

## Sleep Medicine

### Maintenance of Certification Examination Blueprint

#### Purpose of the exam

The exam is designed to evaluate the knowledge, diagnostic reasoning, and clinical judgment skills expected of the certified sleep medicine specialist in the broad domain of the discipline. The ability to make appropriate diagnostic and management decisions that have important consequences for patients will be assessed. The exam may require recognition of common as well as rare clinical problems for which patients may consult a certified sleep medicine specialist. The exam is developed jointly by the ABIM, the American Board of Anesthesiology, the American Board of Family Medicine, the American Board of Otolaryngology, the American Board of Pediatrics, and the American Board of Psychiatry and Neurology.

#### Exam content

Exam content is determined by a pre-established blueprint, or table of specifications, which is reviewed annually and updated as needed for currency. Trainees, training program directors, and certified practitioners in the discipline are surveyed periodically to provide feedback and inform the blueprinting process.

The primary medical content categories of the blueprint are shown below, with the percentage assigned to each for a typical exam:

Medical Content Category	% of Exam
Normal Sleep and Variants	16%
Circadian Rhythm Sleep-Wake Disorders	10%
Insomnia	17%
Central Disorders of Hypersomnia	12%
Parasomnias	7%
Sleep-Related Movements	8%
Sleep-Related Breathing Disorders	20%
Sleep in Other Disorders	5%
Instrumentation and Testing	5%
	100%

## **Exam format**

The exam is composed of multiple-choice questions with a single best answer, predominantly describing patient scenarios. Questions ask about the work done (that is, tasks performed) by physicians in the course of practice:

- Making a diagnosis
- Ordering and interpreting results of tests
- Recommending treatment or other patient care
- Assessing risk, determining prognosis, and applying principles from epidemiologic studies
- Understanding the underlying pathophysiology of disease and basic science knowledge applicable to patient care

Clinical information presented may include patient photographs, actigrams, and polysomnograms to illustrate relevant patient findings. Some questions may include video.

A tutorial including examples of ABIM exam question format can be found at <http://www.abim.org/maintenance-of-certification/assessment-information/sleep-medicine/exam-tutorial.aspx>.

The blueprint can be expanded for additional detail as shown below. Each of the medical content categories is listed there, and below each major category are the content subsections and specific topics that *may* appear in the exam. Please note: actual exam content may vary.

<b>Normal Sleep and Variants</b>	<b>16%</b> of Exam
<b>Sleep-wake mechanisms, neurophysiology</b>	4%
Circadian timing	
Homeostatic sleep regulation	
Non-rapid eye movement (NREM) sleep mechanism	
REM sleep regulation	
Wake neurophysiology	
<b>Other physiology</b>	<2%
Gastrointestinal	
Pulmonary	
Endocrine	
Cardiovascular	
<b>Normal sleep</b>	2%
Infancy	
Childhood	

Adolescence	
Adulthood	
Elder years	
Pregnancy	
Menopause	
<b>Effects of sleep deprivation</b>	<2%
Neurocognitive function	
Mood disturbances	
Metabolic disturbances	
<b>Scoring and staging</b>	7%
Staging and arousals	
Respiratory events	
Movement	
Cardiac	
Electroencephalogram (EEG) variant	

<b>Circadian Rhythm Sleep-Wake Disorders</b>	<b>10%</b> of Exam
<b>Circadian sleep disorders</b>	6.5%
Delayed sleep-wake phase disorder	
Advanced sleep-wake phase disorder	
Non-24-hour sleep-wake rhythm disorder (free-running circadian sleep disorder)	
Irregular sleep-wake disorder	
<b>Shift work disorder</b>	<2%
<b>Jet lag disorder</b>	<2%
<b>Circadian sleep-wake disorder not otherwise specified, including     disruption related to behavior, medical conditions,     or drugs or substances</b>	<2%

<b>Insomnia</b>	<b>17%</b> of Exam
<b>Short-term insomnia</b>	<2%
<b>Chronic insomnias</b>	14%
Chronic insomnia, psychophysiologic subtype	
Chronic insomnia, paradoxical subtype	
Chronic insomnia coexisting with mental disorders	
Chronic insomnia, idiopathic subtype	
Chronic insomnia due to inadequate sleep hygiene	
Chronic insomnia of childhood	3.5%

<b>Insomnia related to behavior, medical conditions, or drugs or substances, and isolated symptoms and normal variants associated with reports of insomnia</b>	2%
Insomnia related to behavior, medical conditions, or drugs or substances	
Excessive time in bed	
Short sleep	

