needed.

STEP 4 · RESULT AND NEXT STEPS

CAM positive: delirium. Check glucose and SpO_2, look for a cause with PINCH ME (here a catheter and a fever point to infection), keep her safe and call with SBAR.

TRAPS PEOPLE FALL INTO

- **Writing "pain 8/10 but appears comfortable."** Report the score and the behavior; neither cancels the other.
- **Charting "denies pain" for a nonverbal patient.** Use FLACC, CPOT or PAINAD instead.
- **Waiting for the respiratory rate to fall on opioids.** Sedation rises first. POSS 3 is the moment to act.
- **Reporting only the GCS total.** E, V and M carry information the total hides.
- **Calling decerebrate "better" because it looks less curled.** Extension (M2) is worse than flexion (M3).
- **Labeling new confusion as dementia or "sundowning."** Acute, fluctuating inattention is delirium until proven otherwise.
- **Screening cognition with no glasses or hearing aids.** Correct the sensory barriers first, or the score means nothing.
- **Using a guessed weight for a weight based drug.** Measure in kilograms on the same scale.

Chapter 7 self-test · ten items

1. A patient sits leaning forward with both arms braced on the bedside table. What does this posture suggest?

A. Abdominal guarding from peritonitis

B. Fatigue after a long sleepless night

C. A normal resting position for reading

D. Accessory muscle use for breathing

D. Accessory muscle use for breathing Tripod positioning recruits accessory muscles. Never lay this patient flat to examine.

2. A patient is 1.60 m tall and weighs 80 kg. What is the BMI and category?

A. 31.3, obesity class I
B. 28.1, overweight
C. 25.0, overweight
D. 35.4, obesity class II

A. 31.3, obesity class I 1.60 × 1.60 = 2.56; 80 ÷ 2.56 = 31.25, in the 30 to 34.9 range.

3. A patient rates pain 8 out of 10 while laughing with a visitor. Heart rate is 74. What should the nurse do?

A. Chart that the pain score seems too high
B. Treat the pain as reported; chart both
C. Wait for the heart rate to rise first
D. Offer distraction instead of medicine

B. Treat the pain as reported; chart both Vital signs adapt and behavior is a coping strategy. The patient's report is the standard.

4. Which pain tool fits an intubated adult in the ICU who cannot self-report?

A. Wong-Baker FACES
B. The FPS-R scale
C. The CPOT scale
D. The 0 to 10 NRS

C. The CPOT scale CPOT is validated for critically ill adults unable to self-report; above 2 is significant pain.

5. A patient describes leg pain as "burning, like electric shocks," and says the bed sheet hurts his feet. What type of pain is this?

A. Neuropathic pain
B. Somatic pain
C. Visceral pain
D. Breakthrough pain

A. Neuropathic pain Burning, electric pain and pain from light touch point to nerve damage, which responds poorly to opioids.

6. Mr. Diaz, on a PCA, nods off twice while you ask him about his pain. His breathing is 15 per minute. Which POSS level and action fit?

A. POSS 2: acceptable, keep watching
B. POSS 1: acceptable, no action now
C. POSS S: normal sleep, let him rest
D. POSS 3: hold or reduce dose, notify

D. POSS 3: hold or reduce dose, notify POSS 3 is unacceptable even with a normal respiratory rate. Sedation precedes respiratory depression.

7. A patient opens his eyes when spoken to, is confused in conversation, and localizes to pain. What is the GCS?

A. 11
B. 13
C. 12
D. 10

C. 12 Eyes to sound E3, confused V4, localizes M5: 3 + 4 + 5 = 12.

8. A confused patient is losing orientation over several days. Which sequence of loss is most typical?

A. Person, place, time, then situation
B. Time, place, situation, then person
C. Place, time, person, then situation
D. Situation, person, place, then time

B. Time, place, situation, then person Time goes first and person last. Loss of one's own name is unusual and needs a closer look.

9. Which finding best separates delirium from dementia?

A. Poor short term memory for new facts
B. Trouble finding the right words often
C. A slow decline over several years
D. Acute onset with fluctuating attention

D. Acute onset with fluctuating attention Delirium is acute, fluctuating and centered on inattention. The others fit dementia.

