



CRITICAL CARE MEDICINE Blueprint

For traditional, 10-year Maintenance of Certification (MOC) exam and Longitudinal Knowledge Assessment (LKA®)

Content development: How ABIM Board Certified physicians inform the process

The American Board of Internal Medicine (ABIM) regularly invites board certified physicians in each specialty to provide ratings of the relative frequency and importance of blueprint topics in practice. This review process helps to ensure that the topics included on ABIM’s assessments are informed by practicing clinicians.

Assessment format

The blueprint is used to develop both the traditional MOC exam taken in the testing center and the quarterly LKA. Most questions describe patient scenarios and ask about the work done (that is, tasks performed) by physicians in the course of practice within major medical content categories.

TASK	TARGET %
Diagnosis/Testing	43%
Treatment/Care Decisions	50%
Risk Assessment/Prognosis/Epidemiology	5%
Pathophysiology/Basic Science	2%

To determine the content distribution, physician governance analyzes practicing physician ratings of topic frequency and importance. Informed by these data, the Approval Committees and Specialty Board have determined the content category targets, which are shown in the next column.

CONTENT CATEGORY	TARGET %
Shock	15%
Renal, Endocrine, and Metabolic Disorders	13%
Cardiovascular Disorders	13%
Pulmonary Disease	17%
Infectious Disease	10%
Gastrointestinal Disorders	5%
Neurologic Disorders	9%
Hematologic and Oncologic Disorders	5%
Surgical Specialties	5%
Pharmacology and Toxicology	5%
Research, Administration, and Ethics	1%
Critical Care Ultrasound Scanning	2%
Total	100%

ABIM is committed to working toward health equity and believes that board certified physicians should have an understanding of health care disparities. Therefore, health equity content that is clinically important to each discipline will be included in assessments.

Health equity functions as a cross-content category spanning multiple content areas of the blueprint. Clinically relevant factors such as, but not limited to, the following may appear on the assessment: low health literacy and language barriers affecting care comprehension; food insecurity influencing nutrition and disease management; and cost or insurance constraints limiting continuity of care.

Clinical information presented may include patient photographs, radiographs, computed tomograms, photomicrographs, magnetic resonance images, equianalgesic tables, bone scans, family pedigree charts, nomograms and other media to illustrate relevant patient findings. Exam tutorials, including examples of question format, can be found at abim.org/about/abim-exams/exam-tutorials/.

Get Involved

ABIM Board Certified physicians contribute to every aspect of the blueprint, from content and distribution to layout and visual aids. Most importantly, practicing physicians in each specialty are invited to participate in blueprint review surveys when those specialties are due for an update. A complete schedule of blueprint reviews is available on ABIM.org. If you are invited to participate, please do so to ensure your perspective is heard in your specialty.

If you are interested in additional volunteer opportunities, visit [ABIM’s website](http://ABIM's website) for a complete list of openings.

Content outline for the Critical Care Medicine traditional, 10-year MOC exam and LKA

■ – High Relevance: Topics are very likely to appear on the assessment
 ■ – Medium Relevance: Topics are moderately likely to appear on the assessment
 □ – Low Relevance: Topics will not appear on the assessment

Blueprint Code and Topic	Diagnosis/Testing (43%)	Treatment/Care Decisions (50%)	Risk Assessment/ Prognosis/ Epidemiology (5%)	Pathophysiology/ Basic Science (2%)
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1 SHOCK (15% of exam)

1.1	Cardiogenic shock	HIGH	HIGH	HIGH	HIGH
1.2	Distributive shock	HIGH	HIGH	HIGH	HIGH
1.3	Hypovolemic shock	HIGH	HIGH	HIGH	HIGH
1.4	Obstructive shock	MEDIUM	MEDIUM	MEDIUM	MEDIUM

2 RENAL, ENDOCRINE, AND METABOLIC DISORDERS (13% of exam)

2.1	Sodium-water balance	HIGH	HIGH	MEDIUM	MEDIUM
2.2	Potassium disorders	HIGH	HIGH	MEDIUM	MEDIUM
2.3	Acid-base disorders	HIGH	HIGH	HIGH	HIGH
2.4	Acute kidney injury	HIGH	HIGH	HIGH	MEDIUM
2.5	Metabolic abnormalities of toxic ingestions	MEDIUM	MEDIUM	MEDIUM	MEDIUM
2.6	Calcium, phosphate, and magnesium disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
2.7	Hyperammonemia	MEDIUM	MEDIUM	MEDIUM	MEDIUM
2.8	Hyperglycemia	MEDIUM	MEDIUM	MEDIUM	MEDIUM
2.9	Hypoglycemia	HIGH	HIGH	MEDIUM	MEDIUM
2.10	Thyroid disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
2.11	Adrenal disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
2.12	Pituitary disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM

