ENDOCRINOLOGY, DIABETES AND METABOLISM Blueprint

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

ABIM invites diplomates to help develop the Endocrinology, Diabetes, and Metabolism MOC exam blueprint

Based on feedback from physicians that MOC assessments should better reflect what they see in practice, in 2016 the American Board of Internal Medicine (ABIM) invited all certified endocrinologists to provide ratings of the relative frequency and importance of blueprint topics in practice.

This review process, which resulted in a new MOC exam blueprint, will be used on a periodic basis to inform and update all MOC assessments created by ABIM. No matter what form ABIM's assessments ultimately take, they will need to be informed by front-line clinicians sharing their perspective on what is important to know.

A sample of over 300 endocrinologists, similar to the total invited population of endocrinologists in age, gender, geographic region, and time spent in direct patient care, provided the blueprint topic ratings. ABIM used this feedback to update the blueprint for MOC assessments (beginning with the Fall 2016 administration of the traditional, 10-year MOC exam).

To inform how assessment content should be distributed across the major blueprint content categories, ABIM considered the average respondent ratings of topic frequency and importance in each of the content categories. A second source of information was the relative frequency of patient conditions in the content categories, as seen by certified endocrinologists and documented by national health care data (described further under *Content distribution* below).

To determine prioritization of specific assessment content within each major medical content category, ABIM used the respondent ratings of topic frequency and importance to set thresholds for these parameters in the exam assembly process (described further under *Detailed content outline* below).

Purpose of the Endocrinology, Diabetes, and Metabolism MOC Assessments

MOC assessments are designed to evaluate whether a certified endocrinologist has maintained competence and currency in the knowledge and judgment required for practice. The MOC assessments emphasize diagnosis and management of prevalent conditions, particularly in areas where practice has changed in recent years. As a result of the blueprint review by ABIM diplomates, MOC assessments place less emphasis on rare conditions and focus more on situations in which physician intervention can have important consequences for patients. For conditions that are usually managed by other specialists, the focus will be on recognition rather than on management.

Assessment format

The traditional, 10-year MOC exam contains up to 220 single-best-answer multiple-choice questions, of which approximately 50 are new questions that do not count in the examinee's score. Examinees taking the traditional, ten-year MOC exam will have access to an external resource (i.e., UpToDate®) for the entire exam.

The LKA for MOC is a five-year cycle in which physicians answer questions on an ongoing basis and receive feedback on how they're performing along the way. More information on how exams are developed can be found abim.org/about/exam-information/exam-development.aspx.

Most questions describe patient scenarios and ask about the work done (that is, tasks performed) by physicians in the course of practice:

- **Diagnosis/Testing:** making a diagnosis/ordering and interpreting results of diagnostic tests
- **Treatment/Care Decisions**: recommending treatment or other patient care
- **Risk Assessment/Prognosis/Epidemiology:** assessing risk, determining prognosis, and applying principles from epidemiologic studies
- **Pathophysiology/Basic Science:** understanding the pathophysiology of disease and basic science knowledge applicable to patient care

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, and the use of gender, race, and ethnicity identifiers will be re-evaluated.

Clinical scenarios presented take place in outpatient or inpatient settings as appropriate to a typical Endocrinology, Diabetes, and Metabolism practice. Clinical information presented may include diagnostic imaging studies, continuous glucose monitoring tracings, radiographic studies, or patient photographs.

Tutorials for the traditional, ten-year MOC exam and for LKA, including examples of ABIM exam question format, can be found at abim.org/maintenance-of-certification/exam-information/endocrinology-diabetes-metabolism/exam-tutorial.aspx.

Content distribution

Listed below are the major medical content categories that define the domain for the Endocrinology, Diabetes, and Metabolism traditional, 10-year MOC exam and LKA. The relative distribution of content is expressed as a percentage of the total assessment. To determine the content distribution, ABIM considered the average respondent ratings of topic frequency and importance. To cross-validate these self-reported ratings, ABIM also considered the relative frequency of conditions seen in Medicare patients by a cohort of certified endocrinologists. Informed by these data, the Endocrinology, Diabetes, and Metabolism Board Approval Committee and Board determined the content category targets shown below.

