



Content Blueprint for the Emergency Medicine CAQ Examination

The Emergency Medicine CAQ Content Blueprint provides information on how exam questions are allocated to the different medical content categories that have been deemed important for PAs working within the specialty area.

The examples provided for each medical content and task category are indicative of the types of information that will be included on the examination. It is not possible to include all topics on a single examination, and it may be possible that some questions on a single examination cover content that is not listed in the examples.

Medical Content Categories

A. Cardiovascular System	9%
B. Dermatologic System	2%
C. Endocrine System	4%
D. Eyes, Ears, Nose, & Throat	5%
E. Gastrointestinal System and Nutrition	9%
F. Genitourinary System	5%
G. Hematologic System	4%
H. Musculoskeletal System	5%
I. Neurologic System	6%
J. Psychobehavioral Disorders	5%
K. Pulmonary System	9%
L. Renal System	5%
M. Obstetrics and Gynecology	5%
N. Systemic Infectious Disorders	5%
O. Environmental and Toxicologic Disorders	6%
P. Traumatic Disorders	6%
Q. Procedures and Skills	5%
R. Emerging Topics and Legal/Ethical Issues	5%

Task Categories

A. History Taking and Performing Physical Examination	15%
B. Ordering and Interpreting Diagnostic and Laboratory Studies	15%
C. Formulating Most Likely Diagnosis	16%
D1. Patient Education and Preventive Measures	5%
D2. Clinical Intervention	16%
D3. Pharmaceutical Therapeutics	15%
E. Applying Scientific Concepts	7%
F. Cultural Competency and Social Determinants of Healthcare	3%
G. Public Health (Population/Society)	3%
L. Emerging Topics and Legal/Ethical Issues	5%

Medical Content Categories

A. Cardiovascular System (9%)

1. Cardiomyopathy
2. Conduction disorders/dysrhythmias
 - Atrial
 - Ventricular
3. Congenital heart disease
 - Acyanotic conditions
 - Cyanotic conditions
4. Coronary artery disease
 - Acute coronary syndrome
 - Lipid disorders
 - NSTEMI/STEMI
5. Heart failure
6. Hypertension
 - Asymptomatic
 - Symptomatic
7. Hypotension/cardiogenic shock
8. Infectious and inflammatory heart conditions
 - Endocarditis
 - Myocarditis
 - Pericardial effusion/tamponade
 - Pericarditis
9. Valvular heart disease
10. Vascular disorders
 - Aortic aneurysm/dissection
 - Arterial embolism/thrombosis
 - Limb ischemia
 - Thrombosis
11. Special circumstances
 - Arterial shunts
 - Cardiac devices
 - Transplants

B. Dermatologic System (2%)

1. Desquamation
 - Scarlet fever
 - Stevens-Johnson syndrome
 - Toxic epidermal necrolysis
2. Exanthems
 - Erythema infectiosum (fifth disease)
 - Hand-foot-and-mouth disease
 - Hypersensitivity reactions
 - Measles
3. Infectious diseases
 - Bacterial
 - Fungal
 - Parasitic
 - Viral
4. Neoplasms
5. Papulosquamous disorders
 - Dermatitis
 - Eczema
 - Pityriasis rosea

6. Skin integrity
 - Dermatitis
 - Pressure injuries
 - Stasis dermatitis
7. Vesiculobullous disease
 - Pemphigoid
 - Pemphigus
8. Other dermatologic disorders
 - Cutaneous manifestations of systemic disease
 - Hidradenitis suppurativa
 - Necrotizing fasciitis
 - Petechiae
 - Vasculitis

C. Endocrine System (4%)

1. Adrenal disorders
 - Adrenal crisis
 - Adrenal insufficiency
2. Diabetes
 - Diabetic ketoacidosis
 - Hyperosmolar hyperglycemic state
 - Hypoglycemia
3. Neoplasms
 - Adrenal/pheochromocytoma
 - Pituitary
 - Thyroid
4. Pituitary disorders
 - Diabetes insipidus
 - Syndrome of inappropriate antidiuretic hormone secretion (SIADH)
5. Thyroid disorders
 - Hyperthyroidism
 - Hypothyroidism
 - Myxedema
 - Thyroid storm

