

## **Statistical Analysis Plan**

**Project title:** WECARE: A Behavioral Intervention for Dementia Caregivers

**Trial Registration:** ClinicalTrials.gov Identifier: [NCT05992467](https://clinicaltrials.gov/ct2/show/study/NCT05992467)

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**Approved by:** George Mason University Office of Research Integrity and Assurance

## **Statistical Analysis Plan**

In this clinical trial with pre-post design, the effectiveness of the intervention is determined by whether participants pre-post changes in outcomes are statistically different.

First, descriptive statistics (e.g., mean, median, standard deviation, percentages) are used applied to summarize the sample's demographic characteristics. Then, to evaluate pre-post changes in psychosocial health outcomes, paired t-tests or Wilcoxon signed-rank tests are employed depending on the distribution of the data. The significance level of  $P < .05$  is used to determine statistical significance. After that, stratified analyses are conducted based on baseline depressive symptom scores ( $CESD < 16$  vs  $CESD \geq 16$ ) and English proficiency levels (good vs poor) to examine potential subgroup differences in the intervention effects. Effect sizes are calculated to assess the practical significance of changes in health outcomes, providing insight into the magnitude of the intervention's impact. All analyses are performed using R version 4.4.1.