

Individual Sleep Analysis Report

Subject ID: 1 | Sleep Difficulty Study

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

Subject Information

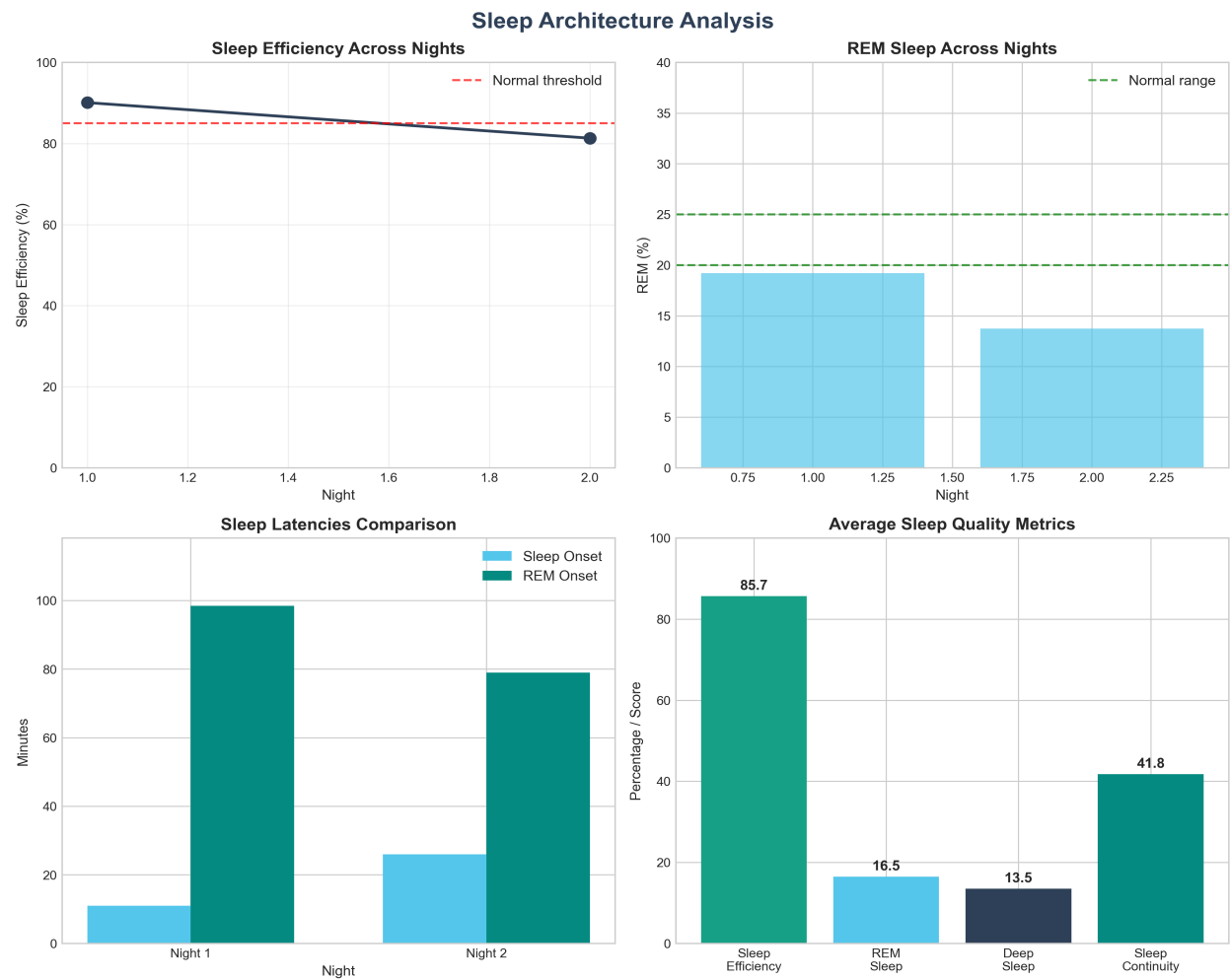
Subject ID	1
Age	60 years
Sex	M
Study Type	Sleep Difficulty
Number of Nights	2
Recording Dates	Multiple nights
Study Conditions	temazepam, placebo

Executive Summary

This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 1, a 60-year-old M participant from the Sleep Telemetry (sleep difficulty) study under temazepam and placebo conditions.