D. Eyes, Ears, Nose, & Throat (5%)

1. Eye disorders
 - Central retinal artery/vein occlusion
 - Chalazion/hordeolum
 - Conjunctivitis
 - Corneal ulcer
 - Glaucoma
 - Hyphema
 - Iritis/uveitis/keratitis
 - Optic neuritis
 - Periorbital and orbital cellulitis
 - Retinal detachment
2. Ear disorders
 - Bullous myringitis
 - External, middle, and inner ear disorders
 - Hearing loss
 - Malignant otitis externa

- Mastoiditis
- Trauma
- 3. Nose/sinus disorders
 - Epistaxis
 - Rhinitis
 - Sinusitis
 - Trauma
- 4. Oral disorders
 - Candidiasis
 - Dental disorders
 - Lesions
 - Salivary disorders
 - Trauma
- 5. Throat disorders
 - Croup/epiglottitis
 - Ludwig angina
 - Peritonsillar/retropharyngeal abscess
 - Pharyngitis/tonsillitis
- 6. Foreign bodies
- 7. Neoplasms
 - Oropharyngeal
 - Throat
 - Thyroid

E. Gastrointestinal System And Nutrition (9%)

1. Biliary disorders
 - Biliary tract disease
 - Cholangitis
 - Cholecystitis
 - Choledocholithiasis
2. Colorectal disorders
 - Abscess/fistula
 - Anal fissure
 - Colitis
 - Constipation
 - Diverticulitis
 - Hemorrhoids
 - Inflammatory bowel disease
 - Obstruction
 - Volvulus
3. Esophageal disorders
 - Gastroesophageal reflux disease
 - Motility disorders
 - Rupture
 - Stricture
 - Varices
4. Foreign bodies
5. Gastric disorders
 - Bariatric considerations
 - Gastritis
 - Rupture
 - Ulcer disease
6. Hepatic disorders
 - Hepatitis
 - Liver failure
7. Hernias
 - Hiatal

- Inguinal
- Umbilical
- Ventral wall
- 8. Intestinal disorders
 - Appendicitis
 - Enteritis
 - Gastrointestinal hemorrhage
 - Ileitis
 - Intussusception
 - Obstruction
- 9. Mesenteric disorders
 - Mesenteric adenitis
 - Mesenteric ischemia
- 10. Neoplasms
- 11. Pancreatic disorders
- 12. Special circumstances
 - Asplenism
 - Gastroparesis
 - Infectious disorders

F. Genitourinary System (5%)

1. Bladder disorders
 - Infectious
 - Noninfectious
2. Neoplasms
3. Penile disorders
 - Balanitis
 - Paraphimosis/phimosis
 - Priapism
4. Prostate disorders
 - Benign prostatic hypertrophy
 - Prostatitis
5. Testicular/scrotal disorders
 - Epididymitis
 - Fournier's gangrene
 - Orchitis
 - Testicular torsion
6. Urethral disorders
 - Obstruction
 - Prolapse
 - Stricture
 - Urethritis
 - Urolithiasis
7. Sexually transmitted infections

G. Hematologic System (4%)

1. Coagulation disorders
 - Bleeding disorders
 - Disseminated intravascular coagulation
 - Emergencies associated with anticoagulant therapy
 - Thrombophilias
2. Cytopenia
 - Anemias
 - Leukopenia
 - Thrombocytopenia

3. Hemoglobinopathies
 - Hemochromatosis
 - Sickle cell disease
4. Immunologic disorders
 - Autoimmune hemolytic anemia
 - Immune thrombocytopenia
 - Transfusion reaction
5. Myelodysplastic disorders
6. Oncologic emergencies
 - Hyperviscosity syndrome
 - Neutropenic fever
 - Tumor lysis syndrome
7. Polycythemia