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3 CARDIOVASCULAR DISORDERS (13% of exam)

3.1	Coronary artery disease	HIGH	HIGH	MEDIUM	MEDIUM
3.2	Rhythm and conduction abnormalities	HIGH	HIGH	MEDIUM	MEDIUM
3.3	Heart failure	HIGH	HIGH	MEDIUM	MEDIUM
3.4	Hemodynamic monitoring	HIGH	HIGH	MEDIUM	LOW
3.5	Vascular diseases	MEDIUM	MEDIUM	MEDIUM	MEDIUM
3.6	Structural and valvular heart disease	MEDIUM	MEDIUM	MEDIUM	MEDIUM
3.7	Pericardial diseases	MEDIUM	MEDIUM	MEDIUM	MEDIUM
3.8	Myocardial diseases	MEDIUM	MEDIUM	MEDIUM	MEDIUM
3.9	Mechanical circulatory support	MEDIUM	MEDIUM	MEDIUM	MEDIUM

4 PULMONARY DISEASE (17% of exam)

4.1	Respiratory failure	HIGH	HIGH	HIGH	HIGH
4.2	Mechanical ventilation	HIGH	HIGH	HIGH	HIGH
4.3	Airway disease	HIGH	HIGH	HIGH	MEDIUM
4.4	Parenchymal lung disease	HIGH	HIGH	MEDIUM	MEDIUM
4.5	Pulmonary vascular disorders	HIGH	HIGH	MEDIUM	MEDIUM
4.6	Hemoptysis	MEDIUM	MEDIUM	MEDIUM	MEDIUM
4.7	Pleural disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM

5 INFECTIOUS DISEASE (10% of exam)

5.1	Systemic infections	HIGH	HIGH	HIGH	MEDIUM
5.2	Central nervous system infections	MEDIUM	MEDIUM	MEDIUM	MEDIUM
5.3	Head, neck, and upper airway infections	HIGH	HIGH	MEDIUM	MEDIUM
5.4	Cardiovascular infections	MEDIUM	MEDIUM	MEDIUM	MEDIUM
5.5	Gastrointestinal, hepatobiliary, and intra-abdominal infections	HIGH	HIGH	MEDIUM	MEDIUM
5.6	Genitourinary tract infections	MEDIUM	MEDIUM	MEDIUM	MEDIUM
5.7	Bone and joint infections	MEDIUM	MEDIUM	MEDIUM	MEDIUM

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5 INFECTIOUS DISEASE *continued... (10% of exam)*

5.8	Catheter- and device-associated infections	HIGH	HIGH	HIGH	MEDIUM
5.9	Antimicrobial therapy and resistance	HIGH	HIGH	HIGH	MEDIUM
5.10	Antimicrobial pharmacokinetics and pharmacodynamics	MEDIUM	MEDIUM	MEDIUM	MEDIUM
5.11	Infections in immunocompromised hosts	HIGH	HIGH	HIGH	MEDIUM
5.12	Skin and soft tissue infections	MEDIUM	MEDIUM	MEDIUM	MEDIUM
5.13	Bioterrorism	MEDIUM	MEDIUM	MEDIUM	LOW
5.14	Infection prevention and antimicrobial stewardship	HIGH	HIGH	MEDIUM	LOW

6 GASTROINTESTINAL DISORDERS *(5% of exam)*

6.1	Esophagus disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
6.2	Stomach disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
6.3	Small intestine disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
6.4	Large intestine disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
6.5	Hepatobiliary disorders	HIGH	MEDIUM	MEDIUM	MEDIUM
6.6	Pancreas	MEDIUM	MEDIUM	MEDIUM	MEDIUM

