
The AASM Manual for the Scoring of Sleep and Associated Events

RULES, TERMINOLOGY AND TECHNICAL SPECIFICATIONS

VERSION 2.2

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All scoring schematics that provide illustration of sleep staging and respiratory scoring rules were provided by Richard B. Berry, MD.

Preface

“We’re moving to this integration of biomedicine, information technology, wireless and mobile now — an era of digital medicine. Even my stethoscope is now digital. And of course, there’s an app for that.”

— Daniel Kraft, physician-scientist, inventor

The publication of the AASM Manual for the Scoring of Sleep and Associated Events in 2007 was a landmark event and the culmination of thousands of hours of hard work by many dedicated individuals. The 2007 manual resulted in standardization of sleep monitoring techniques and scoring, improving uniformity and reliability in the diagnosis and treatment of sleep disorders across different sleep centers. Nonetheless, advances in sleep monitoring technology and questions concerning interpretation of the 2007 rules form the basis of an initiative put forth by the AASM Board of Directors to once again update this critical document in sleep medicine.

At the same time, there has been an explosion of digital information technology and devices that has shifted publication of nearly all documents away from the printed page. This trend toward a digital format has been accelerated by the conveniences of publishing online, most notably, accessibility at any location using smartphones, tablets and computers.

Given the need to update the 2007 Scoring Manual and address a changed digital information landscape, the Board of Directors of the AASM mandated that the scoring manual be published online with regular updates as necessary. A Scoring Manual Committee was established to oversee the content and to make recommendations when content changes are indicated, need for clarification exists, there is new technology or the literature suggests that updates are needed. The major goals for this initial revision of the scoring manual included conversion to a Web-based format, standardization of structure and terminology, inclusion of material covered in the scoring manual FAQs from the AASM website, and updated figures as necessary. In addition, the committee was tasked with incorporating new rules for scoring respiratory events that resulted from the work of the Sleep Apnea Definitions Task Force.

In true digital format, the first online version of the AASM Scoring Manual for Sleep and Associated Events was called Version 2.0. Electronic links quickly take the reader to notes and areas of interest. The scoring manual is accessible not just on the computer, but also on the flexible viewing styles of mobile technology. Version 2.0 represented the first step in resolving issues and ambiguities in the scoring of sleep and associated events. This manual is an incremental work in progress, guided by feedback from the membership and the Board of Directors, which will continue through annual updates. It is the hope of the Scoring Manual Committee that the online manual will continue to advance the field of sleep medicine and improve the quality of care for patients with sleep disorders.

2012–2013 AASM SCORING MANUAL COMMITTEE:

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I. User Guide

Organization of the Manual

The AASM Manual for the Scoring of Sleep and Associated Events is designed to guide users through the technical aspects of conducting routine polysomnography (PSG) testing as well as the analytic scoring and interpretation of PSG results. The rules for PSG testing and scoring are divided over seven chapters (II–VIII) of the manual. Chapter II specifies all of the parameters that should be reported in a routine PSG test. Chapter III details the digital and filter settings that are recommended for routine PSG recording. Chapters IV–VIII provide additional technical specifications as well as scoring rules for the major categories of testing: sleep staging, arousal, cardiac, movement, and respiratory. Chapter IX provides technical specifications and scoring rules for home sleep apnea testing including those utilizing respiratory flow and/or effort and those utilizing peripheral arterial tonometry (PAT). Chapter X (Development Process) details the process by which the rules were developed. An outline of the evidence level and decision-making process for each rule may be found in chapter XI (Procedural Notes). Lastly, chapter XII is a glossary of the terminology used throughout the manual.

While the rules in most chapters apply to patients of all ages, rules for adult and pediatric populations are separated in chapters IV (Sleep Staging Rules) and VIII (Respiratory Rules) due to critical age-specific differences in testing and scoring.

The rules within each chapter are organized into categories designated by an upper case letter. The rules themselves are numbered and may have several components that are identified by lower case letters.

IN EACH SECTION, ALONG WITH THE RULES, YOU WILL NOTICE:

The type of rule:

RECOMMENDED

These rules are recommended for the routine scoring of polysomnography.

ACCEPTABLE

These are rules that may be used as alternatives to the recommended rules at the discretion of the clinician or investigator.

OPTIONAL

These are suggested rules for uncommonly encountered events, events not known to have physiologic significance or events for which there was no consensus decision. Scoring may be performed at the discretion of the clinician or investigator.

Notes: If applicable, notes are positioned at the end of a category in order to provide additional information that is critical for carrying out the rules. Rules are followed by superscripts that signify the corresponding note (ex. ^{N1,N2}).

Sleep Facility Accreditation

AASM sleep facility accreditation requires compliance with all of the rules, definitions, and notes in this manual. According to the AASM, rules specified to be recommended, acceptable, or optional are all acceptable methods for scoring. Based on the discretion of the clinician or investigator, a specific center or laboratory may use the acceptable rule in place of the recommended rule without any risk to accreditation. Optional rules may be followed in addition to the recommended and acceptable rules without any risk to accreditation. For further information please contact the accreditation department at the AASM (accreditation@aasmnet.org).