H. Musculoskeletal System (5%)

1. Chest/rib disorders
2. Compartment syndrome
3. Inflammatory and infectious diseases
 - Osteoarthritis
 - Osteomyelitis
 - Septic arthritis/bursitis
4. Lower extremity disorders
 - Ankle
 - Foot
 - Hip
 - Knee
 - Leg/thigh
5. Neck and spine disorders
 - Cauda equina
 - Disk disorders
6. Neoplasms
7. Osteoporosis
8. Rheumatologic disorders
 - Gout/pseudogout
 - Paget disease
 - Psoriatic arthritis
 - Rheumatoid arthritis
 - Systemic lupus erythematosus
9. Upper extremity disorders
 - Elbow
 - Forearm/upper arm
 - Hand
 - Shoulder
 - Wrist

I. Neurologic System (6%)

1. Altered mental state
2. Central nervous system disorders
 - Cord syndromes
 - Encephalopathy
 - Hydrocephalus
 - Transverse myelitis
 - Vertigo and dizziness
3. Headaches
4. Infectious disorders
 - Encephalitis
 - Meningitis
 - Spinal epidural abscess

5. Neoplasms
6. Neuromuscular disorders
 - Multiple sclerosis
 - Myasthenia gravis
7. Peripheral nerve disorders
 - Bell palsy
 - Complex regional pain syndrome
 - Guillain-Barré syndrome
 - Nerve entrapment syndromes
 - Peripheral neuropathy
8. Seizure disorders
9. Syncope
10. Vascular disorders
 - Atraumatic intracranial hemorrhage
 - Cerebral aneurysm
 - Cerebral venous thrombosis
 - Stroke/transient ischemic attack
 - Temporal arteritis

J. Psychobehavioral Disorders (5%)

1. Abuse and neglect
 - Emotional abuse
 - Neglect
 - Physical abuse
 - Sexual abuse
2. Anxiety disorders
 - Adjustment disorder
 - Generalized anxiety disorder
 - Obsessive-compulsive disorders
 - Panic disorder
 - Phobias
 - Post-traumatic stress disorder
3. Bipolar and related disorders
4. Depressive disorders
 - Major depressive disorder
 - Persistent depressive disorder/dysthymia
 - Suicidal/homicidal behaviors
5. Disruptive, impulse-control, and conduct disorders
6. Dissociative and personality disorders
7. Feeding and eating disorders
8. Neurocognitive disorders
 - Delirium
 - Major/mild neurocognitive disorders
9. Neurodevelopmental disorders
10. Schizophrenia spectrum and other psychotic disorders
11. Sexual and gender-related disorders
12. Somatic symptom and related disorders
13. Substance-related and addictive disorders

K. Pulmonary System (9%)

1. Infectious disorders
 - Acute bronchiolitis
 - Acute bronchitis
 - Empyema
 - Lower respiratory tract infections
 - Lung abscess

- Pneumonias
- Tuberculosis
- Upper respiratory tract infections
- 2. Neoplasms
- 3. Obstructive pulmonary diseases
 - Asthma
 - Chronic obstructive pulmonary disease
 - Emphysema
 - Sleep apnea
- 4. Pleural diseases
 - Pleural effusion
 - Pneumothorax
- 5. Pulmonary circulation
 - Cor pulmonale
 - Pulmonary embolism
 - Pulmonary hypertension
- 6. Restrictive pulmonary diseases
 - Pulmonary fibrosis
 - Sarcoidosis
- 7. Special circumstances
 - Acute respiratory distress syndrome
 - Cystic fibrosis
 - Foreign body aspiration
 - Interstitial lung disease
 - Pulmonary edema
 - Respiratory failure

L. Renal System (5%)

- 1. Acute disorders
 - Acute kidney injury/acute renal failure
 - Pyelonephritis
 - Renal abscess
 - Rhabdomyolysis
- 2. Chronic kidney disease and end-stage renal disease/renal transplant
 - Hemodialysis complications
 - Peritoneal dialysis complications
- 3. Congenital or structural renal disorders
 - Polycystic kidney disease
 - Strictures
- 4. Fluid and electrolyte disorders
 - Acid-base disorders
 - Dehydration/hypervolemia
 - Hyperkalemia/hypokalemia
 - Hyponatremia/hypernatremia
- 5. Hydronephrosis/obstructive uropathy
- 6. Neoplasms
 - Renal cell carcinoma
 - Wilms tumor
- 7. Nephrolithiasis/urolithiasis

