

Information on how the blueprint was developed may be accessed using the following link: [PANRE Content Blueprint \(effective January 2019\) - Introduction](#)

The 2023 PANRE / PANRE-LA Blueprint can be found [here](#).

Organized by Level of Assessment

The diseases and disorders that may be covered on PANRE are provided below and are sorted based on the level of assessment. In addition to covering the topics listed below, up to 2% of the questions on PANRE may cover professional practice (legal and ethical) issues. Due to the limited number of questions on PANRE, it is not possible to include all topics on a single exam. The percentage allocations are approximate and may vary slightly with each exam.

Content Area	Percent Allocation*
Cardiovascular System	13%
Dermatologic System	6%
Endocrine System	6%
Eyes, Ears, Nose, and Throat	8%
Gastrointestinal System/Nutrition	11%
Genitourinary System	5%
Hematologic System	4%
Infectious Diseases	6%
Musculoskeletal System	9%
Neurologic System	7%
Psychiatry/Behavioral Science	5%
Pulmonary System	10%
Renal System	3%
Reproductive System	7%

* Percentages may vary slightly with each exam.

The content blueprint arranged by content area instead of assessment level may be accessed using the following link:

[PANRE Content Blueprint \(effective January 2019\) – organized by content area](#)

Level 1 Diseases and Disorders

The following diseases and disorders may be assessed at Level 1 on the PANRE and the Pilot Alternative to PANRE. Level 1 is defined as follows:

Level 1: Recognize most likely diagnosis using signs, symptoms, and risks; refer appropriately.

Cardiovascular System – Level 1

Abdominal aortic aneurysm	Iliac artery occlusion
Acute/subacute bacterial endocarditis	Mitral regurgitation
Aortic stenosis	Mitral valve prolapse
Atrioventricular block	Pericardial effusion
Bundle branch block	Prinzmetal variant angina
Cardiogenic shock	Sick sinus syndrome
Diastolic heart failure	Thoracic aortic aneurysm
Hypertrophic cardiomyopathy	

Dermatologic System – Level 1

Basal cell carcinoma	Melanoma
Erythema multiforme	Squamous cell carcinoma
	Toxic epidermal necrolysis,
	Stevens-Johnson syndrome

Endocrine System – Level 1

Benign thyroid nodules	Hypoparathyroidism
Cushing syndrome	Primary adrenal insufficiency
Diabetes insipidus	Thyroid cancer
Hyperparathyroidism	

Eyes, Ears, Nose, and Throat – Level 1

Cataract	Oral leukoplakia
Corneal ulcer	Orbital blowout fracture
Glaucoma	Papilledema
Hearing loss	Parotitis
Hyphema	Retinal detachment
Labyrinthitis	Tinnitus
Nystagmus	

Gastrointestinal System/Nutrition – Level 1

Acute hepatitis	Ingestion of caustic substance
Anal abscess/fistula	Intussusception
Celiac disease	Ischemic bowel disease
Cholangitis	Large-bowel obstruction
Chronic hepatitis	Mallory-Weiss tear
Cirrhosis	Pyloric stenosis
Colon cancer	Toxic megacolon
Esophageal varices	

Genitourinary System – Level 1

Bladder cancer	Paraphimosis/phimosis
Fecal incontinence	Prostate cancer
Hydrocele/ varicocele	Testicular cancer

Hematologic System – Level 1

Acute/chronic lymphocytic leukemia	Hypocoagulable states
Anemia of chronic disease	Non-Hodgkin lymphoma
Factor V Leiden hypercoagulability	Sickle cell anemia
Hemolytic anemia	Thrombotic thrombocytopenic purpura
Hodgkin lymphoma	

Infectious Diseases – Level 1

HIV infection
Rabies
Tetanus

Musculoskeletal System – Level 1

Acute/chronic osteomyelitis	Kyphosis
Avascular necrosis	Rotator cuff tear
Cauda equina syndrome	Scoliosis
Compartment syndrome	Slipped capital femoral epiphysis
Fractures and dislocations: knee/patella, ankle/ foot, forearm/wrist/hand, shoulder, hip, spine	Spinal disk herniation
	Systemic lupus erythematosus

