



## Internal Medicine

### Certification Examination Blueprint

#### What Does the Examination Cover?

The exam is designed to evaluate the extent of the candidate's knowledge and clinical judgment in the areas in which an internist should demonstrate a high level of competence. Expertise in the broad domain of internal medicine, and the diagnosis and treatment of both common and rare conditions that have important consequences for patient, will be assessed.

Exam content is consistent with a pre-established blueprint or table of specifications. The blueprint is developed by the Board of Directors and is reviewed and revised annually to ensure that it is current. In addition, practicing internists, internal medicine trainees, and training program directors are surveyed periodically to provide feedback on the blueprinting process. The blueprint is used as a guide in developing the exam.

The majority of questions (over 75 percent) are based on patient presentations. The setting of the encounters reflect current medical practice, so most take place in an outpatient or emergency department setting (roughly 75 percent); the remainder occur in inpatient settings, ranging from the intensive care unit to the nursing home. Questions requiring simple recall of medical facts are in the minority; the majority of items require integration of information from several sources, prioritization of alternatives, and/or utilization of clinical judgment in reaching a correct conclusion. Some questions require interpretation of pictorial material such as electrocardiograms, radiographs, and photomicrographs (e.g., blood films, Gram stains, urine sediments). **Some questions may require recognition and interpretation of recorded sounds (e.g., heart, lung).**

The content areas covered and their relative proportions on the exam are:

Medical-Content Category	Relative Percentage
Cardiovascular Disease	14%
Gastroenterology	9%
Pulmonary Disease	10%
Infectious Disease	9%
Rheumatology/Orthopedics	8%
Endocrinology, Diabetes and Metabolism	8%
Medical Oncology	7%
Hematology	6%
Nephrology/Urology	6%
Allergy/Immunology	3%
Psychiatry	4%
Neurology	4%
Dermatology	3%
Obstetrics/Gynecology	2%
Ophthalmology	2%
Otorhinolaryngology	2%
Miscellaneous	3%
Total	100%

<b>Cross-Content Category</b>	<b>Relative Percentage</b>
Critical Care Medicine	10%
Geriatric Medicine	10%
Prevention	6%
Women's Health	6%
Clinical Epidemiology	3%
Ethics	3%
Nutrition	3%
Palliative/End-of-Life Care	3%
Adolescent Medicine	2%
Occupational Medicine	2%
Patient Safety	2%
Substance Abuse	2%

### **Content Outline of the Certification Examination**

This content outline describes a *typical* Internal Medicine Certification Examination; actual content on a specific examination may vary. Note that some questions may be classified in more than one Medical-Content or Cross-Content category. Question content distributions are not listed for categories with relatively few questions (5% of the examination blueprint or less).

<b>Medical Category (Relative Percentage)</b>	<b>Number of Questions</b>
<b>Adolescent Medicine (2%)</b>	<b>4–7</b>

<b>Allergy/Immunology (3%)</b>	<b>6–8</b>
--------------------------------	------------

<b>Cardiovascular Disease (14%)</b>	<b>30–32 as follows</b>
Hypertension	2–4
Pericardial disease	1–4
Ischemic heart disease	8–11
Arrhythmias	2–5
Congenital heart disease	0–1
Valvular heart disease	2–5
Myocardial disease	1–4
Cardiac tumors	0–1
Endocarditis and other cardiovascular infections	0–1
Vascular disease	0–2
Noncardiogenic syncope	0–1
Preoperative consultation	2–3
Miscellaneous cardiovascular disease	1–3

<b>Medical Category (Relative Percentage)</b>	<b>Number of Questions</b>
<b>Critical Care Medicine (10%)</b>	<b>14–18 as follows</b>
Critical care – Allergy	0–1
Critical care – Cardiology	2–6
Critical care – Dermatology	0–1
Critical care – Endocrinology	1–3
Critical care – Gastroenterology	0–2
Critical care – Hematology	0–2
Critical care – Infectious disease	1–4
Critical care – Nephrology/Urology	0–1
Critical care – Neurology	0–1
Critical care – Obstetrics/Gynecology	0–1
Critical care – Oncology	0–1
Critical care – Psychiatry	0–1
Critical care – Pulmonary	4–7
Critical care – Rheumatology/Orthopedics	0–1
Ethical considerations in the ICU patient	0–1
Other critical care topics	0–1
Miscellaneous critical care	0–1