10. A Mini-Cog total of 2 is best read as which result?

A. A negative screen; no follow up needed
B. A diagnosis of dementia for the chart
C. A positive screen; needs full evaluation
D. A normal score for most older adults

C. A positive screen; needs full evaluation A Mini-Cog under 3 is positive. A screen is a finding, never a diagnosis.

Assessing Skin, Hair and Nails

Read it in full: **Chapter 8 in the textbook**. Practice it in the lab: **Lesion Description Bench** and **Pressure Injury Command Center**.

What to know

The **epidermis** is avascular and turns over about every 28 days. Everyone has about the same number of melanocytes; skin tones differ in how much melanin they make. So the physiology of pallor, cyanosis and erythema is the same in every patient: you do not change the assessment, you change **where you look**. The **dermis** holds collagen, elastin, capillaries, nerve endings and glands; a Stage 2 wound bed is exposed dermis, which is why it hurts. The **subcutaneous** layer pads bony prominences; visible fat in a wound means full thickness, at least Stage 3.

Fingernails grow about 3 mm a month and replace in about six months; toenails take 12 to 18 months. A Beau line 6 mm from the cuticle dates an illness about two months back. A diffuse hair shed two to three months after a major stressor is telogen effluvium. Sebaceous output falls with age, causing xerosis.

Know the lifespan baseline. Newborns: vernix, lanugo, milia, erythema toxicum, and acrocyanosis for the first 24 to 48 hours. Central cyanosis is never normal. Jaundice in the first 24 hours of life is pathologic. Congenital dermal melanocytosis (blue gray sacral patches) is benign and must be documented so it is not mistaken for bruising. Older adults: thin dry skin, lentigines, seborrheic keratoses, cherry angiomas and senile purpura on extensor forearms. Pregnancy: melasma, linea nigra, striae, spider angiomas, palmar erythema.

Skin is examined by inspection then palpation. Use strong daylight or daylight balanced light, tangential light to show contour, a warm room, gloves and a centimeter ruler. Follow a fixed route that includes the scalp, skin folds, between the toes, the full posterior surface and under every device. Compare side to side.

Palpate for temperature (dorsum, bilateral), moisture, texture, **turgor** (over the sternum or below the clavicle in adults; recoil under 2 seconds, tenting 3 seconds or more suggests volume loss, unreliable alone in older adults) and **capillary refill** (under 2 seconds). Grade pitting edema: 1+

about 2 mm, 2+ about 4 mm, 3+ about 6 mm, 4+ about 8 mm, and record how far up the limb it goes.

Color in every skin tone: **cyanosis** shows as ashen or gray at the tongue, buccal mucosa, conjunctivae, palms and soles; it needs about 5 g/dL of deoxygenated hemoglobin, so a severely anemic patient may be hypoxic and never look blue. **Pallor**: conjunctivae, mucosa, palmar creases. **Jaundice**: sclerae near the limbus and the hard palate. **Erythema** may look violet, maroon or not visible in deeply pigmented skin, so palpate for warmth, induration and tenderness.

Name lesions by morphology and size in cm. Flat: macule under 1 cm, patch over 1 cm. Raised solid: papule under 1 cm, plaque over 1 cm flat topped, nodule 1 to 2 cm, tumor over 2 cm. Fluid: vesicle under 1 cm, bulla over 1 cm, pustule with pus; wheal is transient and edematous. Secondary: scale, crust (honey colored suggests impetigo), erosion, ulcer, fissure, excoriation, lichenification, atrophy, scar or keloid. Add configuration and distribution: a vesicular band on one side that stops at the midline is zoster in a dermatome.

Press the red. Blanching means blood is inside vessels: inflammation, flushing. Non-blanching means blood has leaked out: petechiae under 3 mm, purpura 3 mm to 1 cm, ecchymosis over 1 cm. Non-blanching rash with fever is an emergency. Screen pigmented lesions with **ABCDE** (asymmetry, border, color, diameter over 6 mm, evolving) and the ugly duckling rule; check palms, soles and nails for acral melanoma.

Nails: normal base angle about 160 degrees; clubbing flattens it past 180 degrees and closes the Schamroth window, signaling months of hypoxia. Koilonychia suggests iron deficiency; splinter hemorrhages with fever and a murmur suggest endocarditis; Terry nails point to cirrhosis. Shiny hairless cool legs with thick nails suggest arterial disease; warm, brown, edematous legs with a medial malleolus ulcer suggest venous disease. Compression helps venous disease and can harm an arterial limb.

