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:** making a diagnosis or identifying an underlying condition
- **Testing:** ordering tests for diagnosis, staging, or follow-up
- **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 green)
- No more than 25% of questions will address medium-importance content (indicated in yellow)
- No exam questions will address low-importance content (indicated in red)

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

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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	✓	✓	✓	✓	✓
Management of glucocorticoid therapy	*Not Applicable*		✓	✓	✓
Adrenal insufficiency	✓	✓	✓	✓	✓
MINERALOCORTICOIDS *(2% of exam)*					
Hyperaldosteronism	✓	✓	✓	✓	✓
Hypoaldosteronism **LF**	✓	✓	✓	✓	✓
CONGENITAL ADRENAL HYPERPLASIA *(<2% of exam)*					
Congenital adrenal hyperplasia **LF**	✓	✓	✓	✓	✓
ADRENAL INCIDENTALOMA *(<2% of exam)*					
Adrenal incidentaloma	✓	✓	✓	✓	✓
PHEOCHROMOCYTOMA AND PARAGANGLIOMA *(<2% of exam)*					
Pheochromocytoma and paraganglioma **LF**	✓	✓	✓	✓	✓
ADRENAL CANCER *(<2% of exam)*					
Adrenal cancer **LF**	✓	✓	✓	✓	✓

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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	✓	✓	✓	✓	✓
Prolactinomas	✓	✓	✓	✓	✓
Normoprolactinemic galactorrhea	⊘	⊘	⊘	⊘	⊘
GROWTH HORMONE *(<2% of exam)*					
Acromegaly **LF**	✓	✓	✓	⊘	⊘
Growth hormone deficiency **LF**	⊘	⊘	⊘	⊘	⊘
THYROID-STIMULATING HORMONE (TSH) *(<2% of exam)*					
TSH-secreting adenoma **LF**	⊘	⊘	⊘	⊘	⊘
Hyperplasia secondary to longstanding primary hypothyroidism **LF**	⊘	⊘	⊘	⊘	⊘
TSH deficiency **LF**	✓	✓	✓	⊘	⊘
GONADOTROPINS *(<2% of exam)*					
Gonadotroph pituitary tumors **LF**	⊘	⊘	⊘	⊘	⊘
Hypogonadotropic hypogonadism	✓	✓	✓	✓	⊘
NONSECRETING PITUITARY TUMORS *(<2% of exam)*					
Nonsecreting pituitary tumors	✓	✓	✓	⊘	⊘
ADRENOCORTICOTROPIC HORMONE (ACTH) *(<2% of exam)*					
Cushing disease **LF**	✓	✓	✓	✓	⊘
ACTH deficiency **LF**	✓	✓	✓	⊘	⊘
HYPOPITUITARISM *(<2% of exam)*					
Hypopituitarism	✓	✓	✓	✓	✓

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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	✓	✓	✓	⊘	⊘
ANTIDIURETIC HORMONE (ADH) *(<2% of exam)*					
Arginine vasopressin deficiency LF	✓	✓	✓	✓	⊘
Arginine vasopressin resistant	✓	✓	✓	✓	⊘
Psychogenic polydipsia	✓	✓	✓	✓	⊘
Syndrome of inappropriate antidiuretic hormone secretion (SIADH)	✓	✓	✓	⊘	⊘
CRANIOPHARYNGIOMA *(<2% of exam)*					
Craniopharyngioma LF	⊘	⊘	⊘	⊘	⊘
PITUITARY INCIDENTALOMA *(<2% of exam)*					
Pituitary incidentaloma	✓	✓	✓	✓	⊘

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					
Familial hypercholesterolemia	✓	✓	✓	⊘	⊘
Secondary disorders	⊘	⊘	⊘	⊘	⊘
HYPERTRIGLYCERIDEMIA *(2% of exam)*					
Hypertriglyceridemia	⊘	⊘	⊘	⊘	⊘
ELEVATED TRIGLYCERIDES AND LOW-DENSITY LIPOPROTEIN CHOLESTEROL *(3% of exam)*					
Primary disorders	⊘	⊘	⊘	⊘	⊘
Secondary disorders	⊘	⊘	⊘	⊘	⊘
HYPOLIPIDEMIA *(0% of exam)*					
Hypolipodemia LF	✗	✗	✗	✗	✗

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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	✓	✓	✓	✓	✓
OBESITY AND NUTRITION *(2.5% of exam)*					
Genetic disorders	✓	✓	✓	✓	✓
Secondary disorders	✓	✓	✓	✓	✓
Comorbidities	✓	✓	✓	✓	✓
Treatment of obesity					
Diet	*Not Applicable*		✓	✓	✓
Drugs	*Not Applicable*		✓	✓	✓
Lifestyle	*Not Applicable*		✓	✓	✓
Surgery and endoscopic treatments	✓	✓	✓	✓	✓
GENERAL NUTRITION *(<2% of exam)*					
Vitamin deficiency	✓	✓	✓	✓	✓
Enteral nutrition	✓	✓	✓	✓	✓
STRATEGIES FOR COUNSELING *(<2% of exam)*					
Strategies for counseling	✓	✓	✓	✓	✓