CONTENT CATEGORY	TARGET %
Adrenal Disorders	8%
Pituitary Disorders	8%
Lipids, Obesity, and Nutrition	13%
Female Reproduction	5%
Male Reproduction	5%
Diabetes Mellitus and Hypoglycemia	31%
Calcium and Bone Disorders	12%
Thyroid Disorders	18%
Total	**100%**

The Endocrinology, Diabetes, and Metabolism traditional 10-year MOC exam may cover other dimensions of medicine as applicable to the medical content categories, such as adolescent medicine.

How the blueprint ratings are used to assemble the MOC assessment

Blueprint reviewers provided ratings of relative frequency in practice for each of the detailed content topics in the blueprint and provided ratings of the relative importance of the topics for each of the tasks described in *Assessment format* above. In rating importance, reviewers were asked to consider factors such as the following:

- High risk of a significant adverse outcome
- Cost of care and stewardship of resources
- Common errors in diagnosis or management
- Effect on population health
- Effect on quality of life
- When failure to intervene by the physician deprives a patient of significant benefit

Frequency and importance were rated on a three-point scale corresponding to low, medium, or high. The median importance ratings are reflected in the *Detailed content outline* below. The Endocrinology, Diabetes, and Metabolism Board Approval Committee and Board, in partnership with the physician community, have set the following parameters for selecting MOC assessment questions according to the blueprint review ratings:

- At least 75% of questions will address high-importance content (indicated in blue)
- No more than 25% of questions will address medium-importance content (indicated in light blue)
- No exam questions will address low-importance content (indicated in white).

Independent of the importance and task ratings, no more than 25% of questions will address low-frequency content (indicated by “LF” following the topic description).

The content selection priorities below are applicable beginning with the Fall 2016 traditional, 10-year MOC exam and are subject to change in response to future blueprint review.

Note: *The same topic may appear in more than one medical content category.*

Detailed content outline for the Endocrinology, Diabetes, and Metabolism traditional, 10-year MOC exam and LKA

– *High Relevance: Topics are very likely to appear on the assessment*

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ADRENAL DISORDERS *(8% of exam)*	**Diagnosis/Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
GLUCOCORTICOIDS *(3.5% of exam)*				
Cushing syndrome	HIGH	HIGH	MEDIUM	MEDIUM
Management of glucocorticoid therapy	*Not Applicable*	HIGH	HIGH	MEDIUM
Adrenal insufficiency	HIGH	HIGH	HIGH	MEDIUM
MINERALOCORTICOIDS *(2% of exam)*				
Hyperaldosteronism	HIGH	HIGH	MEDIUM	MEDIUM
Hypoaldosteronism LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
CONGENITAL ADRENAL HYPERPLASIA *(<2% of exam)*				
Congenital adrenal hyperplasia LF	MEDIUM	HIGH	MEDIUM	MEDIUM
ADRENAL INCIDENTALOMA *(<2% of exam)*				
Adrenal incidentaloma	HIGH	HIGH	HIGH	MEDIUM
PHEOCHROMOCYTOMA AND PARAGANGLIOMA *(<2% of exam)*				
Pheochromocytoma and paraganglioma LF	HIGH	HIGH	HIGH	MEDIUM
ADRENAL CANCER *(<2% of exam)*				
Adrenal cancer LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM

