R043: Using Northern Ireland Cohort for the Longitudinal Study of Ageing (NICOLA) linked to administrative data to understand how older adults in Northern Ireland transition from MCI to dementia, and to examine equity in dementia-related health care access – QUB

Dementia represents a significant public health issue. With population increase of older people we can expect dementia rates to also increase, impacting on health and social care services.

In terms of the characteristics of people, and their use of health care, little is known about transition from the early stages of cognitive impairment (e.g., early memory problems that are self-reported by a person, known as subjective cognitive decline [SCD]), through to mild cognitive impairment (MCI), and then to dementia. Greater knowledge and understanding of these transitions will help with health and social care service planning, and ensure that everyone who needs access to memory and dementia-related health care (e.g., memory clinic referrals, medications for dementia) has equal access.

The Northern Ireland Cohort for the Longitudinal Study of Ageing (NICOLA) is the largest study of adults aged 50+ years and living in Northern Ireland. NICOLA provides a unique and in-depth data source to answer questions about those in NI with cognitive impairments. However, by linking NICOLA data to relevant administrative data (i.e., memory clinic referrals and prescription data) we can create an enhanced data resource that allows us to estimate the proportions of NI older adults who have progressed from SCD to MCI to dementia over time. We can also carry out a detailed study of the patient’s journey and an examination of the equity of access to services such as memory clinics or disease modifying medication and the factors associated with the use of memory/dementia-related health care.

**Primary research questions:**

- What are the estimated proportions of older adults in NI who progress from Subjective (i.e., self-reported) Cognitive decline (SCD) to Mild Cognitive Impairment (MCI) to dementia over time?
  What are the range and referral rates to memory care services and usage of dementia related prescribing for those progressing from Mild Cognitive Impairment (MCI) to dementia over time?

**Secondary research question:**

- What are the factors associated with use of memory and or dementia related health care services?