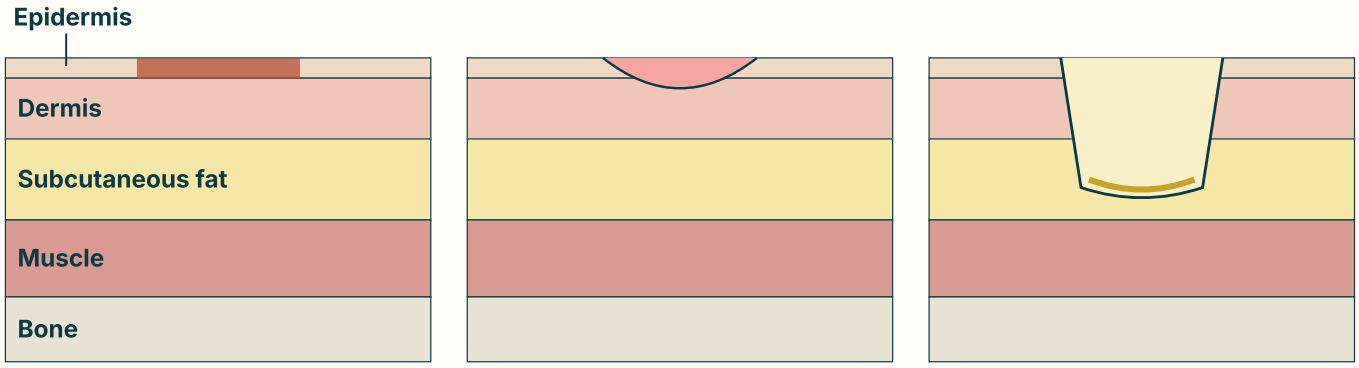
The **Braden Scale** totals 6 to 23; lower is worse. 15 to 18 mild, 13 to 14 moderate, 10 to 12 high, 9 or less very high; 18 or less starts the prevention bundle: reposition every 2 hours in bed, every hour in a chair, 30 degree tilt, head of bed 30 degrees or less, float the heels, no massage over bony prominences. Stages: 1 intact non-blanchable; 2 partial thickness, exposed dermis; 3 full

thickness, fat visible; 4 exposed or palpable fascia, muscle, tendon or bone; unstageable when slough or eschar hides the base; deep tissue injury is persistent maroon or purple or a blood blister. Never reverse-stage; leave stable heel eschar alone; staging is only for pressure injuries.

LOCK THESE IN

- Same physiology in every skin tone; change where you look.
- Turgor over the sternum; refill under 2 s; edema 1+ to 4+ at about 2 mm steps.
- Cyanosis: tongue and buccal mucosa; jaundice: sclera near the limbus and hard palate.
- Macule and papule under 1 cm; patch, plaque and bulla over 1 cm.
- Blanching: blood inside vessels. Non-blanching with fever: escalate now.
- Clubbing: angle over 180 degrees, no Schamroth window, chronic hypoxia.
- Braden 18 or less: start the bundle. Lower is worse.
- Visible fat is Stage 3; bone, tendon or muscle is Stage 4; never reverse-stage.

Pressure injury stages by depth of tissue loss



Stage 1

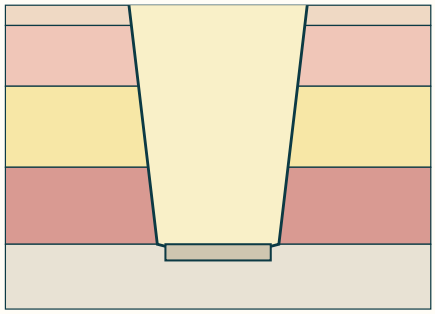
Intact skin, non-blanchable; in darker skin palpate warmth and firmness

