

# Decision Making for Cardiovascular Therapy in Adults with Mild Cognitive Impairment

<https://www.neurodegenerationresearch.eu/survey/decision-making-for-cardiovascular-therapy-in-adults-with-mild-cognitive-impairment/>

## Principal Investigators

LEVINE, DEBORAH

## Institution

UNIVERSITY OF MICHIGAN

## Contact information of lead PI

### Country

USA

## Title of project or programme

Decision Making for Cardiovascular Therapy in Adults with Mild Cognitive Impairment

## Source of funding information

NIH (NIA)

## Total sum awarded (Euro)

€ 3,322,819.27

## Start date of award

15/09/2016

## Total duration of award in years

1

## The project/programme is most relevant to:

Alzheimer's disease & other dementias

## Keywords

Acquired Cognitive Impairment... Aging... Alzheimer's Disease... Alzheimer's Disease including Alzheimer's Disease Related Dementias (AD/ADRD)... Behavioral and Social Science... Brain Disorders... Cardiovascular... Clinical Research... Clinical Research - Extramural... Dementia... Heart Disease... Heart Disease - Coronary Heart Disease... Neurodegenerative... Neurosciences

## Research Abstract

? DESCRIPTION (provided by applicant): There is a fundamental gap in understanding how mild cognitive impairment (MCI) influences treatment and decision making for serious illnesses, like cardiovascular disease (CVD), in older patients. Poor understanding of clinical decision making is a critical barrier to the design of interventions to improve the quality and outcomes of CVD care of in older patients with MCI. The long-term goal of this research is to develop, test, and disseminate interventions aimed to improve the quality and outcomes of CVD care and to reduce CVD-related disability in older Americans with MCI. The objective of this application is to determine the extent to which people with MCI are receiving sub-standard care for the two most common CVD events, acute myocardial infarction (AMI) and acute ischemic stroke, increasing the chance of mortality and morbidity in a population with otherwise good quality of life, and to determine how MCI influences patient preferences and physician recommendations for treatment. AMI and acute ischemic stroke are excellent models of serious, acute illnesses with a wide range of effective therapies for acute management, rehabilitation, and secondary prevention. Our central hypothesis is that older adults with MCI are undertreated for CVD because patients and physicians overestimate their risk of dementia and underestimate their risk of CVD. This hypothesis has been formulated on the basis of preliminary data from the applicants' pilot research. The rationale for the proposed research is that understanding how patient preferences and physician recommendations contribute to underuse of CVD treatments in patients with MCI has the potential to translate into targeted interventions aimed to improve the quality and outcomes of care, resulting in new and innovative approaches to the treatment of CVD and other serious, acute illnesses in adults with MCI. Guided by strong preliminary data, this hypothesis will be tested by pursuing two specific aims: 1) Compare AMI and stroke treatments between MCI patients and cognitively normal patients and explore differences in clinical outcomes associated with treatment differences; and 2) Determine the influence of MCI on patient and surrogate preferences and physician recommendations for AMI and stroke treatment. Under the first aim, a health services research approach- shown to be feasible in the applicants' hands-will be used to quantify the extent and outcomes of treatment differences for AMI and acute ischemic stroke in older patients with MCI. Under the second aim, a multi-center, mixed-methods approach and a national physician survey, which also has been proven as feasible in the applicants' hands, will be used to determine the influence of MCI on patient preferences and physician recommendations for AMI and stroke treatment. This research proposal is innovative because it represents a new and substantially different way of addressing the important public health problem of enhancing the health of older adults by determining the extent and causes of underuse of effective CVD treatments in those with MCI. The proposed research is significant because it is expected to vertically advance and expand understanding of how MCI influences treatment and decision making for AMI and ischemic stroke in older patients. Ultimately, such knowledge has the potential to inform the development of targeted interventions that will help to improve the quality and outcomes of CVD care and to reduce CVD-related disability in older Americans.

### **Lay Summary**

**PUBLIC HEALTH RELEVANCE:** The proposed research is relevant to public health because the discovery of the mechanisms by which mild cognitive impairment influences clinical decision making is ultimately expected to lead to new approaches that improve the quality and efficiency of care provided to older Americans experiencing serious illnesses. The proposed research is relevant to the part of NIH's mission of developing fundamental knowledge that will help

enhance the health of older adults and reduce the burdens of human disability.

**Further information available at:**

**Types:**

Investments > €500k

**Member States:**

United States of America

**Diseases:**

Alzheimer's disease & other dementias

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

N/A