Individual Sleep Analysis Report

Subject ID: 17 | Sleep Difficulty Study

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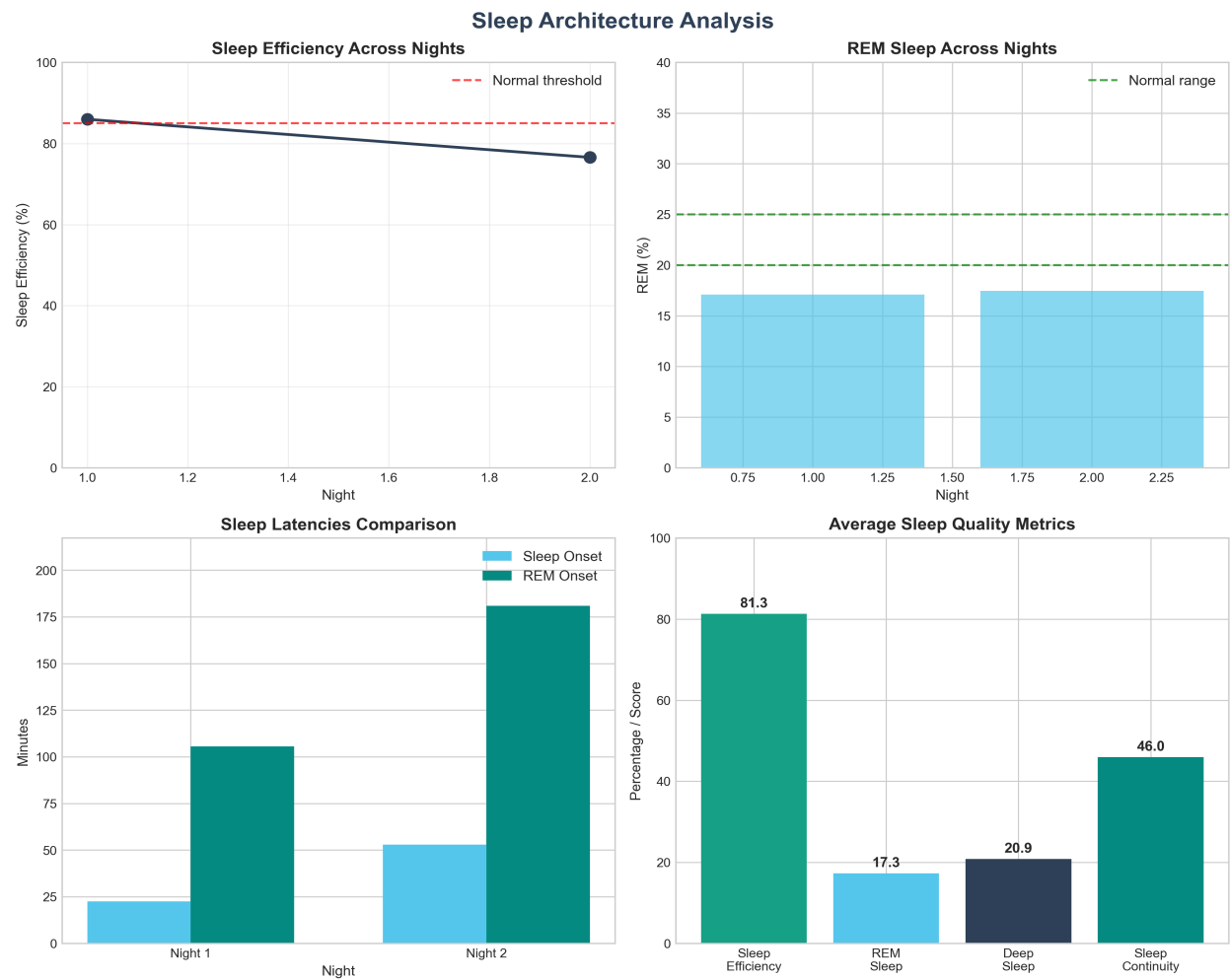
Subject Information