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PITUITARY DISORDERS *(8% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
PROLACTIN *(<2% of exam)*					
Hyperprolactinemia		HIGH	HIGH	HIGH	HIGH
Prolactinomas		HIGH	HIGH	HIGH	HIGH
Normoprolactinemic galactorrhea		MEDIUM	MEDIUM	MEDIUM	MEDIUM
GROWTH HORMONE *(<2% of exam)*					
Acromegaly	LF	HIGH	HIGH	MEDIUM	MEDIUM
Growth hormone deficiency	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
THYROID-STIMULATING HORMONE (TSH) *(<2% of exam)*					
TSH-secreting adenoma	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Hyperplasia secondary to longstanding primary hypothyroidism	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
TSH deficiency	LF	HIGH	HIGH	MEDIUM	MEDIUM
GONADOTROPINS *(<2% of exam)*					
Gonadotroph pituitary tumors	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Hypogonadotropic hypogonadism		HIGH	HIGH	HIGH	MEDIUM
NONSECRETING PITUITARY TUMORS *(<2% of exam)*					
Nonsecreting pituitary tumors		HIGH	HIGH	MEDIUM	MEDIUM
ADRENOCORTICOTROPIC HORMONE (ACTH) *(<2% of exam)*					
Cushing disease	LF	HIGH	HIGH	HIGH	MEDIUM
ACTH deficiency	LF	HIGH	HIGH	MEDIUM	MEDIUM
HYPOPITUITARISM *(<2% of exam)*					
Hypopituitarism		HIGH	HIGH	HIGH	HIGH

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PITUITARY DISORDERS *continued…* *(8% of exam)*	Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
EMPTY SELLA SYNDROME *(<2% of exam)*				
Empty sella syndrome	HIGH	HIGH	MEDIUM	MEDIUM
ANTIDIURETIC HORMONE (ADH) *(<2% of exam)*				
Arginine vasopressin deficiency LF	HIGH	HIGH	HIGH	MEDIUM
Arginine vasopressin resistant	HIGH	HIGH	HIGH	MEDIUM
Psychogenic polydipsia	HIGH	HIGH	HIGH	MEDIUM
Syndrome of inappropriate antidiuretic hormone secretion (SIADH)	HIGH	HIGH	MEDIUM	MEDIUM
CRANIOPHARYNGIOMA *(<2% of exam)*				
Craniopharyngioma LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
PITUITARY INCIDENTALOMA *(<2% of exam)*				
Pituitary incidentaloma	HIGH	HIGH	HIGH	MEDIUM

LIPIDS, OBESITY, AND NUTRITION *(13% of exam)*	Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
HYPERCHOLESTEROLEMIA *(<2% of exam)*				
Primary disorders	HIGH	HIGH	MEDIUM	MEDIUM
Familial hypercholesterolemia	HIGH	HIGH	MEDIUM	MEDIUM
Secondary disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
HYPERTRIGLYCERIDEMIA *(2% of exam)*				
Hypertriglyceridemia	MEDIUM	MEDIUM	MEDIUM	MEDIUM
ELEVATED TRIGLYCERIDES AND LOW-DENSITY LIPOPROTEIN CHOLESTEROL *(3% of exam)*				
Primary disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Secondary disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM
HYPOLIPIDEMIA *(0% of exam)*				
Hypolipodemia LF	LOW	LOW	LOW	LOW

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LIPIDS, OBESITY, AND NUTRITION *continued…* *(13% of exam)*	**Diagnosis/Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
TREATMENT OF LIPID DISORDERS *(5% of exam)*				
Treatment of lipid disorders	HIGH	HIGH	HIGH	MEDIUM
OBESITY AND NUTRITION *(2.5% of exam)*				
Genetic disorders	HIGH	HIGH	MEDIUM	MEDIUM
Secondary disorders	MEDIUM	HIGH	MEDIUM	MEDIUM
Comorbidities	HIGH	HIGH	HIGH	MEDIUM
Treatment of obesity				
Diet	*Not Applicable*	HIGH	HIGH	MEDIUM
Drugs	*Not Applicable*	HIGH	HIGH	MEDIUM
Lifestyle	*Not Applicable*	HIGH	HIGH	HIGH
Surgery and endoscopic treatments	HIGH	HIGH	HIGH	MEDIUM
GENERAL NUTRITION *(<2% of exam)*				
Vitamin deficiency	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Enteral nutrition	MEDIUM	MEDIUM	MEDIUM	MEDIUM
STRATEGIES FOR COUNSELING *(<2% of exam)*				
Strategies for counseling	MEDIUM	MEDIUM	MEDIUM	MEDIUM

