

## **P10: Feasibility of a Longitudinal Audiovisual Observation Protocol to Characterize EL in Advanced AD/ADRD**

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**Background:** Episodes of lucidity (EL) are clinically and potentially epidemiologically significant events that occur among individuals with advanced dementia. EL are characterized by a spontaneous return of abilities previously thought to have been lost and are predominantly reported near end of life. Audiovisual observation offers a valuable approach to studying EL, providing opportunities to characterize verbal/non-verbal features of EL as well as their surrounding contexts. Approaches to capturing and characterizing audiovisual data and potential verbal/non-verbal indicators of EL near end of life are lacking.

**Objective:** This study determined the acceptability and feasibility of a multi-faceted observational study protocol to characterize potential observable indicators of EL among people with advanced dementia near end of life.

**Methods:** This study incorporated longitudinal audiovisual observation, informant field interviews/case review of potential EL events by informants. We examined enrollment and retention rates, task load and usability ratings from clinician and research staff across data collection and processing tasks, and surveys and qualitative appraisal from participants and staff regarding feasibility and acceptability. The NASA TLX Task Load Index measures workflow assessment to generate a combined score between 0-20, with 0 indicating higher workflow assessment. The modified System Usability Scale (SUS) measures usability with a score of 0-100, with 100 indicating higher usability and a target score  $\geq 68$  indicating usability higher than 50% of the average score.

**Results and Conclusion:** Five eligible individuals were enrolled, yielding a 100% enrollment/retention rate, and 103 observations totaling 280 hours of observation across participants. NASA TLX Task Load Index scores of 2.9 over 4 months, with vast improvement over time indicate study procedures with iterative refinements were feasible. Average modified SUS score for clinician and research staff was 96 and 82.4 respectively, indicating high usability with notable improvement over time. Surveys and qualitative appraisal from participants and staff endorse high rates of acceptability and feasibility. Additionally, the study team identified 9 potential EL across 3 participants. Seven caregivers and two clinicians participated in case reviews to review the corresponding audiovisual data, resulting in 3 endorsed EL.

## **P21: Intermittent theta burst stimulation for treatment of behavioral and psychological symptoms of dementia in Alzheimer's disease and its effect on the use of antipsychotics – study protocol**

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