Subject ID	17
Age	48 years
Sex	F
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 17, a 48-year-old F participant from the Sleep Telemetry (sleep difficulty) study under temazepam and placebo conditions.
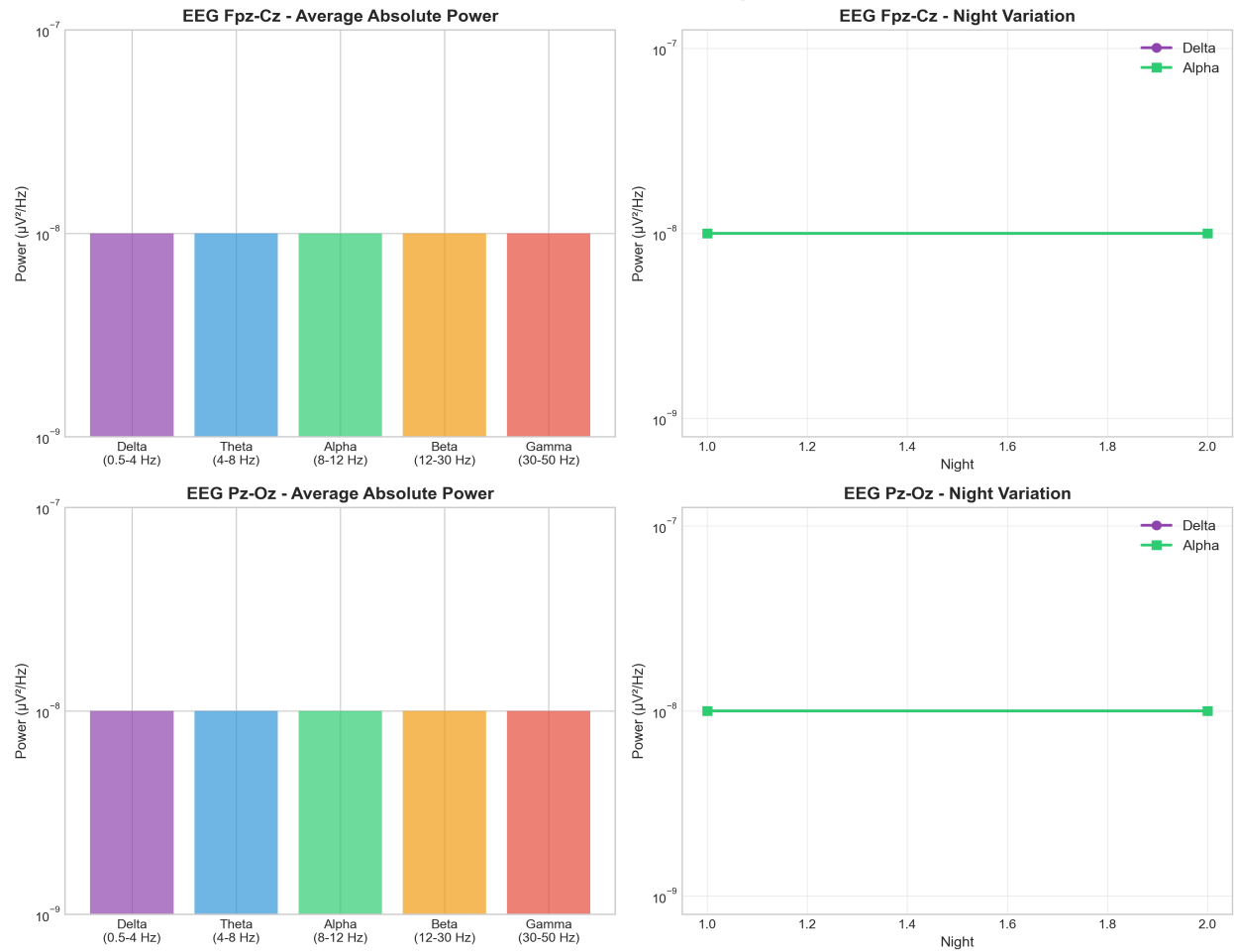
Metric	Value	Clinical Interpretation
Sleep Efficiency	81.3%	Below Normal (<85%)
Sleep Latency	37.8 min	Prolonged (>30min)
REM Latency	143.2 min	Atypical
REM Sleep	17.3%	Atypical
Wake After Sleep Onset	54.0 min	Elevated (>30min)