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FEMALE REPRODUCTION *(5% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
AMENORRHEA *(<2% of exam)*					
Primary					
Androgen insensitivity syndrome	LF	MEDIUM	MEDIUM	LOW	LOW
Turner syndrome	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Primary ovarian insufficiency	LF	HIGH	HIGH	MEDIUM	MEDIUM
Secondary		HIGH	HIGH	MEDIUM	MEDIUM
HYPERANDROGENISM *(<2% of exam)*					
Polycystic ovary syndrome		HIGH	HIGH	HIGH	MEDIUM
Non-polycystic ovary syndrome		MEDIUM	MEDIUM	LOW	LOW
Nonclassic congenital adrenal hyperplasia	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Abuse of anabolic steroids	LF	MEDIUM	MEDIUM	LOW	LOW
PREMENSTRUAL SYNDROME AND PREMENSTRUAL DYSPHORIC DISORDER *(<2% of exam)*					
Premenstrual syndrome and premenstrual dysphoric disorder	LF	MEDIUM	MEDIUM	LOW	LOW
ENDOCRINE CAUSES OF INFERTILITY *(<2% of exam)*					
Endocrine causes of infertility		MEDIUM	MEDIUM	LOW	LOW
HORMONAL CONTRACEPTION *(<2% of exam)*					
Hormonal contraception		*Not Applicable*	MEDIUM	MEDIUM	LOW
PERIMENOPAUSE AND MENOPAUSE *(<2% of exam)*					
Perimenopause and menopause		HIGH	MEDIUM	MEDIUM	MEDIUM
SEXUAL DIFFERENTIATION *(<2% of exam)*					
Gender dysphoria	LF	MEDIUM	MEDIUM	MEDIUM	LOW
Female-to-male transition management	LF	*Not Applicable*	MEDIUM	MEDIUM	LOW

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MALE REPRODUCTION *(5% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
HYPOGONADISM *(3% of exam)*					
Primary hypogonadism		HIGH	HIGH	MEDIUM	MEDIUM
Secondary hypogonadism		HIGH	HIGH	MEDIUM	MEDIUM
Genetic disorders of androgen production and action	LF	MEDIUM	MEDIUM	LOW	LOW
INFERTILITY *(<2% of exam)*					
Cryptorchidism	LF	MEDIUM	LOW	LOW	LOW
Klinefelter syndrome	LF	HIGH	MEDIUM	MEDIUM	MEDIUM
Cystic fibrosis and cystic fibrosis gene mutations	LF	MEDIUM	LOW	LOW	LOW
Drug-induced infertility	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Obstructive azoospermia	LF	LOW	LOW	LOW	LOW
Idiopathic oligozoospermia	LF	LOW	LOW	LOW	LOW
Y-chromosome microdeletions	LF	LOW	LOW	LOW	LOW
GYNECOMASTIA *(<2% of exam)*					
Gynecomastia		HIGH	HIGH	MEDIUM	MEDIUM
ERECTILE DYSFUNCTION *(<2% of exam)*					
Erectile Dysfunction		HIGH	HIGH	HIGH	HIGH
TESTOSTERONE IN AGING MEN *(<2% of exam)*					
Testosterone in aging men		HIGH	HIGH	HIGH	MEDIUM
ABUSE OF ANDROGENS AND ANABOLIC STEROIDS *(<2% of exam)*					
Abuse of androgens and anabolic steroids		HIGH	MEDIUM	MEDIUM	MEDIUM