7 NEUROLOGIC DISORDERS *(9% of exam)*

7.1	Brain death/death by neurologic criteria (physiology)	MEDIUM	MEDIUM	MEDIUM	MEDIUM
7.2	Cerebrovascular disease	HIGH	HIGH	HIGH	MEDIUM
7.3	Seizures and status epilepticus	MEDIUM	MEDIUM	MEDIUM	MEDIUM
7.4	Neuromuscular diseases	MEDIUM	MEDIUM	MEDIUM	MEDIUM
7.5	Intracranial hypertension	MEDIUM	MEDIUM	MEDIUM	MEDIUM
7.6	Head trauma	MEDIUM	MEDIUM	MEDIUM	MEDIUM
7.7	Spinal cord injury	MEDIUM	MEDIUM	MEDIUM	MEDIUM
7.8	Coma, encephalopathy, and delirium	HIGH	HIGH	HIGH	HIGH
7.9	Analgesia, sedation, and neuromuscular junction blockade	HIGH	HIGH	HIGH	HIGH

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8 HEMATOLOGIC AND ONCOLOGIC DISORDERS (5% of exam)


8.1	Red blood cell diseases	MEDIUM	MEDIUM	MEDIUM	MEDIUM
8.2	White blood cell diseases	MEDIUM	MEDIUM	MEDIUM	MEDIUM
8.3	Platelet disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
8.4	Coagulopathies	HIGH	HIGH	MEDIUM	MEDIUM
8.5	Hypercoagulable states	MEDIUM	MEDIUM	MEDIUM	MEDIUM
8.6	Transfusion medicine	MEDIUM	MEDIUM	MEDIUM	MEDIUM
8.7	Solid tumors	MEDIUM	MEDIUM	MEDIUM	LOW
8.8	Oncologic syndromes	MEDIUM	MEDIUM	MEDIUM	MEDIUM
8.9	Hematopoietic cell transplantation	LOW	MEDIUM	LOW	LOW
8.10	Complications of immunosuppressive drugs and chemotherapy	MEDIUM	MEDIUM	MEDIUM	MEDIUM


9 SURGICAL SPECIALTIES (5% of exam)


9.1	Cardiovascular and vascular surgery	HIGH	HIGH	MEDIUM	MEDIUM
9.2	Abdominal and gastrointestinal	HIGH	HIGH	MEDIUM	MEDIUM
9.3	Genitourinary and obstetric emergencies	MEDIUM	MEDIUM	MEDIUM	MEDIUM
9.4	Environmental injury	MEDIUM	MEDIUM	MEDIUM	MEDIUM
9.5	General postoperative management	MEDIUM	MEDIUM	MEDIUM	LOW
9.6	Trauma	MEDIUM	MEDIUM	MEDIUM	MEDIUM
9.7	Solid organ transplantation (0.5% of exam)	MEDIUM	MEDIUM	LOW	LOW

10 PHARMACOLOGY AND TOXICOLOGY (5% of exam)

10.1	Basic pharmacologic principles	MEDIUM	MEDIUM	MEDIUM	MEDIUM
10.2	Drug-drug interactions	MEDIUM	HIGH	MEDIUM	MEDIUM
10.3	Adverse effects of drugs	MEDIUM	MEDIUM	MEDIUM	MEDIUM
10.4	Toxicology, drug overdose, and poisoning	HIGH	HIGH	MEDIUM	MEDIUM

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11 RESEARCH, ADMINISTRATION, AND ETHICS (1% of exam)

11.1	Intensive care unit (ICU) administration	LOW	HIGH	MEDIUM	LOW
11.2	Ethical considerations	LOW	HIGH	HIGH	LOW
11.3	Ethics of brain death	LOW	MEDIUM	MEDIUM	LOW
11.4	Withholding or withdrawing life-sustaining therapies	LOW	HIGH	HIGH	LOW
11.5	Advanced care planning	LOW	HIGH	MEDIUM	LOW
11.6	Patient confidentiality and Health Insurance Portability and Accountability Act (HIPAA) regulations	LOW	MEDIUM	MEDIUM	LOW
11.7	Organ donation	MEDIUM	MEDIUM	MEDIUM	LOW
11.8	Medically nonbeneficial treatments	LOW	MEDIUM	MEDIUM	LOW
11.9	Medical research	MEDIUM	MEDIUM	LOW	LOW
11.10	Patient safety and quality improvement	MEDIUM	HIGH	MEDIUM	LOW

12 CRITICAL CARE ULTRASOUND SCANNING (2% of exam)

12.1	Cardiac	HIGH	HIGH	MEDIUM	LOW
12.2	Pulmonary	HIGH	HIGH	MEDIUM	LOW
12.3	Abdominal	MEDIUM	MEDIUM	MEDIUM	LOW
12.4	Vascular	MEDIUM	MEDIUM	MEDIUM	LOW

Expanded Blueprints: For the most detailed content outline, including third-level subtopics, visit [ABIM's website](#).