Sleep Architecture Analysis

Sleep Architecture Analysis

Sleep Efficiency Across Nights

REM Sleep Across Nights

Sleep Latencies Comparison

Average Sleep Quality Metrics

Neurophysiological Analysis - EEG Power Spectrum

EEG Power Spectral Analysis

EEG Fpz-Cz - Average Absolute Power

EEG Fpz-Cz - Night Variation

EEG Pz-Oz - Average Absolute Power

EEG Pz-Oz - Night Variation

Signal Quality & Physiological Assessment

Signal Quality & Physiological Analysis

EMG Activity Across Nights

EOG Activity Across Nights

Sampling Rate Quality

Recording Duration
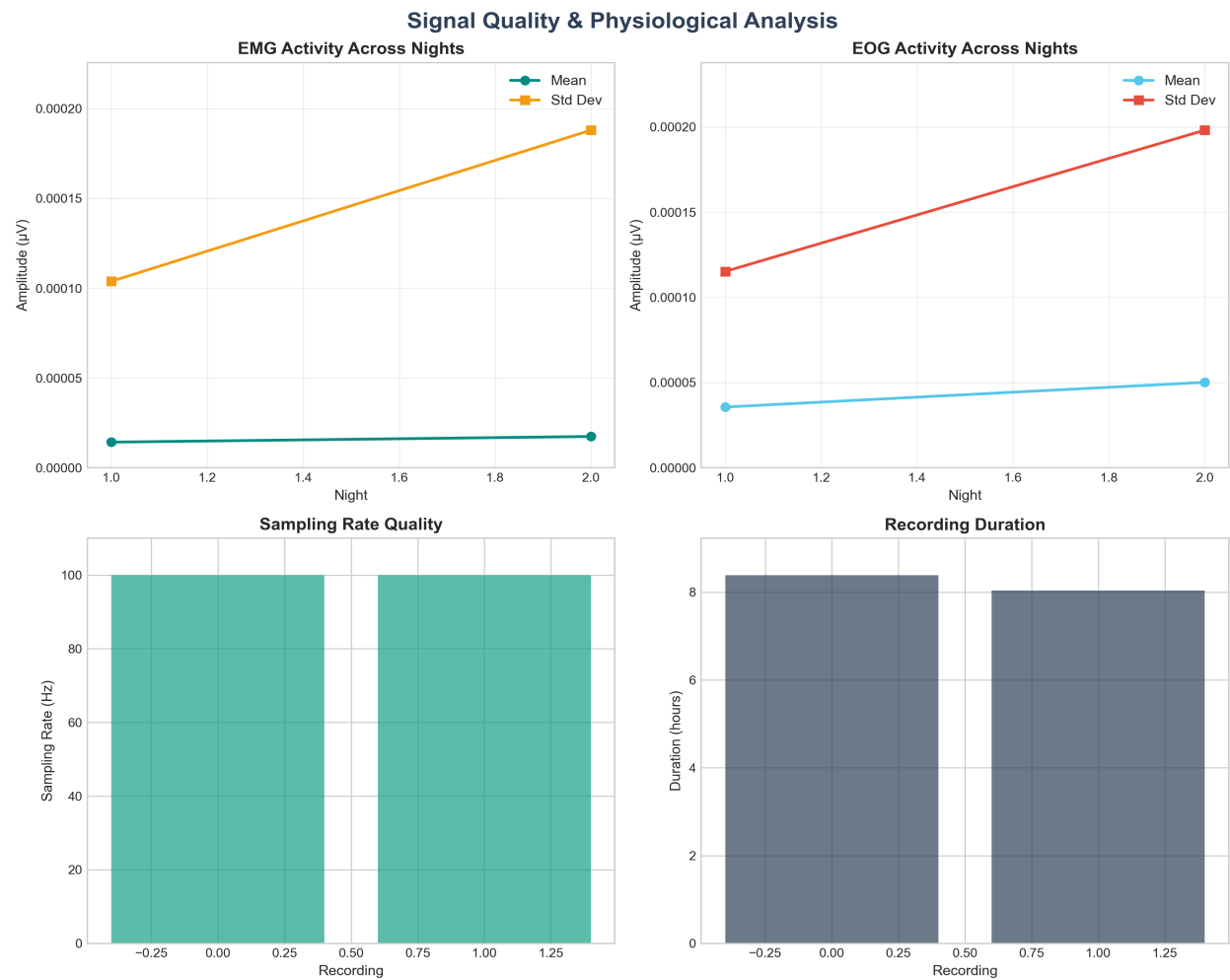
Population Comparative Analysis

Comparative Population Analysis

Sleep Efficiency (%)
★ Subject

REM Sleep (%)

Sleep Latency (min)