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MALE REPRODUCTION *continued…* *(5% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
SEXUAL DIFFERENTIATION *(<2% of exam)*					
Gender dysphoria	LF	MEDIUM	MEDIUM	MEDIUM	LOW
Male-to-female transition management	LF	MEDIUM	MEDIUM	MEDIUM	LOW
EJACULATORY DYSFUNCTIONS *(<2% of exam)*					
Ejaculatory dysfunctions	LF	LOW	LOW	LOW	LOW
DIABETES MELLITUS AND HYPOGLYCEMIA *(31% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
PREDIABETES *(2% of exam)*					
Prediabetes		HIGH	HIGH	HIGH	MEDIUM
MONITORING GLYCEMIC CONTROL *(2% of exam)*					
Monitoring glycemic control		HIGH	HIGH	HIGH	HIGH
TYPE 1 DIABETES MELLITUS *(4.5% of exam)*					
Ketoacidosis		HIGH	HIGH	HIGH	HIGH
Latent autoimmune diabetes of the adult (LADA)		HIGH	HIGH	HIGH	MEDIUM
Hyperglycemia		HIGH	HIGH	HIGH	MEDIUM
Hypoglycemia		HIGH	HIGH	HIGH	HIGH
Pathogenesis		HIGH	HIGH	HIGH	MEDIUM
TYPE 2 DIABETES MELLITUS *(5.5% of exam)*					
Hyperosmolar nonketotic state		HIGH	HIGH	HIGH	MEDIUM
Hyperglycemia		HIGH	HIGH	HIGH	HIGH
Hypoglycemia		HIGH	HIGH	HIGH	HIGH
Pathogenesis		HIGH	HIGH	HIGH	MEDIUM
ADDITIONAL TYPES OF DIABETES *(<2% of exam)*					
Additional types of diabetes		MEDIUM	MEDIUM	HIGH	MEDIUM

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DIABETES MELLITUS AND HYPOGLYCEMIA *continued…* *(31% of exam)*	Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
RECOGNITION AND MANAGEMENT OF ASSOCIATED CONDITIONS *(2% of exam)*				
Hypertension	HIGH	HIGH	HIGH	MEDIUM
Dyslipidemia	HIGH	HIGH	HIGH	MEDIUM
Obesity	HIGH	HIGH	HIGH	MEDIUM
Sleep apnea	HIGH	MEDIUM	MEDIUM	MEDIUM
Fatty liver	HIGH	HIGH	MEDIUM	MEDIUM
Thyroid disease	HIGH	HIGH	HIGH	MEDIUM
RECOGNITION AND MANAGEMENT OF ASSOCIATED CONDITIONS *continued… (2% of exam)*				
Polycystic ovary syndrome	HIGH	HIGH	HIGH	MEDIUM
Eating disorders LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
PREGNANCY *(<2% of exam)*				
Gestational diabetes	HIGH	HIGH	HIGH	MEDIUM
Pre-gestational diabetes	HIGH	HIGH	MEDIUM	MEDIUM
DIABETES MELLITUS COMPLICATIONS *(5% of exam)*				
Microvascular	HIGH	HIGH	HIGH	MEDIUM
Macular edema	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Mononeuropathies LF	MEDIUM	MEDIUM	MEDIUM	LOW
Macrovascular	HIGH	HIGH	HIGH	MEDIUM
Diabetic foot	HIGH	HIGH	HIGH	MEDIUM
Skin disorders	MEDIUM	MEDIUM	MEDIUM	MEDIUM