M. Obstetrics and Gynecology (5%)

- 1. Breast disorders
- 2. Infectious and inflammatory disorders
 - Cervicitis
 - Pelvic inflammatory disease
 - Toxic shock syndrome

- 3. Pregnancy-related complications
 - Abortions
 - Breech presentation
 - Cord prolapse
 - Fetal distress
 - Ectopic pregnancy
 - Hemolysis, elevated liver enzymes, low platelet count (HELLP)
 - Hyperemesis gravidarum
 - Placenta abruptio
 - Placenta previa
 - Postpartum hemorrhage
 - Preeclampsia/eclampsia
 - Prelabor rupture of membranes
 - Retained products of conception
 - Rh incompatibility
 - Subchorionic hemorrhage
- 4. Contraception
 - Implant/IUD complications
 - Emergency contraceptive use
- 5. Neoplasms
- 6. Ovarian/fallopian tube disorders
 - Cysts
 - Salpingitis
 - Torsion
 - Tubo-ovarian abscess
- 7. Menstrual/uterine disorders
- 8. Vaginal/vulvar disorders
 - Bartholin gland/abscess
 - Foreign body
 - Vaginitis

N. Systemic Infectious Disorders (5%)

- 1. Bacteremia
- 2. Bacterial infections
 - Lyme disease
 - Meningitis
 - Rocky Mountain spotted fever
 - Tetanus
- 3. Fungal infections
 - Candidemia
 - Cryptococcus
- 4. Opportunistic infections
- 5. Parasitic infections
 - Chagas
 - Giardia
 - Malaria
 - Toxoplasmosis
- 6. Postexposure prophylaxis
- 7. SIRS/sepsis/septic shock
- 8. Travel-related/tropical illnesses
- 9. Viral infections
 - COVID 19
 - HIV/AIDS
 - Infectious mononucleosis
 - Influenza
 - Rabies

O. Environmental and Toxicologic Disorders (6%)

1. Allergic reactions
 - Anaphylaxis
 - Hypersensitivity reactions
2. Altitude sickness
3. Biological/chemical terrorism
4. Dive emergencies
5. Envenomation and arthropod injuries
6. Exposure illnesses
 - Hyperthermia
 - Hypothermia
7. Inhalation of toxins
 - Ammonia
 - Carbon monoxide
 - Chlorine
 - Cyanide
8. Near-drowning/drowning
9. Radiation exposure
10. Toxic ingestion
 - Foreign bodies
 - Illicit substances
 - Medications
 - Metals
11. Toxidromes
12. Withdrawal syndromes

P. Traumatic Disorders (6%)

1. Chest/abdomen/pelvic injuries
2. Electrical injuries
 - Electrocution
 - Lightning strike
3. Head and spinal injuries
4. Impaired skin integrity
 - Bites/abrasions
 - Burns
 - Frostbite
 - Lacerations
5. Mechanisms of injuries
 - Acceleration/deceleration
 - Blast
 - Blunt force
 - Crush
 - Penetrating
 - Strangulation
6. Musculoskeletal injuries
7. Ocular injuries
8. Oral/maxillofacial injuries
9. Physical/sexual assault
10. Shock
11. Soft tissue injuries
12. Trauma in pregnancy
13. Vascular injuries

Q. Procedures and Skills (5%)

1. Advanced wound management
 - Incision and drainage
 - Wound debridement
 - Superficial/deep wound closure

2. Airway adjuncts: invasive airway management
 - Capnometry
 - Intubation
 - Mechanical ventilation
 - Noninvasive ventilatory management
3. Anesthesia
 - Local, digital
 - Procedural sedation and analgesia
4. Diagnostic/therapeutic procedures
 - Cardiac pacing
 - Control of epistaxis
 - Decontamination
 - Defibrillation/cardioversion
 - Electrocardiographic interpretation
 - Foreign body removal
 - Hemorrhage control
 - Lateral canthotomy
 - Lumbar puncture
 - Paracentesis
 - Slit-lamp examination
 - Thoracentesis
 - Thoracostomy
 - Tonometry
5. Disaster management
6. Managing delivery of a newborn
7. Orthopaedic management
 - Arthrocentesis
 - Clearing a cervical spine
 - Fracture/dislocation reduction
 - Splinting/casting
8. Point-of-care ultrasound
 - Extended focused assessment with sonography for trauma (eFAST)
 - Vascular access
9. Psychobehavioral interventions
10. Radiographic interpretation
 - CT scans, MRIs
 - Radiographs
11. Resuscitation
 - Cardiopulmonary
 - Fluid
12. Small catheter management
 - Foley tube
 - Nasogastric tube
 - Orogastric tube
13. Vascular access techniques
 - Arterial
 - Central venous
 - Intraosseous
 - Peripheral venous