WASO (min)
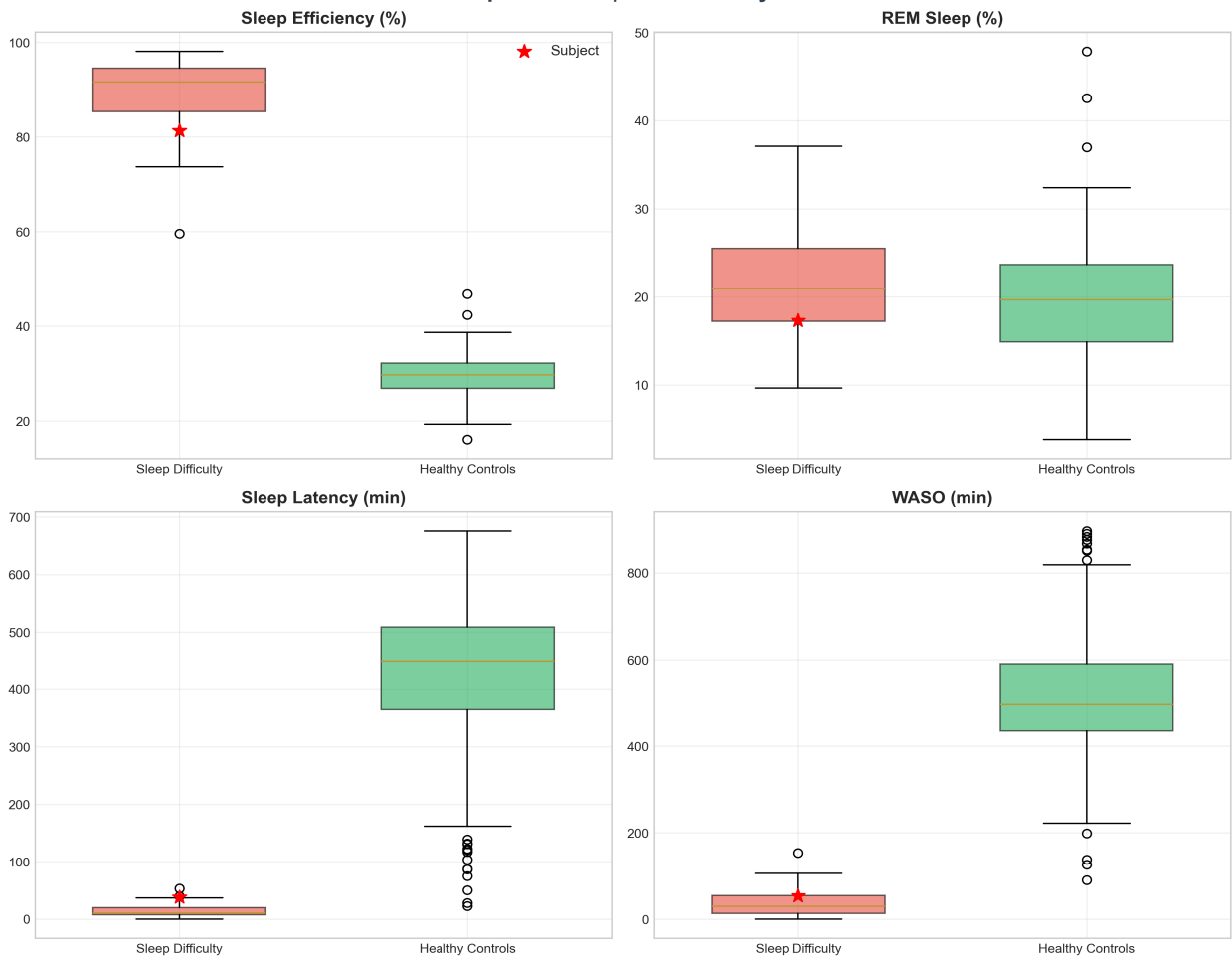
Clinical Interpretation & Recommendations

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: 81.3% (Below normal)
• REM Sleep: 17.3% (Atypical)
• Deep Sleep: 20.9% (Adequate)
• Sleep Continuity: Fragmented (WASO: 54.0 min)

Key Findings

• **Reduced Sleep Efficiency**: At 81.3%, sleep efficiency is below the normal threshold of 85%, indicating potential sleep quality issues.
• **Reduced REM Sleep**: REM sleep comprises 17.3% of total sleep, which is below the normal range of 20-25%.
• **Adequate Deep Sleep**: Deep sleep stages comprise 20.9% of sleep, indicating good restorative sleep.
• **Medication Effect**: Temazepam improved sleep efficiency by 9.4% compared to placebo night.

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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