



# The Northern Ireland Cohort for the Longitudinal Study of Ageing Harmonised Cognitive Assessment Protocol (HCAP): Study Protocol and Progress Update

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## Background

Dementia, the progressive decline in memory and other cognitive abilities as a result of neurodegenerative disease, has a large and growing impact on both an individual and societal level. The Harmonised Cognitive Assessment Protocol (HCAP) is a protocol for collecting data on cognitive function within a population-based cohort study. The protocol was originally designed and implemented within the US-based Health and Retirement Study, and has since been adopted in other national cohort studies (see Figure 1). The use of a harmonised protocol across multiple national studies will allow for cross-national comparisons of dementia prevalence and risk-factors. In Northern Ireland, HCAP is being implemented within the Northern Ireland Cohort for the Longitudinal Study of Ageing (NICOLA).

## Research Aims

- **Collect cognitive data from a large sample of older adults in Northern Ireland using a harmonised protocol**
- **Develop algorithms to provide the first population estimates of dementia in Northern Ireland**
- **Investigate potential risk factors for dementia and cognitive decline, including:**
  - cardiovascular disease
  - sensory impairment
  - stress and long-term exposure to conflict

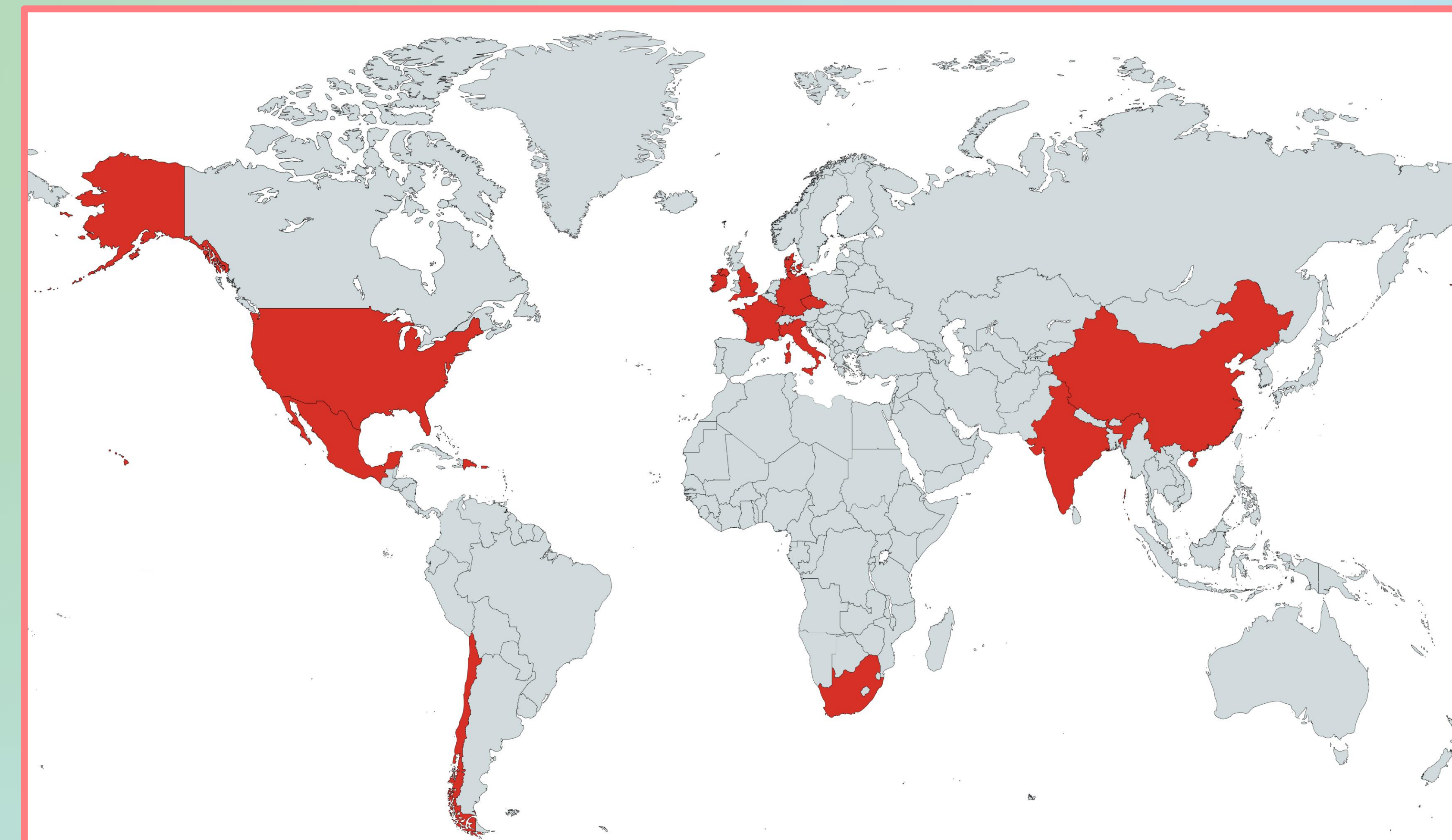


Figure 1. Map of countries represented in the HCAP network

## NICOLA HCAP study and SPACE linkage

Researchers from SPACE Work Package 3 will combine cognitive health data from the NICOLA HCAP study and urban environment data to explore patterns and relationships between participants' urban environment and their cognitive health.

## Methods

The NICOLA sample comprises around 8500 adults aged 50 and over living across Northern Ireland. The HCAP sub-study will recruit 1000 of these participants who are aged 65 and over and living in private residential accommodation.

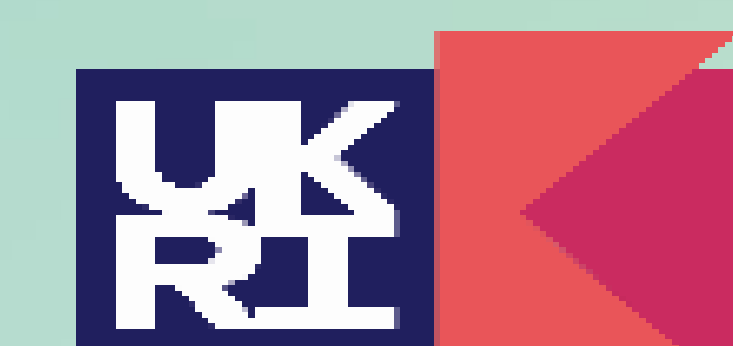
All participants will complete a battery of cognitive tests designed to measure performance across a range of cognitive domains.

Participants are also asked to nominate an informant (usually a family member or friend) to complete a separate interview. Informants complete a series of questionnaires to provide information on the participant's everyday cognitive performance and activities of daily living.

## Summary of Current Progress

Following a short pilot study, fieldwork for the NICOLA HCAP study commenced in February 2022. As of November 2023, fieldwork is now complete, with a total of 1037 participant interviews and 862 informant interviews. Data cleaning processes are currently ongoing. All data collected will be made publicly available via Dementias Platform UK.

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