Individual Sleep Analysis Report

Subject ID: 47 | Healthy Control Study

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

Subject Information

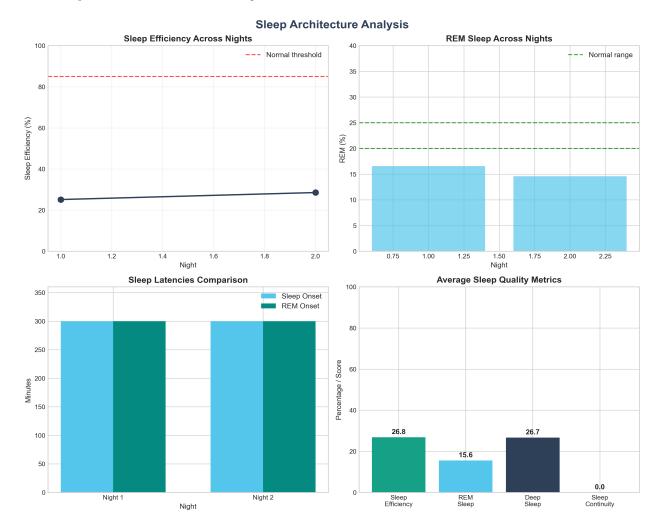
| Subject ID | 47 |
|------------------|------------------|
| Age | 73 years |
| Sex | F |
| Study Type | Healthy Controls |
| Number of Nights | 2 |
| Recording Dates | Multiple nights |

Executive Summary

This report presents a comprehensive analysis of 2 night polysomnographic recordings for Subject 47, a 73-year-old F participant from the Sleep Cassette (healthy controls) study under nan condition.

| Metric | Value | Clinical Interpretation |
|------------------------|-----------|-------------------------|
| Sleep Efficiency | 26.8% | Below Normal (<85%) |
| Sleep Latency | 363.5 min | Prolonged (>30min) |
| REM Latency | 500.8 min | Atypical |
| REM Sleep | 15.6% | Atypical |
| Wake After Sleep Onset | 632.0 min | Elevated (>30min) |

Sleep Architecture Analysis

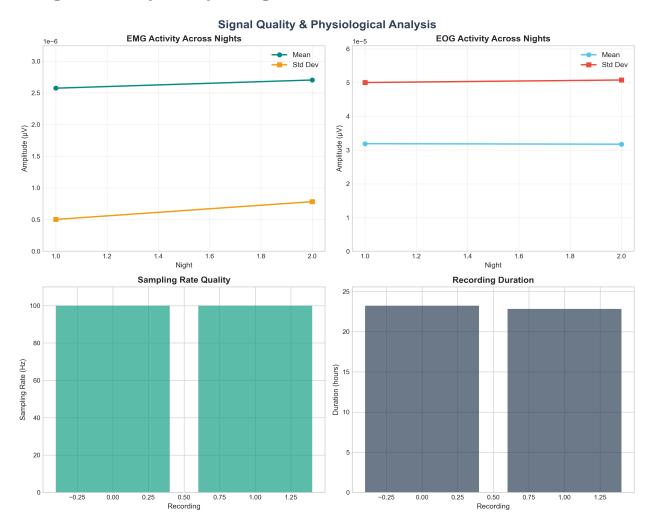


Neurophysiological Analysis - EEG Power Spectrum

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)

Healthy Controls

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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: 26.8% (Below normal)

REM Sleep: 15.6% (Atypical)Deep Sleep: 26.7% (Adequate)

• Sleep Continuity: Fragmented (WASO: 632.0 min)

Key Findings

- **Reduced Sleep Efficiency**: At 26.8%, sleep efficiency is below the normal threshold of 85%, indicating potential sleep quality issues.
- **Reduced REM Sleep**: REM sleep comprises 15.6% of total sleep, which is below the normal range of 20-25%.
- Adequate Deep Sleep: Deep sleep stages comprise 26.7% 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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