# **Individual Sleep Analysis Report**

## Subject ID: 18 | Healthy Control Study

Analysis Date: August 16, 2025 | Nights Analyzed: 2 | Report Generated by: Sleep-EDF Analysis System

## **Subject Information**

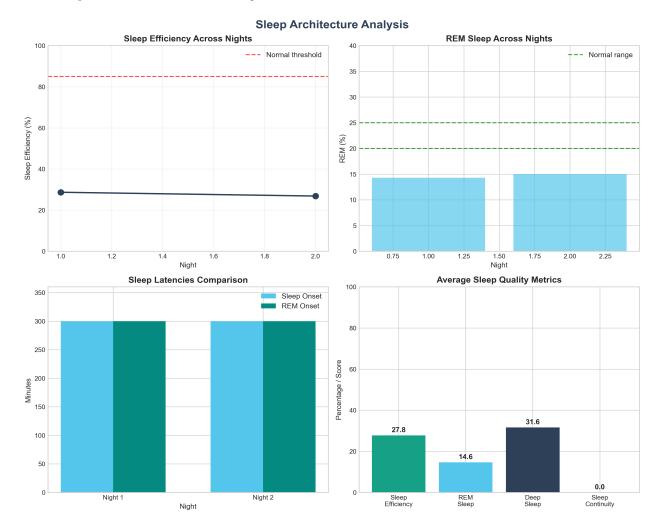
Subject ID	18
Age	28 years
Sex	M
Study Type	Healthy Controls
Number of Nights	2
Recording Dates	Multiple nights

## **Executive Summary**

This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 18, a 28-year-old M participant from the Sleep Cassette (healthy controls) study under nan condition.

Metric	Value	Clinical Interpretation
Sleep Efficiency	27.8%	Below Normal (<85%)
Sleep Latency	477.2 min	Prolonged (>30min)
REM Latency	636.0 min	Atypical
REM Sleep	14.6%	Atypical
Wake After Sleep Onset	522.5 min	Elevated (>30min)

## **Sleep Architecture Analysis**

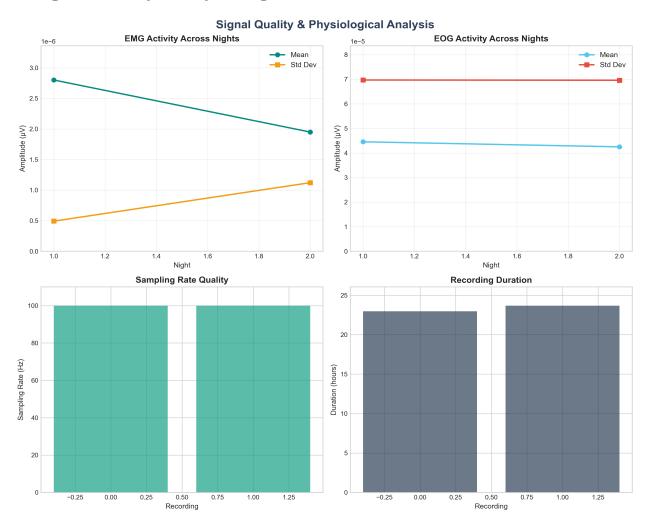


Neurophysiological Analysis - EEG Power Spectrum

### **EEG Power Spectral Analysis**



## **Signal Quality & Physiological Assessment**



**Population Comparative Analysis** 

#### **Comparative Population Analysis** Sleep Efficiency (%) REM Sleep (%) ★ Subject Sleep Difficulty Sleep Difficulty Healthy Controls Healthy Controls WASO (min) Sleep Latency (min)

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Healthy Controls

Sleep Difficulty

Healthy Controls

### **Clinical Interpretation & Recommendations**

### **Overall Sleep Health Assessment**

Sleep Quality Level: POOR

Poor sleep quality with multiple metrics outside normal ranges. The subject's sleep architecture shows:

• Sleep Efficiency: 27.8% (Below normal)

REM Sleep: 14.6% (Atypical)Deep Sleep: 31.6% (Adequate)

• Sleep Continuity: Fragmented (WASO: 522.5 min)

### **Key Findings**

- **Reduced Sleep Efficiency**: At 27.8%, sleep efficiency is below the normal threshold of 85%, indicating potential sleep quality issues.
- **Reduced REM Sleep**: REM sleep comprises 14.6% of total sleep, which is below the normal range of 20-25%.
- Adequate Deep Sleep: Deep sleep stages comprise 31.6% of sleep, indicating good restorative sleep.

#### Recommendations

- Consider sleep hygiene counseling and evaluation of factors affecting sleep quality
- Evaluate for potential REM sleep disorders or medications affecting REM sleep
- Investigation of factors causing sleep fragmentation may be beneficial

### Report Analysis and Generation:

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