<b>Central Disorders of Hypersomnia</b>	<b>12%</b> of Exam
<b>Narcolepsy</b>	5%
Type 1 (with cataplexy)	
Type 2 (without cataplexy)	
<b>Idiopathic hypersomnia</b>	<2%
<b>Kleine-Levin syndrome (periodic hypersomnia)</b>	<2%
<b>Insufficient sleep syndrome</b>	3%
<b>Hypersomnia due to medical disorders</b>	<2%
<b>Hypersomnia due to medications</b>	<2%
<b>Hypersomnia associated with psychiatric disorders</b>	<2%

<b>Parasomnias</b>	<b>7%</b> of Exam
<b>NREM-related parasomnias</b>	3%
Confusional arousals	
Sleep walking	
Sleep terrors	
Sleep-related eating disorder	
<b>REM-related parasomnias</b>	3%
REM sleep behavior disorder	
Recurrent isolated sleep paralysis	
Nightmare disorder	
<b>Other parasomnias</b>	<2%
Exploding head syndrome	
Sleep-related hallucinations	
Enuresis	
Parasomnia due to medical disorders, medications, or substances or unspecified	
<b>Isolated symptoms and normal variants</b>	<2%
Sleep talking	

<b>Sleep-Related Movements</b>	<b>8%</b> of Exam
<b>Restless legs syndrome</b>	3.5%
<b>Periodic limb movement during sleep</b>	2%
<b>Rhythmic movement disorder</b>	<2%
<b>Sleep-related leg cramps</b>	<2%
<b>Bruxism</b>	<2%
<b>Sleep myoclonus</b>	<2%
Benign sleep myoclonus of infancy	
Propriospinal myoclonus at sleep onset	
<b>Other-sleep-related movement disorders due to medical disorders, medications, or substances or unspecified and movement related to isolated symptoms and normal variants</b>	<2%
Other sleep-related movement disorders due to medical disorders, medications, or substances or unspecified	
Excessive fragmentary myoclonus	
Hypnagogic foot tremor and alternating leg muscle activation	
Sleep starts (hypnic jerks)	

<b>Sleep-Related Breathing Disorders</b>	<b>20%</b> of Exam
<b>Obstructive sleep apnea</b>	9%
Adult obstructive sleep apnea	
Pediatric obstructive sleep apnea	
<b>Central sleep apnea syndromes</b>	7.5%
Central sleep apnea with Cheyne-Stokes breathing	
Central sleep apnea due to a medical disorder without Cheyne-Stokes breathing	
Central sleep apnea due to high-altitude periodic breathing	
Central sleep apnea due to medications or substances	
Primary central sleep apnea	
Primary central sleep apnea of infancy	
Primary central sleep apnea of prematurity	
Treatment-emergent central sleep apnea	
<b>Sleep-related hypoventilation disorders</b>	2.5%
Obesity-hypoventilation syndrome	
Congenital central alveolar hypoventilation syndrome	
Late-onset central hypoventilation with hypothalamic dysfunction	
Idiopathic central alveolar hypoventilation	
Sleep-related hypoventilation due to medications or substances	
Sleep-related hypoventilation due to medical disorders	

<b>Sleep-related hypoxemia disorder</b>	<2%
<b>Isolated symptoms and normal variants</b>	<2%
Snoring	
Catathrenia	

<b>Sleep in Other Disorders</b>	<b>5%</b> of Exam
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<b>Neurologic disorders</b>	2%
Neurodegenerative and neuromuscular disorders	
Cerebrovascular disorders	
Sleep-related epilepsy and seizure disorders	
Congenital disorders	
Sleep-related headaches	
Neurodevelopmental disorders	
<b>Psychiatric disorders</b>	2%
Mood disorders	
Psychotic disorders	
Anxiety	
Substance abuse	
Other conditions and general topics	
<b>Other medical disorders</b>	<2%
Genetic disorders	
Endocrine disorders	
Cardiac disorders	
Pulmonary disorders	
Gastrointestinal disorders	
Hematologic disorders	

<b>Instrumentation and Testing</b>	<b>5%</b> of Exam
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<b>Electrical components</b>	<2%
Sensors	
Filters	
Analog-to-digital (A-to-D) convertors	
Display	
<b>Technical aspects of sleep devices</b>	<2%
Actigraphy	
Positive airway pressure (PAP) and ventilatory support devices	
<b>Electrical safety</b>	<2%

<b>Artifacts</b>	<2%
<b>Study preparation and testing conditions</b>	<2%
Polysomnography (PSG)	
Multiple Sleep Latency Test (MSLT) and Maintenance of Wakefulness Test (MWT)	
Out-of-center testing	

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