<b>Dermatology (3%)</b>	<b>6–8</b>
-------------------------	------------

<b>Endocrinology, Diabetes and Metabolism (8%)</b>	<b>17–19 as follows</b>
Adrenal disorders	0–2
Thyroid disorders	2–4
Hypertension	0–1
Lipid disorders	2–3
Ovarian disorders/Female reproductive health	0–1
Testes/Male reproductive health	1–2
Diabetes mellitus	5–8
Disorders of calcium metabolism and bone	1–5
Hypothalamic disorders	0–1
Anterior pituitary disorders	0–1
Posterior pituitary and water metabolism	0–1
Endocrine tumors and endocrine manifestations of tumors	0–1
Hypoglycemia not due to insulinoma	0–1
Polyglandular disorders	0–1
Nutritional disorders	0–1
Women's health endocrine issues	0–1
Miscellaneous endocrine disorders	0–1

<b>End-of-Life/Palliative Care (3%)</b>	<b>2–6</b>
---	------------

Medical Category(Relative Percentage)	Number of Questions
Epidemiology (3%)	5-9

Ethics (3%)	3-7
-------------	-----

Gastroenterology (9%)	19-21 as follows
Diseases of the mouth and salivary glands	0-1
Esophageal disease	2-5
Stomach or duodenum	0-2
Small intestinal disease	2-5
Colonic and anorectal disease	2-6
Pancreatic disease	1-3
Biliary tract disease	0-2
Liver disease	3-8
Gastrointestinal complications of HIV infection	0-1
Undiagnosed gastrointestinal hemorrhage	0-1
Miscellaneous gastroenterology	0-1

Geriatric Medicine (10%)	14-23 as follows
Cardiovascular disease in the elderly	1-4
Dermatology in the elderly	0-1
Endocrinology in the elderly	0-2
End-of-life/Palliative care in the elderly	0-1
Ethics in the elderly	0-1
Gastroenterology in the elderly	0-2
Hematology in the elderly	0-1
Infectious disease in the elderly	0-1
Nephrology/Urology in the elderly	0-2
Neurology in the elderly	3-6
Nutrition in the elderly	0-1
Oncology in the elderly	0-1
Ophthalmology in the elderly	0-1
Psychiatry in the elderly	0-1
Pulmonary disease in the elderly	0-1
Rheumatology/Orthopedics in the elderly	5-7
Principles of the geriatric assessment	0-1
Rehabilitation and the elderly	0-1
Other primary geriatric topics	0-1
Miscellaneous geriatrics	0-1

<b>Medical Category (Relative Percentage)</b>	<b>Number of Questions</b>
<b>Hematology (6%)</b>	<b>12–15 as follows</b>
Hypoproliferative anemias	1–5
Hemolytic anemias	2–3
Hemoglobinopathies and thalassemias	1–3
Leukocyte disorders	0–1
Platelet disorders	1–2
Coagulation factor disorders and thrombotic disorders	1–3
Porphyrias	0–1
Myeloproliferative disorders	0–2
Myelodysplastic syndrome	0–1
Hematologic malignancies	0–3
Transfusion medicine (principles and complications)	0–1
Hematologic complications of HIV infection	0–1
Bone marrow transplantation	0–1
Miscellaneous hematology disorders	0–1

<b>Infectious Disease (9%)</b>	<b>19–21 as follows</b>
Skin and soft tissue infections	0–3
CNS infections	1–3
Upper respiratory tract infections	0–2
Eye infections	0–1
Lower respiratory tract infections	1–5
Endocarditis and other cardiovascular infections	0–2
Hepatic infections	0–2
Enteric infections	1–4
AIDS and HIV infection	2–4
Sexually transmitted diseases and infections of reproductive organs	0–2
Urinary tract infections	0–1
Infectious arthritis	1–2
Osteomyelitis	0–1
Bacteremia/sepsis syndrome	0–2
Rheumatic fever	0–1
Procedure- and device-associated infections	1–2
Nosocomial infections	0–1
Immunization	0–1
Prevention of infectious disease	0–1
Specific causative organisms	0–5
Miscellaneous infectious disease disorders	0–1

<b>Miscellaneous (3%)</b>	<b>5–8</b>
---------------------------	------------

<b>Medical Category (Relative Percentage)</b>	<b>Number of Questions</b>
<b>Nephrology/Urology (6%)</b>	<b>12–14 as follows</b>
Acute renal failure	1–4
Chronic kidney disease	1–3
Tubulointerstitial disease	1–2
Glomerular disorders	1–3
Hypertension	0–1
Urinary tract infections	0–1
Nephrolithiasis	0–2
Other kidney disorders	0–1
Urologic cancer	0–1
Prostate disorders	0–2
Other urology	0–1
Urinary incontinence	0–1
Water and electrolyte balance	2–4
Miscellaneous bladder and kidney disorders	0–1

