



Sleep efficiency (SE)

[Researchers](#)

[Clinicians](#)

[Patients](#)

[<< Return to Table of Contents](#)

[References >>](#)



What is SE? Why is it a core measure?

Sleep efficiency is the **proportion of time spent sleeping when the individual intends to sleep**, and is expressed as a **percentage**.

Sleep efficiency is a **core measure** because it is a **key indicator of sleep continuity and overall sleep health**. A higher sleep efficiency indicates better sleep consolidation and quality, whereas lower sleep efficiency suggests fragmented or disrupted sleep patterns. Research has consistently shown that disturbances in sleep efficiency are associated with various adverse health outcomes, including increased risk of cardiovascular diseases, metabolic disorders, and impaired cognitive function. Therefore, monitoring sleep efficiency is essential for identifying individuals at risk for sleep disorders and implementing appropriate interventions.



Why does sleep efficiency **matter to researchers?**

Quantitative and standardizable outcome

measure: In clinical research, sleep efficiency provides a quantitative measure of sleep quality and continuity, allowing researchers to objectively assess the effectiveness of interventions targeting sleep disorders or disturbances by monitoring changes in sleep efficiency before, during, or after the intervention. As a standardized outcome measure, sleep efficiency facilitates comparisons between different studies and interventions, allowing for meta-analyses and systematic reviews to evaluate the overall efficacy of treatments for sleep disorders across multiple studies.

Contribute to body of knowledge between sleep disorders and other

adverse health outcomes: Sleep efficiency can help researchers understand the underlying mechanisms of sleep disorders and their impact on health outcomes. For example, studying alterations in sleep efficiency in various populations may shed light on the relationship between sleep disturbances and chronic health conditions such as cardiovascular disease or mood disorders.



Why does sleep efficiency **matter to clinicians?**

Clinical diagnosis: Sleep efficiency provides valuable information for diagnosing sleep disorders such as insomnia, sleep apnea, and circadian rhythm disorders. It helps clinicians assess the severity of sleep disturbances and differentiate between different types of sleep disorders based on patterns of sleep continuity and fragmentation.

Clinical management: Clinicians use sleep efficiency to monitor the effectiveness of interventions for sleep disorders. Changes in sleep efficiency over time can indicate whether treatment is improving sleep quality and continuity. Clinicians turn to published research that reports sleep efficiency data when determining the success of treatments and making evidence-based recommendations for patient care. By monitoring sleep efficiency, clinicians can tailor interventions to address specific sleep disturbances and optimize treatment outcomes for individual patients.

Identify health risk factors: Low sleep efficiency is associated with an increased risk of various adverse health outcomes, including cardiovascular disease, metabolic disorders, cognitive impairment, and mental health disorders. Clinicians can use sleep efficiency as a marker of overall sleep health and to assess patients' risk for developing chronic health conditions.