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DIABETES MELLITUS AND HYPOGLYCEMIA *continued…* *(31% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
PANCREAS TRANSPLANTATION *(<2% of exam)*					
Pancreas transplantation	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
HYPOGLYCEMIA INDEPENDENT OF DIABETES *(2% of exam)*					
Insulinoma	LF	HIGH	HIGH	MEDIUM	MEDIUM
Noninsulinoma	LF	HIGH	MEDIUM	MEDIUM	MEDIUM
INPATIENT DIABETES MANAGEMENT *(<2% of exam)*					
Inpatient diabetes management		HIGH	HIGH	HIGH	MEDIUM
CALCIUM AND BONE DISORDERS *(12% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
HYPERCALCEMIA *(3% of exam)*					
Parathyroid hormone-mediated					
Primary hyperparathyroidism		HIGH	HIGH	HIGH	MEDIUM
Non-parathyroid hormone-mediated		HIGH	HIGH	MEDIUM	MEDIUM
HYPOCALCEMIA *(3% of exam)*					
Hypoparathyroidism		HIGH	HIGH	MEDIUM	MEDIUM
Parathyroid hormone (PTH) resistance	LF	MEDIUM	MEDIUM	LOW	MEDIUM
Hypomagnesemia	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Hyperphosphatemia	LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Hypocalcemia (general)		HIGH	HIGH	MEDIUM	MEDIUM
OSTEOPOROSIS *(4% of exam)*					
In female		HIGH	HIGH	HIGH	HIGH
In male		HIGH	HIGH	HIGH	HIGH
Post-transplant and glucocorticoid-induced		HIGH	HIGH	MEDIUM	MEDIUM
Renal, hepatic, and gastrointestinal disease related		MEDIUM	MEDIUM	MEDIUM	MEDIUM

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CALCIUM AND BONE DISORDERS *continued…* *(12% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
PAGET DISEASE OF BONE *(<2% of exam)*					
Paget disease of bone	LF	HIGH	MEDIUM	MEDIUM	MEDIUM
HYPOVITAMINOSIS D *(<2% of exam)*					
Dietary deficiency		HIGH	HIGH	MEDIUM	MEDIUM
Limited sun exposure		MEDIUM	MEDIUM	MEDIUM	MEDIUM
Malabsorption		HIGH	HIGH	MEDIUM	MEDIUM
Liver failure	LF	MEDIUM	MEDIUM	LOW	LOW
Renal insufficiency		MEDIUM	MEDIUM	MEDIUM	MEDIUM
Vitamin D dependent rickets type I and II	LF	MEDIUM	MEDIUM	LOW	MEDIUM
Vitamin D resistant rickets	LF	MEDIUM	MEDIUM	LOW	MEDIUM
Drug-induced	LF	MEDIUM	MEDIUM	LOW	MEDIUM
Bone disease		HIGH	MEDIUM	MEDIUM	MEDIUM
Nonskeletal disorders	LF	MEDIUM	MEDIUM	LOW	LOW
OSTEOMALACIA AND RICKETS *(<2% of exam)*					
Chronic hypophosphatemia	LF	MEDIUM	MEDIUM	LOW	MEDIUM
Inhibitors of mineralization	LF	MEDIUM	MEDIUM	LOW	LOW
RENAL OSTEODYSTROPHY *(<2% of exam)*					
Renal osteodystrophy		MEDIUM	MEDIUM	MEDIUM	MEDIUM
NEPHROLITHIASIS *(<2% of exam)*					
Nephrolithiasis		MEDIUM	MEDIUM	MEDIUM	MEDIUM
OSTEOGENESIS IMPERFECTA AND BONE DYSPLASIAS *(<2% of exam)*					
Osteogenesis imperfecta and bone dysplasias	LF	MEDIUM	MEDIUM	LOW	LOW
FIBROUS DYSPLASIA AND OTHER DYSPLASTIC SYNDROMES *(<2% of exam)*					
Fibrous dysplasia and other dysplastic syndromes	LF	LOW	LOW	LOW	LOW

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CALCIUM AND BONE DISORDERS *continued…* *(12% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
CALCIPHYLAXIS *(<2% of exam)*					
Calciphylaxis	LF	MEDIUM	MEDIUM	LOW	LOW
HYPOPHOSPHATEMIA *(<2% of exam)*					
Renal losses	LF	MEDIUM	MEDIUM	LOW	LOW
Gastrointestinal malabsorption	LF	MEDIUM	MEDIUM	LOW	LOW
Internal redistribution	LF	LOW	LOW	LOW	LOW
RARE BONE DISEASES *(<2% of exam)*					
Hypophosphatasia	LF	MEDIUM*	MEDIUM*	LOW*	LOW*
Fibrodysplasia ossificans progressiva	LF	MEDIUM*	LOW*	LOW*	LOW*
Osteopetrosis	LF	MEDIUM*	MEDIUM*	LOW*	LOW*