<b>Neurology (4%)</b>	<b>8–10</b>
-----------------------	-------------

<b>Nutrition (3%)</b>	<b>4–6</b>
-----------------------	------------

<b>Obstetrics/Gynecology/Women's Health (6%)</b>	<b>10–15 as follows</b>
Cardiovascular disease in women	1–3
Dermatology in women	0–1
Endocrinology in women	0–3
End-of-life/Palliative care in women	0–1
Ethical issues relating to women	0–1
Gastroenterology in women	0–2
Hematology in women	0–1
Infectious disease in women	0–2
Nephrology/Urology in women	0–1
Neurology in women	0–1
Nutrition in women	0–1
Oncology in women	2–3
Ophthalmology in women	0–1
Psychiatry in women	0–2
Prevention in women	0–1
Pulmonary disease in women	0–1
Rheumatology/Orthopedics in women	1–3
Miscellaneous obstetrics/gynecology/women's health	0–1

<b>Occupation/Environmental Medicine (2%)</b>	<b>2–6</b>
---	------------

<b>Medical Category (Relative Percentage)</b>	<b>Number of Questions</b>
<b>Medical Oncology (7%)</b>	<b>14–16 as follows</b>
Lung cancer	1–2
Breast cancer	2–4
Neoplasms of the head and neck	0–1
Gastrointestinal or hepatic cancer	3–4
Urologic cancer	0–2
Cardiac tumors	0–1
Gynecologic cancer	0–1
Bone tumors	0–1
CNS tumors	0–1
Skin cancer	0–1
Hematologic malignancies	2–5
Soft tissue cancer	0–1
Assorted endocrine tumors and endocrine manifestations of tumors	0–1
Oncologic complications of HIV infection	0–1
Cancer prevention and screening	0–2
Oncologic emergencies	0–1
Adverse effects of cancer chemotherapy	0–2
Management of malignant pain	0–1
Carcinoma of unknown primary	0–1
Miscellaneous oncology	0–2

<b>Ophthalmology (2%)</b>	<b>3–5</b>
---------------------------	------------

<b>Otolaryngology/Dental Medicine (2%)</b>	<b>3–5</b>
--	------------

<b>Patient Safety (2%)</b>	<b>4–6</b>
----------------------------	------------

<b>Prevention (6%)</b>	<b>6–10 as follows</b>
Prevention of infectious disease	2–3
Cancer prevention and screening	1–2
Diet and prevention	0–3
Exercise and prevention	0–1
Smoking cessation	0–1
Prevention of violence and injury	0–1
Substance abuse	0–1
Prevention of cardiovascular disease	0–1
Other prevention	0–2

<b>Psychiatry (4%)</b>	<b>8–10</b>
------------------------	-------------

<b>Medical Category (Relative Percentage)</b>	<b>Number of Questions</b>
<b>Pulmonary Disease (10%)</b>	<b>21–23 as follows</b>
Obstructive airway diseases	4–8
Occupational and environmental lung disease	1–3
Restrictive lung disease	0–1
Interstitial lung disease	0–4
Pulmonary vascular disease	2–4
Pleural disease	1–4
Lower respiratory tract infections	1–4
Bronchiectasis	0–1
Congenital lung disease	0–1
Adult respiratory distress syndrome	0–1
Lung cancer	0–2
Sleep medicine	0–1
Management of ventilators	0–3
Pulmonary complications of HIV infection	0–1
Miscellaneous pulmonary disorders	1–4

<b>Rheumatology/Orthopedics (8%)</b>	<b>17–19 as follows</b>
Crystal-induced arthropathy	0–2
Localized joint syndromes	1–6
Spondyloarthropathies	0–2
Rheumatoid arthritis	0–2
Systemic lupus erythematosus	0–1
Systemic sclerosis	1–2
Vasculitis	1–5
Other primary rheumatic disorders	2–5
Infectious arthritis	0–1
Metabolic and other bone disease	0–1
Osteoarthritis	2–3
Sports injuries/trauma	0–1
Miscellaneous rheumatology/orthopedics	1–3

<b>Substance Abuse (2%)</b>	<b>2–5</b>
-----------------------------	------------