Neurologic System – Level 1

Cerebral aneurysm	Multiple sclerosis
Delirium	Parkinson disease
Encephalitis	Seizure disorders
Guillain-Barré syndrome	Spontaneous intracranial hemorrhage
Major neurocognitive disorder/dementia	Traumatic intracranial hemorrhage

Psychiatry/Behavioral Science – Level 1

Anorexia nervosa, Bulimia nervosa	Non-substance-related addictive disorders
Attention-deficit/hyperactivity disorder	Post-traumatic stress disorder
Bipolar disorder	Substance use disorders: illicit substances, prescription drugs, alcohol, tobacco
Child/elder abuse, Spouse/partner abuse	

Pulmonary System – Level 1

Lung cancer
Pulmonary nodules

Renal System – Level 1

Acid-base disorders
Acute kidney injury (Acute renal failure)

Reproductive System – Level 1

Abruptio placentae	Ovarian cysts
Amenorrhea	Placenta previa
Breast cancer	Postpartum hemorrhage
Cervical cancer	Premature rupture of membranes
Dysfunctional uterine bleeding	Prenatal diagnosis and care/preconception counseling
Endometriosis	Rh incompatibility
Gestational diabetes	Sexual/physical abuse in pregnancy
Hypertension disorders in pregnancy	

Level 2 Diseases and Disorders

The following diseases and disorders may be assessed at Level 2 on the PANRE and the Pilot Alternative to PANRE. Level 2 is defined as follows:

Level 2: Make appropriate diagnosis by recognizing signs, symptoms, risks and/or interpreting results of diagnostic studies and have knowledge of first-line treatment.

Cardiovascular System – Level 2

Acute myocardial infarction: non–ST-segment elevation myocardial infarction (NSTEMI)	Peripheral artery disease
Acute myocardial infarction: ST-segment elevation myocardial infarction (STEMI)	Phlebitis/thrombophlebitis
Acute pericarditis	Premature atrial/ventricular contractions
Aortic dissection	Secondary hypertension
Arterial embolism/thrombosis	Systolic heart failure
Atrial flutter	Temporal arteritis
Cardiac tamponade	Torsades de pointes
Hypertensive emergency	Unstable angina
Orthostatic hypotension	Varicose veins
Paroxysmal supraventricular tachycardia	Venous insufficiency
	Ventricular fibrillation
	Ventricular tachycardia

Dermatologic System – Level 2

Acne vulgaris	Onychomycosis, Dermatophyte infections
Actinic keratosis	Paronychia
Acute urticaria, Drug eruptions	Pilonidal disease
Atopic dermatitis	Pityriasis rosea
Burns	Pressure ulcers
Contact dermatitis	Psoriasis
Herpes simplex virus	Rosacea
Hidradenitis suppurativa	Scabies, Lice infestation
Impetigo	Seborrheic dermatitis
Lipomas/epidermal inclusion cysts	Spider bites
Molluscum contagiosum	

Endocrine System – Level 2

Hyperthyroidism/thyrotoxicosis
Thyroiditis

Eyes, Ears, Nose, and Throat – Level 2

Acute epiglottitis	Foreign body in eye
Acute/chronic sinusitis	Foreign body in nose
Allergic rhinitis	Hordeolum
Aphthous ulcers	Laryngitis
Blepharitis	Mastoiditis
Chalazion	Meniere disease
Conjunctivitis	Orbital cellulitis
Corneal abrasion	Otitis externa
Epistaxis	Peritonsillar abscess
Eustachian tube dysfunction	Tympanic membrane perforation
Foreign body in ear	Vertigo

Gastrointestinal System/Nutrition – Level 2

Acute/chronic cholecystitis	Gastroesophageal reflux disease
Acute/chronic pancreatitis	Hemorrhoids
Anal fissure	Hernias
Appendicitis	Infectious diarrhea
Cholelithiasis	Inflammatory bowel disease
Diverticulitis/diverticulosis	Intentional overdose of medication
Esophagitis	Irritable bowel syndrome
Fecal impaction	Noninfectious diarrhea
Food allergies	Peptic ulcer disease
Foreign body ingestion	Small-bowel obstruction
Gastritis	

