

## Sleep Medicine

### 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/certification/exam-information/tutorials/default.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> | <b>&lt;2%</b> |
| Neurocognitive function             |               |
| Mood disturbances                   |               |
| Metabolic disturbances              |               |
| <b>Scoring and staging</b>          | <b>7%</b>     |
| Staging and arousals                |               |
| Respiratory events                  |               |
| Movement                            |               |
| Cardiac                             |               |
| Electroencephalogram (EEG) variant  |               |

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

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| <b>Insomnia</b> | <b>17%</b> of Exam |
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|---|---------------|
| <b>Short-term insomnia</b>                        | <b>&lt;2%</b> |
| <b>Chronic insomnias</b>                          | <b>14%</b>    |
| 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                     |               |

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

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| <b>Central Disorders of Hypersomnia</b>                  | <b>12%</b> of Exam |
| <b>Narcolepsy</b>  | <b>5%</b>          |
| Type 1 (with cataplexy)                                  |                    |
| Type 2 (without cataplexy)                               |                    |
| <b>Idiopathic hypersomnia</b>                            | <b>&lt;2%</b>      |
| <b>Kleine-Levin syndrome (periodic hypersomnia)</b>      | <b>&lt;2%</b>      |
| <b>Insufficient sleep syndrome</b>                       | <b>2.5%</b>        |
| <b>Hypersomnia due to medical disorders</b>              | <b>&lt;2%</b>      |
| <b>Hypersomnia due to medications</b>                    | <b>&lt;2%</b>      |
| <b>Hypersomnia associated with psychiatric disorders</b> | <b>&lt;2%</b>      |

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

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| Sleep-related hypoventilation due to medical disorders |     |
| <b>Sleep-related hypoxemia disorder</b>                | <2% |
| <b>Isolated symptoms and normal variants</b>           | <2% |
| Snoring  |     |
| Catathrenia  |     |

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|---------------------------------|-------------------|
| <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<br>Wakefulness Test (MWT) |     |
| Out-of-center testing   |     |

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