Wake after sleep onset (WASO)

Researchers

Clinicians

Patients

<< Return to Table of Contents

References >>

What is WASO? Why is it a core measure?

Wake after sleep onset is the total duration of time spent awake in the Primary Sleep Period. In other words, it refers to the total amount of time an individual spends awake after initially falling asleep and before finally waking up for the day.

Wake after sleep onset (WASO) is a **core measure** because it provides valuable insights into the quality of sleep and sleep continuity. High levels of WASO are indicative of **fragmented sleep**, which can lead to daytime sleepiness, impaired cognitive function, and overall reduced quality of life. By monitoring WASO, clinicians and researchers can assess the effectiveness of interventions aimed at improving sleep quality and identify underlying sleep disorders. High levels of WASO are associated with various negative health outcomes, including cardiovascular disease, depression, and decreased immune function. Tracking WASO alongside other sleep parameters is crucial for comprehensive sleep evaluation and management.

Why does WASO **matter to researchers**?

WASO is a versatile measure in clinical research, providing valuable information about sleep quality, its impact on health outcomes, treatment efficacy, and potential avenues for intervention and improvement.

Diagnostic criterion: WASO is often used as a diagnostic criterion for sleep disorders. Elevated levels of WASO can indicate sleep fragmentation, a hallmark of insomnia. Researchers may use WASO thresholds to categorize participants into different diagnostic groups or to assess the severity of sleep disturbances.

Outcome measure in clinical trials: In clinical trials evaluating interventions for sleep disorders, WASO serves as an outcome measure to assess the effectiveness of an intervention in reducing sleep fragmentation and improving sleep quality.

Exploring comorbidities: Researchers may examine the relationship between WASO and various health outcomes or comorbid conditions, such as cardiovascular disease, metabolic disorders, mental health conditions (such as depression and anxiety), cognitive function, and overall quality of life.

Facilitate comparative studies: WASO can be compared across different populations, age groups, or clinical conditions to identify differences in sleep quality and patterns of sleep disruption, helping researchers better understand the factors contributing to sleep disturbances and inform targeted interventions.

Why does WASO **matter to clinicians**?

Diagnosis around sleep complaints: WASO provides valuable insights into the quality of a patient's sleep. By assessing WASO, clinicians can identify underlying sleep disturbances and tailor treatment plans accordingly. WASO can aid clinicians in assessing the severity of a patient's sleep disturbance and its impact on daytime functioning. Addressing sleep fragmentation and reducing WASO can help improve patients' daytime functioning and overall quality of life.

Clinical management, sleep disorders: WASO can serve as an objective measure to monitor treatment response and adherence in patients with sleep disorders by assessing changes in WASO over time to ensure patients are benefiting from and following prescribed treatment regimens consistently. Evaluating WASO levels before initiating treatment may help predict how patients will respond to different interventions. Patients with higher baseline WASO levels may require more intensive or targeted treatments to achieve desired outcomes.

Clinical management of other conditions: WASO is associated with a range of physical and mental health conditions. Elevated WASO levels have been linked to an increased risk of cardiovascular disease, metabolic disorders, depression, anxiety, and impaired cognitive function. Addressing sleep fragmentation and reducing WASO may mitigate the risk of these adverse health outcomes and improve overall patient well-being.

Inform lifestyle modification counseling: Clinicians can use WASO data to inform patients about the impact of certain lifestyle factors on sleep quality. By identifying behaviors or environmental factors contributing to elevated WASO, clinicians can recommend appropriate lifestyle modifications to improve sleep hygiene.