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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	✓	✓	✓	✗	✗
Turner syndrome LF	✓	✓	✓	✓	✓
Primary ovarian insufficiency LF	✓	✓	✓	✓	✓
Secondary	✓	✓	✓	✓	✓
HYPERANDROGENISM *(<2% of exam)*					
Polycystic ovary syndrome	✓	✓	✓	✓	✓
Non-polycystic ovary syndrome	✓	✓	✓	✗	✗
Nonclassic congenital adrenal hyperplasia LF	✓	✓	✓	✓	✓
Abuse of anabolic steroids LF	✓	✓	✓	✗	✗
PREMENSTRUAL SYNDROME AND PREMENSTRUAL DYSPHORIC DISORDER *(<2% of exam)*					
Premenstrual syndrome and premenstrual dysphoric disorder LF	✓	✓	✓	✗	✗
ENDOCRINE CAUSES OF INFERTILITY *(<2% of exam)*					
Endocrine causes of infertility	✓	✓	✓	✗	✗
HORMONAL CONTRACEPTION *(<2% of exam)*					
Hormonal contraception	*Not Applicable*		✓	✓	✗
PERIMENOPAUSE AND MENOPAUSE *(<2% of exam)*					
Perimenopause and menopause	✓	✓	✓	✓	✓
SEXUAL DIFFERENTIATION *(<2% of exam)*					
Gender dysphoria LF	✓	✓	✓	✓	✗
Female-to-male transition management LF	*Not Applicable*	✓	✓	✓	✗

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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	✓	✓	✓	/	/
Secondary hypogonadism	✓	✓	✓	/	/
Genetic disorders of androgen production and action LF	/	/	/	✗	✗
INFERTILITY *(<2% of exam)*					
Cryptorchidism LF	/	✗	✗	✗	✗
Klinefelter syndrome LF	✓	/	/	/	/
Cystic fibrosis and cystic fibrosis gene mutations LF	/	✗	✗	✗	✗
Drug-induced infertility LF	/	/	/	/	/
Obstructive azoospermia LF	✗	✗	✗	✗	✗
Idiopathic oligozoospermia LF	✗	✗	✗	✗	✗
Y-chromosome microdeletions LF	✗	✗	✗	✗	✗
GYNECOMASTIA *(<2% of exam)*					
Gynecomastia	✓	✓	✓	/	/
ERECTILE DYSFUNCTION *(<2% of exam)*					
Erectile Dysfunction	✓	✓	✓	✓	✓
TESTOSTERONE IN AGING MEN *(<2% of exam)*					
Testosterone in aging men	✓	✓	✓	✓	/
ABUSE OF ANDROGENS AND ANABOLIC STEROIDS *(<2% of exam)*					
Abuse of androgens and anabolic steroids	✓	✓	/	/	/

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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**	✓	✓	✓	✓	✗
Male-to-female transition management **LF**	*Not Applicable*	✓	✓	✓	✗
EJACULATORY DYSFUNCTIONS *(<2% of exam)*					
Ejaculatory dysfunctions **LF**	✗	✗	✗	✗	✗

DIABETES MELLITUS AND HYPOGLYCEMIA *(31% of exam)*	**Diagnosis**	**Testing**	**Treatment/ Care Decisions**	**Risk Assessment/ Prognosis/ Epidemiology**	**Pathophysiology/ Basic Science**
PREDIABETES *(2% of exam)*					
Prediabetes	✓	✓	✓	✓	✓
MONITORING GLYCEMIC CONTROL *(2% of exam)*					
Monitoring glycemic control	✓	✓	✓	✓	✓
TYPE 1 DIABETES MELLITUS *(4.5% of exam)*					
Ketoacidosis	✓	✓	✓	✓	✓
Latent autoimmune diabetes of the adult (LADA)	✓	✓	✓	✓	✓
Hyperglycemia	✓	✓	✓	✓	✓
Hypoglycemia	✓	✓	✓	✓	✓
Pathogenesis	✓	✓	✓	✓	✓
TYPE 2 DIABETES MELLITUS *(5.5% of exam)*					
Hyperosmolar nonketotic state	✓	✓	✓	✓	✓
Hyperglycemia	✓	✓	✓	✓	✓
Hypoglycemia	✓	✓	✓	✓	✓
Pathogenesis	✓	✓	✓	✓	✓
ADDITIONAL TYPES OF DIABETES *(<2% of exam)*					
Additional types of diabetes	✓	✓	✓	✓	✓