Metric	Value	Clinical Interpretation
Sleep Efficiency	85.7%	Normal ($\geq 85\%$)
Sleep Latency	18.5 min	Normal (≤ 30 min)
REM Latency	88.8 min	Normal (60-120min)
REM Sleep	16.5%	Atypical
Wake After Sleep Onset	58.2 min	Elevated (> 30 min)

Sleep Architecture Analysis

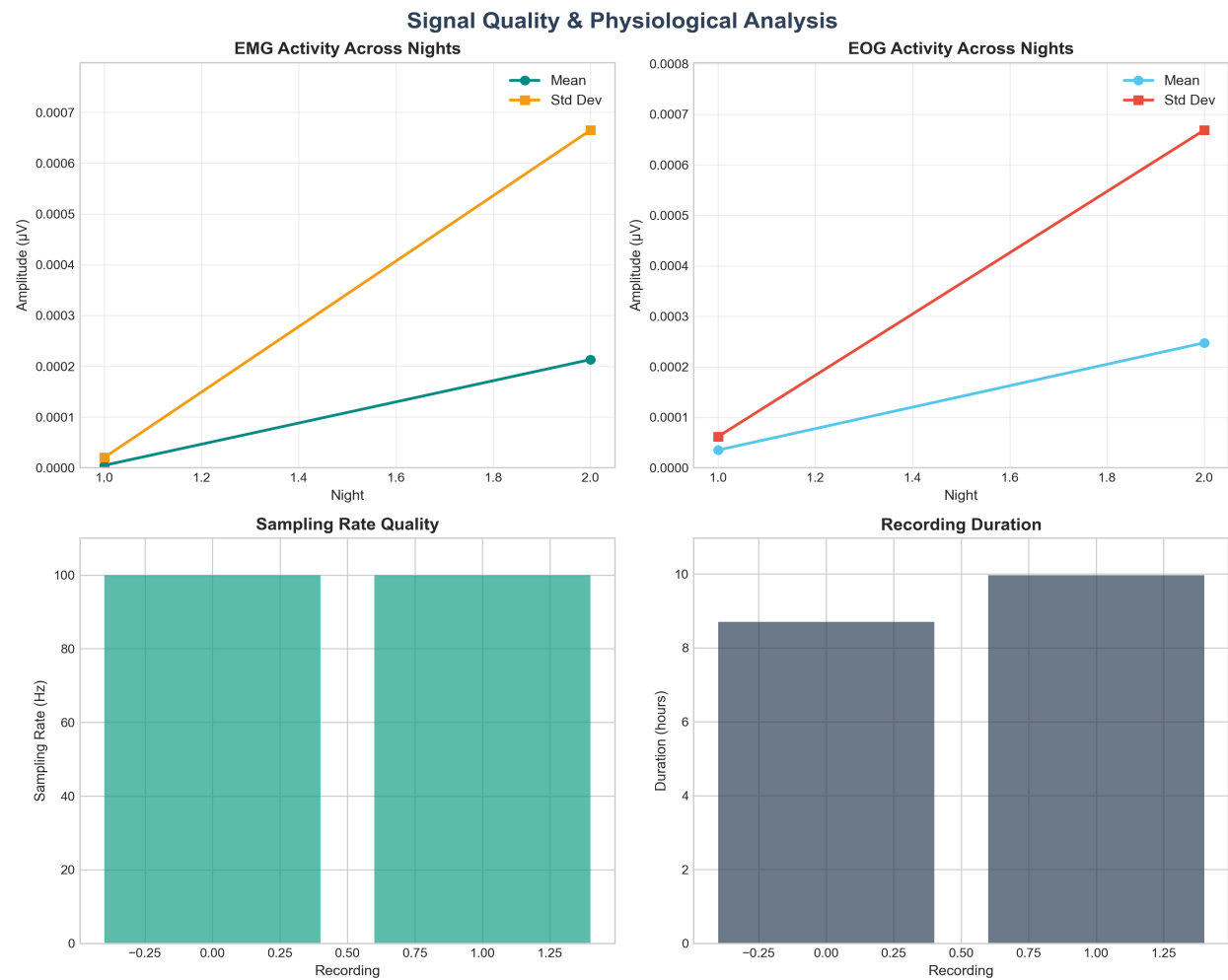


Neurophysiological Analysis - EEG Power Spectrum

EEG Power Spectral Analysis

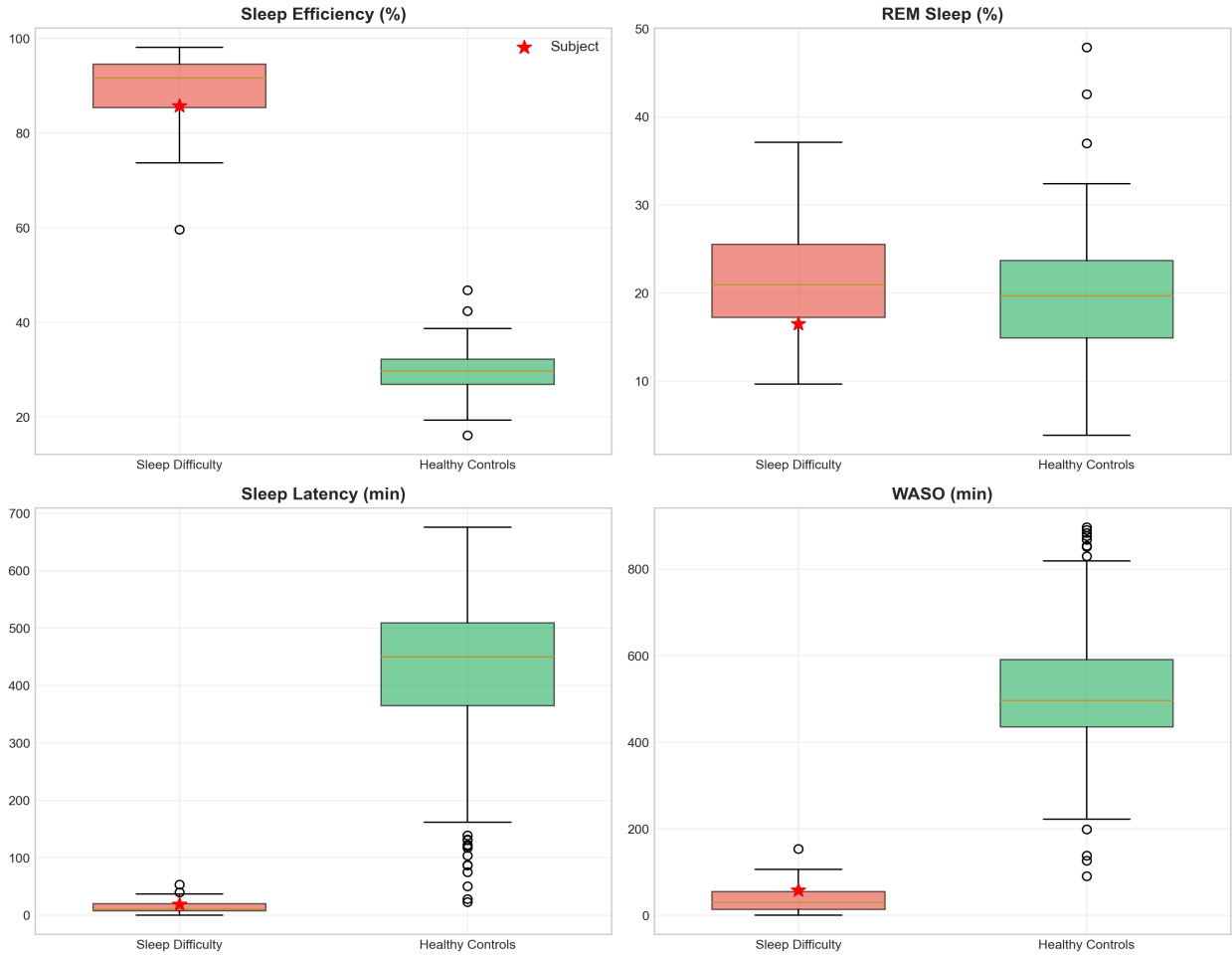


Signal Quality & Physiological Assessment



Population Comparative Analysis

Comparative Population Analysis



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: 85.7% (Normal)
- REM Sleep: 16.5% (Atypical)
- Deep Sleep: 13.5% (Reduced)
- Sleep Continuity: Fragmented (WASO: 58.2 min)

Key Findings

- **Good Sleep Efficiency:** At 85.7%, sleep efficiency is within normal range, indicating good sleep quality.
- **Reduced REM Sleep:** REM sleep comprises 16.5% of total sleep, which is below the normal range of 20-25%.
- **Reduced Deep Sleep:** Deep sleep stages (N3+N4) comprise 13.5% of sleep, which may indicate reduced sleep restoration.
- **Medication Effect:** Temazepam improved sleep efficiency by 8.8% compared to placebo night.

Recommendations

- Evaluate for potential REM sleep disorders or medications affecting REM sleep
- Assess sleep environment and factors that may be disrupting deep sleep stages
- Investigation of factors causing sleep fragmentation may be beneficial

Report Analysis and Generation:

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