THYROID DISORDERS *(18% of exam)*		Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
HYPERTHYROIDISM *(4% of exam)*					
Graves disease		HIGH	HIGH	HIGH	HIGH
Toxic adenoma and multinodular goiter		HIGH	HIGH	HIGH	MEDIUM
Inappropriate thyroid-stimulating hormone syndromes		HIGH	HIGH	MEDIUM	MEDIUM
Thyrotoxicosis with low radioactive iodine uptake					
Thyroiditis		HIGH	HIGH	HIGH	MEDIUM
Factitious, accidental, and iatrogenic thyrotoxicosis	LF	HIGH	HIGH	MEDIUM	MEDIUM
Iodine-induced and other drug-induced	LF	MEDIUM	HIGH	MEDIUM	MEDIUM
Struma ovarii	LF	MEDIUM	MEDIUM	LOW	LOW
Complicated thyrotoxicosis	LF	HIGH	HIGH	MEDIUM	MEDIUM
Subclinical hyperthyroidism		HIGH	HIGH	HIGH	MEDIUM

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– *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*

LF – ***Low Frequency***: *No more than 25% of questions will address topics with this designation, regardless of task or importance.*

THYROID DISORDERS *continued…* *(18% of exam)*	Diagnosis/Testing	Treatment/ Care Decisions	Risk Assessment/ Prognosis/ Epidemiology	Pathophysiology/ Basic Science
HYPOTHYROIDISM *(3% of exam)*				
Primary	HIGH	HIGH	HIGH	HIGH
Secondary	HIGH	HIGH	MEDIUM	MEDIUM
Subclinical hypothyroidism	HIGH	HIGH	HIGH	MEDIUM
Complicated hypothyroidism LF	HIGH	HIGH	MEDIUM	MEDIUM
TSH resistance LF	LOW	LOW	LOW	LOW
Therapy	*Not Applicable*	HIGH	HIGH	HIGH
NONTOXIC SOLITARY NODULES AND MULTINODULAR GOITER *(2.5% of exam)*				
Nontoxic solitary nodules and multinodular goiter	HIGH	HIGH	HIGH	HIGH
THYROID CANCER *(4% of exam)*				
Well-differentiated epithelial cancers	HIGH	HIGH	HIGH	MEDIUM
Hürthle cell cancer LF	HIGH	HIGH	MEDIUM	MEDIUM
Anaplastic cancer LF	HIGH	MEDIUM	MEDIUM	LOW
Lymphoma LF	MEDIUM	MEDIUM	MEDIUM	LOW
Medullary cancer LF	HIGH	HIGH	MEDIUM	MEDIUM
THYROID TEST ABNORMALITIES WITHOUT THYROID DISEASE *(2.5% of exam)*				
Euthyroid hypothyroxinemia	HIGH	MEDIUM	MEDIUM	MEDIUM
Euthyroid hyperthyroxinemia LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
Effect of drugs on thyroid function tests	HIGH	HIGH	MEDIUM	MEDIUM
Nonthyroidal illness (euthyroid sick syndrome)	HIGH	HIGH	MEDIUM	MEDIUM
Thyroid hormone antibodies	HIGH	MEDIUM	MEDIUM	MEDIUM
Antibody interferences with TSH measurement LF	MEDIUM	MEDIUM	MEDIUM	MEDIUM
THYROID DISEASES IN PREGNANCY *(<2% of exam)*				
Thyroid disease in pregnancy	HIGH	HIGH	HIGH	HIGH

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