DAY 7 — REST, SLEEP & BCC MIXED INTEGRATION

Basic Care & Comfort • NGN NCLEX 2026 Master Review (Capstone)

SLEEP ARCHITECTURE | OSA / CPAP | INSOMNIA / CBT-I | RLS / NARCOLEPSY | HOSPITAL DELIRIUM | BCC INTEGRATION

CRITICAL / EMERGENCY | PATHOPHYSIOLOGY | SAFE / EXPECTED | COMPLICATIONS | NCLEX TRAPS | PROCEDURES | PT EDUCATION

FOUNDATIONS — SLEEP ARCHITECTURE

A normal night = 4–6 ultradian cycles of ~90 minutes each. Each cycle progresses NREM (N1 → N2 → N3) → REM. Adults need 7–9 h/night; school-age 9–12 h; adolescents 8–10 h. **NREM 3 (slow-wave)** dominates the first half of the night and supports physical restoration; **REM** lengthens through the second half and supports memory consolidation and emotional regulation.

STAGE	% OF SLEEP	FUNCTION / CLINICAL NOTES
NREM N1	2–5%	Light, easily aroused; transitional; hypnic jerks
NREM N2	~50%	Sleep spindles, K-complexes; further drop in HR/RR
NREM N3 (slow-wave / "deep")	10–25%	Tissue repair, GH release, immune restoration; sleepwalking, night terrors arise here; **decreases with age**
REM	20–25%	Vivid dreams, atonia of skeletal muscle, irregular VS; memory consolidation; lengthens through night

SLEEP HYGIENE & CBT-I (FIRST-LINE FOR INSOMNIA)

- Consistent sleep–wake schedule, even on weekends
- Bed for sleep and sex ONLY (stimulus control)
- If unable to fall asleep within ~20 minutes, leave the bed; return when sleepy
- No screens 30–60 min before bed (blue light suppresses melatonin)
- No caffeine after noon; avoid nicotine; no alcohol within 3 h of bed

- No large meals or vigorous exercise within 2–3 h of bed
- Cool, dark, quiet room (~65–68 °F)
- Limit naps to < 30 min before mid-afternoon
- Sunlight in the morning anchors circadian rhythm

CBT-I components: sleep restriction, stimulus control, cognitive restructuring, relaxation training, sleep hygiene, sleep diary. **First-line** for chronic insomnia — superior long-term outcomes vs hypnotics.

OBSTRUCTIVE SLEEP APNEA (OSA) & CPAP

RECOGNIZE

- Loud snoring, witnessed apneas, gasping/choking arousals
- Daytime sleepiness, morning headaches, AM dry mouth, irritability
- Risk: obesity, large neck circumference, retrognathia, male, age > 40, postmenopausal
- Diagnosis: **polysomnography**; AHI ≥ 5 with symptoms or ≥ 15 alone
- Untreated OSA → HTN, AFib, stroke, MI, MV crashes (drowsy driving)

CPAP TEACHING

1. Use the device **every time you sleep**, including naps and travel
2. Mask should seal without leaks; report skin breakdown on the bridge of the nose
3. Use the integrated humidifier to prevent dry mouth/nasal congestion
4. Clean the mask daily (water + mild soap); tubing weekly
5. Replace filter and supplies on schedule
6. Side-sleeping helps; weight loss may reduce CPAP pressure or eliminate need
7. Avoid alcohol and sedatives — relax airway muscles, worsen apneas

RESTLESS LEGS SYNDROME (RLS / WILLIS-EKBOM)

- Urge to move legs, worse at rest and evening, relieved by movement
- Workup: ferritin, iron studies, BUN/creatinine; pregnancy and CKD common contributors
- Treat **iron deficiency if ferritin < 75 ng/mL** (target > 75–100)
- Avoid caffeine, nicotine, alcohol; warm bath, leg massage, stretching, regular sleep schedule
- Pharm: dopamine agonists (pramipexole, ropinirole), gabapentinoids (gabapentin, pregabalin)
- Avoid drugs that worsen RLS: dopamine antagonists (metoclopramide, antipsychotics), antihistamines, SSRIs in some clients

NARCOLEPSY

- Excessive daytime sleepiness, irrepressible sleep attacks
- **Cataplexy:** sudden bilateral muscle weakness triggered by strong emotion (laughter, anger)
- Hypnagogic hallucinations, sleep paralysis, fragmented night sleep
- Treatment: scheduled short naps (planned), modafinil/armodafinil, sodium oxybate, stimulants
- Safety: **no driving** until symptoms controlled; counsel about workplace and school accommodations

INSOMNIA — STEPWISE APPROACH

FIRST-LINE: NON-PHARM

- CBT-I
- Sleep hygiene
- Sleep diary 1–2 weeks
- Treat underlying conditions (pain, depression, OSA)