Stage 2

Partial thickness: exposed dermis, pink and moist, or a serum blister

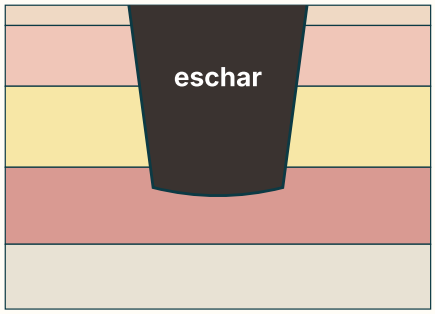
Stage 3

Full thickness: fat visible; no muscle, tendon or bone



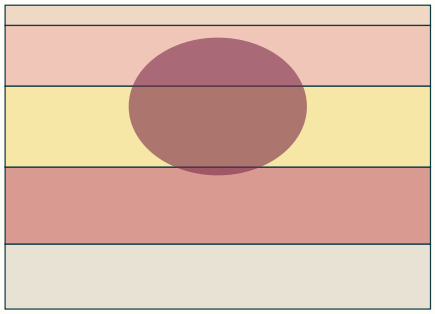
Stage 4

Exposed or palpable fascia, muscle, tendon or bone



Unstageable

Base hidden by slough or eschar



Deep tissue injury

Persistent maroon or purple area or blood blister

Layers top to bottom in each panel: epidermis, dermis, subcutaneous fat, muscle, bone.

Depth decides the stage. Visible fat marks the line between Stage 2 and Stage 3; exposed or palpable muscle, tendon or bone means Stage 4. A healing wound keeps its deepest stage: never reverse-stage.

Primary lesions

Lesion	Definition and size	Example
Macule	Flat color change under 1 cm	Freckle, petechia
Patch	Flat color change over 1 cm	Vitiligo, melasma
Papule	Raised solid, under 1 cm	Wart, raised nevus
Plaque	Raised flat topped, over 1 cm	Psoriasis
Nodule	Raised solid, deeper, 1 to 2 cm	Lipoma
Tumor	Raised solid, over 2 cm	Large lipoma, neoplasm
Vesicle	Clear fluid, under 1 cm	Herpes simplex, varicella
Bulla	Fluid, over 1 cm	Burn blister
Pustule	Pus filled, any size	Impetigo, folliculitis
Wheal	Raised, edematous, transient	Hives

Pressure injury stages and Braden

Item	Defining feature	Key point
Stage 1	Intact skin, non-blanchable	In darker skin, palpate warmth, firmness, bogginess
Stage 2	Partial thickness, exposed dermis, or serum blister	No slough, eschar, granulation or fat
Stage 3	Full thickness, fat visible	No fascia, muscle, tendon or bone
Stage 4	Exposed or palpable fascia, muscle, tendon, cartilage or bone	Osteomyelitis risk
Unstageable	Base hidden by slough or eschar	Leave stable heel eschar alone
Deep tissue injury	Persistent maroon or purple area, or blood blister	Can worsen within hours
Braden total	6 to 23; lower is worse	18 or less starts prevention
Braden bands	15 to 18 mild; 13 to 14 moderate; 10 to 12 high; 9 or less very high	Reassess each shift and with change

Worked cases

WORKED CASE 1 · A RED SPOT REPORTED BY A UAP

A UAP says Mr. Vance in 306 "has a red spot on his bottom." Mr. Vance has deeply pigmented skin.

STEP 1 · GO LOOK YOURSELF

The UAP may observe and report; you assess.

STEP 2 · INSPECT AND PRESS

In natural light, inspect the area and test blanching. Redness may not be visible on his skin.

STEP 3 · PALPATE

Compare with the opposite side for warmth or coolness, firmness, bogginess and pain.

STEP 4 · CLASSIFY

Over a bony prominence with intact skin and non-blanchable change: Stage 1 pressure injury. Over soft tissue in the perineum with diffuse edges: moisture associated damage instead.

STEP 5 · ACT

Offload, update the Braden score and plan, document with measurements, notify as indicated.

WORKED CASE 2 · DATING A BEAU LINE

Ms. Okoro has a transverse groove in each fingernail sitting 6 mm from the cuticle. She was in the ICU some weeks ago.

STEP 1 · USE THE GROWTH RATE

Fingernails grow about 3 mm per month.

STEP 2 · DIVIDE

6 mm ÷ 3 mm per month = 2 months.

STEP 3 · CONNECT

The illness that paused nail growth happened about two months ago, matching the ICU stay.