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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	✓	✓	✓	✓	✓
Dyslipidemia	✓	✓	✓	✓	✓
Obesity	✓	✓	✓	✓	✓
Sleep apnea	✓	✓	✓	✓	✓
Fatty liver	✓	✓	✓	✓	✓
Thyroid disease	✓	✓	✓	✓	✓
RECOGNITION AND MANAGEMENT OF ASSOCIATED CONDITIONS *continued… (2% of exam)*					
Polycystic ovary syndrome	✓	✓	✓	✓	✓
Eating disorders **LF**	✓	✓	✓	✓	✓
PREGNANCY *(<2% of exam)*					
Gestational diabetes	✓	✓	✓	✓	✓
Pre-gestational diabetes	✓	✓	✓	✓	✓
DIABETES MELLITUS COMPLICATIONS *(5% of exam)*					
Microvascular	✓	✓	✓	✓	✓
Macular edema	✓	✓	✓	✓	✓
Mononeuropathies **LF**	✓	✓	✓	✓	✗
Macrovascular	✓	✓	✓	✓	✓
Diabetic foot	✓	✓	✓	✓	✓
Skin disorders	✓	✓	✓	✓	✓

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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**	✓	✓	✓	✓	✓
HYPOGLYCEMIA INDEPENDENT OF DIABETES *(2% of exam)*					
Insulinoma **LF**	✓	✓	✓	✓	✓
Noninsulinoma **LF**	✓	✓	✓	✓	✓
INPATIENT DIABETES MANAGEMENT *(<2% of exam)*					
Inpatient diabetes management	✓	✓	✓	✓	✓

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	✓	✓	✓	✓	✓
Non-parathyroid hormone-mediated	✓	✓	✓	✓	✓
HYPOCALCEMIA *(3% of exam)*					
Hypoparathyroidism	✓	✓	✓	✓	✓
Parathyroid hormone (PTH) resistance **LF**	✓	✓	✓	✗	✓
Hypomagnesemia **LF**	✓	✓	✓	✓	✓
Hyperphosphatemia **LF**	✓	✓	✓	✓	✓
Hypocalcemia (general)	✓	✓	✓	✓	✓
OSTEOPOROSIS *(4% of exam)*					
In female	✓	✓	✓	✓	✓
In male	✓	✓	✓	✓	✓
Post-transplant and glucocorticoid-induced	✓	✓	✓	✓	✓
Renal, hepatic, and gastrointestinal disease related	✓	✓	✓	✓	✓

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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	✓	✓	✓	✓	✓
HYPOVITAMINOSIS D *(<2% of exam)*					
Dietary deficiency	✓	✓	✓	✓	✓
Limited sun exposure	✓	✓	✓	✓	✓
Malabsorption	✓	✓	✓	✓	✓
Liver failure LF	✓	✓	✓	✗	✗
Renal insufficiency	✓	✓	✓	✓	✓
Vitamin D dependent rickets type I and II LF	✓	✓	✓	✗	✓
Vitamin D resistant rickets LF	✓	✓	✓	✗	✓
Drug-induced LF	✓	✓	✓	✗	✓
Bone disease	✓	✓	✓	✓	✓
Nonskeletal disorders LF	✓	✓	✓	✗	✗
OSTEOMALACIA AND RICKETS *(<2% of exam)*					
Chronic hypophosphatemia LF	✓	✓	✓	✗	✓
Inhibitors of mineralization LF	✓	✓	✓	✗	✗
RENAL OSTEODYSTROPHY *(<2% of exam)*					
Renal osteodystrophy	✓	✓	✓	✓	✓
NEPHROLITHIASIS *(<2% of exam)*					
Nephrolithiasis	✓	✓	✓	✓	✓
OSTEOGENESIS IMPERFECTA AND BONE DYSPLASIAS *(<2% of exam)*					
Osteogenesis imperfecta and bone dysplasias LF	✓	✓	✓	✗	✗
FIBROUS DYSPLASIA AND OTHER DYSPLASTIC SYNDROMES *(<2% of exam)*					
Fibrous dysplasia and other dysplastic syndromes LF	✗	✗	✗	✗	✗

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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	/	/	/	✗	✗
HYPOPHOSPHATEMIA *(<2% of exam)*					
Renal losses LF	/	/	/	✗	✗
Gastrointestinal malabsorption LF	/	/	/	✗	✗
Internal redistribution LF	✗	✗	✗	✗	✗
RARE BONE DISEASES *(<2% of exam)*					
Hypophosphatasia LF	/*	/*	/*	✗*	✗*
Fibrodysplasia ossificans progressiva LF	/*	/*	✗*	✗*	✗*
Osteopetrosis LF	/*	/*	/*	✗*	✗*

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

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

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