PHARM (SHORT TERM)

- Melatonin (circadian misalignment, jet lag)
- Z-drugs (zolpidem) — short term, fall risk
- Trazodone — off-label, watch orthostasis & priapism
- Avoid benzodiazepines and diphenhydramine in older adults (Beers)

OLDER ADULT SLEEP CHANGES

- Advanced sleep-phase pattern (early to bed, early to rise)
- ↓ NREM 3 (slow-wave); ↑ awakenings; sleep more fragmented
- Total sleep need still 7–9 h — clients often nap to compensate
- Frequent contributors: nocturia, pain, polypharmacy, depression, OSA
- **Beers Criteria:** avoid benzodiazepines, Z-drugs, diphenhydramine (anticholinergic), and other sedating agents in older adults — fall, fracture, delirium risk

HOSPITAL SLEEP PROMOTION BUNDLE

1. Cluster nursing care to allow uninterrupted blocks at night
2. Dim lights and reduce noise; eye mask and earplugs as desired
3. Silence non-critical alarms; close door if appropriate
4. Avoid bedtime diuretics and unnecessary fluids late in the evening
5. Offer warm noncaffeinated beverage; back rub or relaxation aids
6. Day-night cueing: open shades and ambulate during the day
7. Address pain, anxiety, and full bladder before reaching for sedatives

HOSPITAL-ACQUIRED DELIRIUM

Acute, fluctuating disturbance of attention and cognition — **reversible** when underlying causes (sleep disruption, infection, dehydration, hypoxia, pain, electrolyte abnormalities, medications) are addressed.

RECOGNIZE

- Acute onset, fluctuating course, inattention, disorganized thinking, altered LOC
- Hyperactive (agitated) or **hypoactive** (often missed — quiet, withdrawn)
- Screen with **CAM / CAM-ICU**

PREVENTION BUNDLE

- Reorient frequently; clock and calendar visible; glasses and hearing aids in place
- Sleep promotion bundle (above)
- Early mobility; hydration; pain control; treat infection
- Avoid restraints and Beers-list medications when possible
- Family presence; familiar objects

Distinguish: delirium = acute, fluctuating, reversible · dementia = chronic, progressive · depression = persistent low mood, ↓ energy. All can co-exist.

SLEEP MEDICATION MATRIX

DRUG	MECHANISM	KEY TEACHING / CAUTIONS
Zolpidem (Ambien)	Non-benzo Z-drug; GABA-A	Take immediately before bed with 7–8 h available; complex sleep behaviors (sleep-driving, sleep-eating) — STOP if occurs; **Beers** in older adults
Eszopiclone (Lunesta)	Z-drug	Bitter aftertaste; same Beers caution
Melatonin	Pineal hormone analog	OTC; circadian rhythm support; jet lag, shift work; minimal dependence
Ramelteon	Melatonin receptor agonist	No dependence; safe option in older adults
Trazodone	Sedating antidepressant; off-label	Orthostatic hypotension (fall risk); rare priapism — STOP & seek care if erection > 4 h
Diphenhydramine (Benadryl)	Anticholinergic antihistamine	**Beers**; confusion, urinary retention, fall risk; avoid in older adults
Benzodiazepines (temazepam, lorazepam)	GABA-A	Tolerance, dependence, rebound insomnia; **Beers**; avoid w/ opioids

Suvorexant (Belsomra)	Orexin receptor antagonist	Next-day sedation; CYP3A4 interactions

BCC MIXED INTEGRATION — ALL 6 SUBDOMAINS IN ONE PLAN

The capstone NGN scenarios pull from every BCC subdomain at once. Practice spotting them quickly:

ASSISTIVE DEVICES (DAY 1)

- Cane = COAL; "Up with Good, Down with Bad"
- Crutch pads 2–3 fingers below axilla
- Brakes locked, footrests up, strong-side angle

ELIMINATION (DAY 2)

- Pediatric enema = NS only
- Stoma: pink/red OK · dusky/black = STAT
- C. diff = soap + water + bleach

MOBILITY (DAY 3)

- THA Big 3 NEVER (post.): no flex > 90°, no adduction, no IR
- Stage 1 PI = offload, no massage; never reverse-stage
- No Homan's; no massage of suspected DVT

COMFORT (DAY 4)

- Self-report is gold; match scale to client
- Acute = cold; chronic = heat; 15–20 min with barrier
- TENS contraindicated: pacemaker, carotid, pregnant uterus

NUTRITION (DAY 5)

- NG: X-ray + pH 1.0–5.5; auscultation alone not acceptable
- HOB ≥ 30° during/after feeds; chin-tuck for dysphagia
- Refeeding: K, Mg, phos; thiamine first in alcoholism

HYGIENE (DAY 6)

