

Alzheimer's Disease and Related Dementias (ADRD) is a leading cause of death among people ages 65 years and older in the United States. The findings of impacts of sociocultural, behavioral, and environmental determinants on diagnosis of ADRD are mixed. Using advanced statistical methodology to better understand the association of determinants with diagnosis of ADRD is critical to the public health and individuals. The proposed project utilizes a novel statistical cure model framework to improve the ability to evaluate the association between determinants and diagnosis of ADRD in later life. Hormone therapy will be used as an example to illustrate the application of this advanced methodological technique in the field of ADRD research. The first objective of the project is to analyze the effect of hormone therapy exposure (hormone modulating therapy or androgen deprivation therapy) on the diagnosis of ADRD among elderly population with diagnosis of breast cancer or prostate cancer; the second objective is to evaluate if the racial/ethnic disparities exist in the association between hormone exposure and diagnosis of ADRD; and the third objective is to evaluate the robustness of the findings using sensitivity analyses.