WORKED CASE 3 · MEASURING AND CHARTING A WOUND

A sacral wound is 4.2 cm head to toe, 3.0 cm side to side and 0.8 cm deep. Fat is visible; no bone or tendon. There is 1.5 cm of undermining toward the patient's right hip. Last week it was 3.5 × 2.6 cm.

STEP 1 · ORDER THE MEASUREMENTS

Length (head to toe) × width × depth: 4.2 × 3.0 × 0.8 cm.

STEP 2 · STAGE IT

Visible fat, no deeper structures: Stage 3.

STEP 3 · LOCATE THE UNDERMINING

Use the clock with 12 toward the head; note depth in cm.

STEP 4 · SHOW THE TREND

Surface area went from 3.5 × 2.6 = 9.1 cm^2 to 4.2 × 3.0 = 12.6 cm^2, larger by 3.5 cm^2. Notify the wound nurse.

WORKED CASE 4 · TWO NEWBORNS

Baby A is 10 hours old and visibly jaundiced. Baby B is 6 hours old with blue hands and feet but pink lips and pink oral mucosa.

STEP 1 · BABY A

Jaundice in the first 24 hours is pathologic until proven otherwise. Notify the provider now and expect a bilirubin level.

STEP 2 · BABY B

Blue hands and feet with a pink trunk and mucosa is acrocyanosis, expected for 24 to 48 hours.

STEP 3 · THE RULE

Central cyanosis of the lips, tongue or mucosa is never normal at any age.

TRAPS PEOPLE FALL INTO

- **Looking only for "redness" on deeply pigmented skin.** Palpate for warmth, induration, bogginess and ask about pain.
- **Testing turgor on the back of an older adult's hand.** Use the sternum or below the clavicle, and add other data.
- **Describing a lesion as "dime sized."** Measure in centimeters and name the morphology.
- **Reverse-staging a healing Stage 4 as Stage 2.** It stays a healing Stage 4.
- **Staging a skin tear or venous ulcer.** Staging is only for pressure injuries.
- **Debriding dry stable eschar on a heel.** Leave it, offload, report; escalate if it softens or drains.
- **Massaging a reddened bony prominence.** Massage over compromised tissue adds damage.
- **Delegating the bath and never looking.** The bath is the assessment; be there for it.

Chapter 8 self-test · ten items

1. Where is turgor most reliably tested in an 82 year old?

A. On the back of the hand
B. Over the upper sternum
C. On the inner forearm
D. On the top of the foot

B. Over the upper sternum Aging thins the dermis of the hand, making it falsely tent. Use the sternum, and pair it with other data.

2. Pressing a thumb over the tibia for 5 seconds leaves a pit about 6 mm deep that lasts many seconds. How is this graded?

A. 3+ pitting edema
B. 1+ pitting edema
C. 2+ pitting edema
D. 4+ pitting edema

A. 3+ pitting edema 1+ is about 2 mm, 2+ about 4 mm, 3+ about 6 mm and 4+ about 8 mm.

3. Mr. Bello, who has very dark skin, is short of breath. Which site will show cyanosis most reliably?

A. The skin of his forehead
B. The backs of both hands
C. His tongue and inner cheeks
D. The skin over his sternum

C. His tongue and inner cheeks Mucous membranes are minimally pigmented in almost everyone, so cyanosis shows there as gray or ashen.

4. A raised, flat topped lesion 2.5 cm across is best described as which lesion?

A. A papule
B. A macule
C. A vesicle
D. A plaque

D. A plaque Raised and over 1 cm with a flat top is a plaque. A papule is raised and under 1 cm.

5. Pinpoint red spots under 3 mm do not blanch, and the patient has a fever and headache. What is the priority?

A. Apply a cool cloth and recheck in four hours
B. Rapid response now and droplet precautions
C. Document a viral rash and continue the plan
D. Apply a barrier cream and keep the skin dry

B. Rapid response now and droplet precautions Non-blanching petechiae with fever can mean meningococcemia or DIC. Escalate now.

6. A mole is 8 mm across and the patient says it has grown darker this year. Which ABCDE features are present?

A. Diameter and evolving
B. Asymmetry and border
C. Color and border
D. Asymmetry and diameter

A. Diameter and evolving Diameter over 6 mm and change over time are both present. Evolving is the most important letter.