- Diabetic foot: lukewarm, no soak, no lotion between toes
- Return foreskin to prevent paraphimosis
- Anticoag = electric razor

IF / THEN — CLINICAL DECISION RULES

IF chronic insomnia	→	CBT-I first-line, not hypnotics
IF OSA + alcohol or sedatives	→	avoid — relax airway, worsen apnea
IF RLS + ferritin < 75	→	iron repletion

IF cataplexy with strong emotion	→	narcolepsy with cataplexy; safety + meds
IF older adult new agitation/confusion	→	screen for delirium (CAM); identify reversible cause
IF hospitalized client cannot sleep	→	apply sleep promotion bundle BEFORE PRN sedative
IF older adult on diphenhydramine for sleep	→	advocate change — Beers risk (delirium, falls)
IF zolpidem + reports sleepwalking/sleep-driving	→	STOP drug; notify provider

NCLEX TRAPS

Daytime napping > 30 min
Reduces nighttime sleep drive; teach short, early naps.

"Alcohol helps me sleep"
Disrupts REM, worsens OSA, fragments sleep.

Restraints for confused older adult
Worsens delirium and agitation; use re-orientation, sitter, environment first.

Skipping CPAP for naps
Use it every time you sleep, including naps.

Benzodiazepine for older adult insomnia
Beers — falls, fractures, delirium.

Bedtime diuretic dose
Nocturia disrupts sleep and increases fall risk.

Family interpreting sleep history
Use professional interpreter for accurate report.

Undertreating insomnia in dementia
Worsens behavior; address pain, environment, schedule first.

NCLEX PATTERNS

PATTERN: FIRST-LINE IS BEHAVIORAL

- Insomnia → CBT-I
- OSA → CPAP + weight loss + side-sleep

PATTERN: HOSPITAL SLEEP = BUNDLE FIRST

- Cluster care, dim, quiet, no bedtime diuretic

PATTERN: OLDER ADULT RED FLAGS

- Beers list: benzos, Z-drugs, diphenhydramine

PATTERN: DRUG SAFETY COUNSELING

- Zolpidem → complex sleep behaviors
- Trazodone → orthostasis, priapism

- RLS → iron + lifestyle before drugs

- Address pain/bladder/anxiety BEFORE PRN sedative

- New confusion = delirium until proven otherwise

- Suvorexant → next-day sedation

NGN BOW-TIE — CAPSTONE SYNTHESIS

Case: 78 y/o admitted 2 days ago for community-acquired pneumonia. PMH: posterior R THA 6 weeks ago, type 2 DM, mild dementia. Today: new agitation overnight, slept 2 h total, pulled at IV. Found at edge of bed without abductor pillow. Sacrum non-blanchable redness; foot exam shows fissured heels. Family asks for "something to make her sleep" — diphenhydramine is on the home med list.

TOP 3 ACTIONS

- Apply **delirium + sleep bundle**: reorient, glasses/hearing aids in, cluster care, dim lights, address pain/bladder/oxygenation; CAM screen
- Reinforce **posterior THA precautions**: abductor pillow, no flex > 90°, no adduction, no IR; bed/chair alarm; ambulate with PT
- Offload sacrum (Stage 1 PI): turn q2h with lift sheet, HOB ≤ 30° when possible; nutrition/protein consult; advocate against diphenhydramine (Beers)

CONDITION

HOSPITAL-ACQUIRED DELIRIUM in older adult with multiple BCC risks (sleep disruption, post-op THA, Stage 1 PI, diabetic skin)

TOP 3 MONITOR

- CAM, sleep duration/quality, pain
- Skin (sacrum, heels), Braden, signs of progression
- Glucose, hydration, oxygenation, infection trends

PATIENT & FAMILY EDUCATION CHECKLIST

- ✓ Keep a consistent sleep–wake schedule, even on weekends
- ✓ Reserve the bed for sleep and intimacy only — get up if not asleep within ~20 minutes
- ✓ No screens, caffeine, or large meals 1–2 hours before bed; no alcohol within 3 hours
- ✓ Keep the bedroom cool, dark, and quiet
- ✓ Use CPAP every time you sleep — naps, travel, hospitalization

- ✓ Report new daytime sleepiness, witnessed apneas, or morning headaches
- ✓ For RLS: avoid caffeine, nicotine, alcohol; ask about iron levels
- ✓ For narcolepsy: do not drive until symptoms are controlled; plan scheduled naps
- ✓ Older adults: avoid OTC PM products containing diphenhydramine — talk with provider
- ✓ If a hospitalized loved one becomes acutely confused, alert the nurse — possible delirium

DAY 7 OF 7 — BCC STUDY GUIDE SERIES (CAPSTONE)

Pair this guide with the Day 7 Question Bank (20 NGN items including a capstone bow-tie).

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