Genitourinary System – Level 2

Acute prostatitis	Nephrolithiasis/uroolithiasis
Bacterial cystitis	Orchitis
Benign prostatic hyperplasia	Testicular torsion
Chronic prostatitis	Urethritis
Epididymitis	Urinary incontinence
Erectile dysfunction	

Hematologic System – Level 2

Folate deficiency anemia
Iron deficiency anemia
Vitamin B12 deficiency anemia

Infectious Diseases – Level 2

Acute rheumatic fever	Pinworm infestation
Chlamydial infections	Rocky Mountain spotted fever
Epstein-Barr virus infections	Roseola
Gonococcal infections	Rubella
Human papillomavirus infections	Syphilis
Lyme disease	Tuberculosis
Measles	Vaginal candidiasis
Mumps	

Musculoskeletal System – Level 2

Back strain/sprain, Lower back injuries	Osgood-Schlatter disease
Biceps tendinitis	Osteoarthritis
Carpal tunnel syndrome	Rheumatoid arthritis
de Quervain tenosynovitis	Septic arthritis
Fibromyalgia	Shoulder bursitis
Ganglion	Shoulder tendinitis
Gout/pseudogout	Soft-tissue injuries: knee, foot/ankle, forearm/wrist/hand
Lateral and medial epicondylitis	Spinal stenosis

Neurologic System – Level 2

Cluster headache	Postconcussion syndrome
Concussion	Radiculopathy
Essential tremor	Status epilepticus
Meningitis	Syncope
Peripheral neuropathy	

Psychiatry/Behavioral Science – Level 2

Bereavement/grief reaction	Panic disorder
Generalized anxiety disorder	Suicide risk
Major depressive disorder	

Pulmonary System – Level 2

Acute bronchiolitis
Acute bronchitis
Acute respiratory distress syndrome
Croup
Foreign body aspiration

Pertussis
Pleural effusion
Pneumothorax
Respiratory syncytial virus infection
Sleep apnea

Renal System – Level 2

Chronic kidney disease
Electrolyte disorders
Pyelonephritis

Reproductive System – Level 2

Breast abscess
Cervicitis Contraception
Dysmenorrhea
Ectopic pregnancy

Mastitis
Menopause
Pelvic inflammatory disease
Premenstrual syndrome
Vaginitis

Level 3 Diseases and Disorders

The following diseases and disorders may be assessed at Level 3 on the PANRE and the Pilot Alternative to PANRE. Level 3 is defined as follows:

Level 3: Make appropriate diagnosis by recognizing signs, symptoms, risks and/or interpreting results of diagnostic studies and have knowledge of first-line treatment. In addition, have knowledge required to manage well known comorbid conditions, contraindications and complications.

Cardiovascular System – Level 3

Angina pectoris (stable angina)
Atrial fibrillation
Coronary artery disease
Deep venous thrombosis

Essential hypertension (in adults)
Hypercholesterolemia
Hypertriglyceridemia

Dermatologic System – Level 3

Cellulitis, Erysipelas

Endocrine System – Level 3

Hypothyroidism
Metabolic syndrome and obesity
Osteoporosis

Type 1 diabetes mellitus
Type 2 diabetes mellitus

Eyes, Ears, Nose, and Throat – Level 3

Acute pharyngitis
Acute/chronic otitis media
Oral candidiasis

Gastrointestinal System/Nutrition – Level 3

Appendicitis
Constipation
Gastroesophageal reflux disease

Genitourinary System – Level 3

No Level 3 topics in this content category.

Hematologic System – Level 3

No Level 3 topics in this content category. NCCPA

Infectious Diseases – Level 3

Chickenpox/herpeszoster
Influenza

Musculoskeletal System – Level 3

No Level 3 topics in this content category.

Neurologic System – Level 3

Migraine
Stroke/transientischemic attack
Tension headache

Psychiatry/Behavioral Science – Level 3

No Level 3 topics in this content category.

Pulmonary System – Level 3

Asthma	Emphysema Pulmonary
Bacterial pneumonia	embolism
Chronic bronchitis	Viral pneumonia

Renal System – Level 3

No Level 3 topics in this content category.

Reproductive System – Level 3

No Level 3 topics in this content category.