7. The nail base angle measures 190 degrees and the Schamroth window is gone. What does this suggest?

A. Iron deficiency anemia from blood loss
B. A recent fever from an acute infection
C. Normal nail changes that come with aging
D. Long standing hypoxia, as in lung disease

D. Long standing hypoxia, as in lung disease Clubbing develops over months of hypoxemia or shunting. Koilonychia suggests iron deficiency.

8. A sacral wound is full thickness with yellow fat visible and no bone or tendon. What is the stage?

A. Stage 2
B. Stage 3
C. Stage 4
D. Unstageable

B. Stage 3 Visible fat without deeper structures is Stage 3. Exposed or palpable bone, tendon or muscle would be Stage 4.

9. A patient's Braden score is 12. How is this read?

A. High risk; start the prevention bundle
B. No risk; continue routine skin care
C. Mild risk; reassess at next week's visit
D. Very high risk; only a special bed helps

A. High risk; start the prevention bundle Braden 10 to 12 is high risk. Lower scores mean higher risk.

10. During morning care on a stable patient, which skin related task is appropriate for the UAP?

A. Staging a new sacral wound
B. Scoring the Braden Scale today
C. Applying ordered barrier cream
D. Teaching the family skin checks

C. Applying ordered barrier cream UAP may give hygiene care and apply prescribed products to intact skin. Staging, Braden scoring and teaching stay with the RN.

Cram sheet

Everything from chapters 7 and 8 in one place. Cover the right column and see if you can rebuild each row.

Numbers to know

Item	Value	Note
BMI	kg ÷ m^2; 18.5 to 24.9 healthy	25 to 29.9 overweight; 30, 35, 40 start classes I, II, III
Waist risk	Over 102 cm men; over 88 cm women	At the iliac crest, end of exhalation
Weight loss flag	Over 5% in 1 month; over 10% in 6 months	Unintentional
Heart failure weight	Over 1 kg in 24 h or 2.3 kg in a week	1 kg is about 1 L
Reassess analgesia	IV 15 to 30 min; IM or subcut 30 to 60; oral about 60	Include sedation for opioids
GCS	E 1 to 4, V 1 to 5, M 1 to 6; total 3 to 15	8 or less severe; drop of 2 is an emergency
Pupils	3 to 5 mm in room light	New difference over 1 mm is an emergency
Screens	Mini-Cog under 3 positive; MMSE under 24; MoCA 26 normal	PHQ-2 ≥ 3; PHQ-9 ≥ 10; GDS-15 ≥ 5
Turgor and refill	Recoil under 2 s; tenting 3 s or more	Refill under 2 s
Edema	1+ 2 mm; 2+ 4 mm; 3+ 6 mm; 4+ 8 mm	Note how far up the limb
Lesion sizes	Petechiae under 3 mm; purpura 3 mm to 1 cm; ecchymosis over 1 cm	Macule, papule, vesicle under 1 cm
Nails	Grow about 3 mm per month	Angle 160 normal; over 180 clubbing
Braden	6 to 23; 18 or less starts prevention	10 to 12 high; 9 or less very high

Formulas

Name	Formula	Use
BMI	Weight (kg) ÷ height $(m)^2$	Screening, not body composition
Percent weight loss	(old − new) ÷ old × 100	Over 5% in a month is significant
GCS	E + V + M	Chart each part
Beau line age	Distance from cuticle (mm) ÷ 3 mm per month	Dates the past illness
Wound size	Length (head to toe) × width × depth, cm	Undermining by clock, 12 toward the head

Rules that are not numbers

Topic	The rule
General survey	Appearance, structure, mobility, behavior; look before you speak.
Pain	The patient's report is the standard; never "but" between score and behavior.
Opioids	Sedation precedes respiratory depression; POSS 3 means act.
CAM	Acute or fluctuating AND inattention, plus disorganized thinking OR altered consciousness.
Skin tone	Look at mucosa, conjunctivae, sclerae, palms, soles; palpate for erythema.
Blanching	Blanches: inside vessels. Non-blanching: outside vessels; with fever, escalate.
Staging	Only pressure injuries; never reverse-stage; leave stable heel eschar.
Delegation	UAP report what they see and hear; the RN assesses, scores, stages and teaches.

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