R. Emerging Topics and Legal/Ethical Issues (5%)

Task Categories

A. History Taking and Performing Physical Examination

- ☐ Identify most appropriate history questions/factors
- ☐ Identify most appropriate physical exam components/maneuvers
- ☐ Use chief complaint, history, or PE to make diagnosis (no test results given)

B. Ordering and Interpreting Diagnostic and Laboratory Studies

- ☐ Select the appropriate diagnostic test or procedure
- ☐ Interpret results for a patient with known diagnosis

C. Formulating Most Likely Diagnosis

- ☐ Determine the differential diagnosis; identify the most likely diagnosis
- ☐ Interpret results of diagnostic study in order to reach a diagnosis
- ☐ Identify the prognosis
- ☐ Identify the likely complications of a condition/disease
- ☐ Use test results as well as history and PE information to make a diagnosis

D1. Patient Education and Preventive Measures (advice)

- ☐ Identify risk factors
- ☐ Identify preventive measures
- ☐ Identify appropriate immunizations
- ☐ Identify appropriate patient education/advice (e.g., lifestyle and diet modifications)
- ☐ Identify appropriate follow-up instructions to patients/family

D2. Clinical Intervention (action)

- ☐ Select the most appropriate intervention (surgical procedures or treatments, nonsurgical or mechanical procedures, referral to specialist or nonintervention such as: reassurance, observation, schedule follow-up visit, do nothing)
- ☐ Identify/predict common complications of procedures

D3. Pharmaceutical Therapeutics (medication)

- ☐ Identify indications for medications
- ☐ Select appropriate medications
- ☐ Identify therapeutic effects of medications
- ☐ Identify the contraindications and side effects of medications

E. Applying Scientific Concepts (basic science items without detailed patient vignettes)

- ☐ Identify anatomy and physiology, etiology, pathophysiological mechanisms
- ☐ Recognize basic epidemiological concepts/facts (differentiate from preventive measures in D1)
- ☐ Identify causal organisms (viral or bacterial pathogens) for patient with known diagnosis
- ☐ Pharmacological mechanisms (basic science, not vignette items)
Example: "Which of the following is the reason channel blockers are effective for hypertension?" Answer: "They directly relax the smooth muscle of the arterioles"

F. Cultural Competency and Social Determinants of Healthcare

- ☐ Identify social, economic, environmental, cultural, racial, religious, and legal considerations affecting patient health and quality of life
- ☐ Identify the PA role in providing emergency care that addresses barriers to patient care
- ☐ Recognize how gender identity and expression and sexual orientation affect patient health and quality of life
- ☐ Use multifaceted team approach to patient care (eg, local community organizations, social work, shelter, video interpreter)

G. Public Health (Population/Society)

- ☐ Recognize challenges of emergency room overcrowding/boarding
- ☐ Recognize challenges of responding to natural disasters, terrorism/bioterrorism, and other mass casualty incidents
- ☐ Identify emerging infectious diseases
- ☐ Identify need for end-of-life care

L. Emerging Topics and Legal/Ethical Issues

- ☐ Identify reporting requirements for any type of abuse or neglect
- ☐ Identify reporting requirements for any communicable disease
- ☐ Recognize need to ensure informed consent
- ☐ Recognize need to comply with patient directives
- ☐ Recognize need to protect patient privacy
- ☐ Recognize need to report inappropriate conduct
- ☐ Recognize the PA scope of practice
- ☐ Recognize appropriate use of technology including medical records and social media