PCL/20/01 - Temporal dynamics of multimorbidity and medication use with mental illness and dementia: an investigation in NHS Scotland routinely collected data and the Lothian Birth Cohort 1936

The co-existence of multiple conditions, known as multimorbidity, is increasing in prevalence and has been identified as a priority for research and in healthcare. Unanswered questions exist about mental and physical illnesses occurring together in multimorbidity, for example which conditions come first and the implications of taking multiple medications (polypharmacy). This epidemiological research will examine associations between multimorbidity and medication use with dementia and other mental illnesses in depth. It will include temporal dynamics, in terms of whether changing levels of medication use affect the associations, and the importance of specific drug groups. It will stratify analyses by sex. The data sources will be routinely collected linked data from NHS Information Services Division (ISD), including everyone aged 50 years or over on 1st January 2009 who received a prescription in Scotland in that quarter (n=1 346 714), followed up over 8.5 years. In addition, I will analyse more detailed measurements of cognition and mental health from the Lothian Birth Cohort 1936 (n=1 091). This will be Scotland's first longitudinal population-wide study of medication use, complemented with specific measures in a high quality cohort study. The results will be relevant to patients, policymakers and researchers in multimorbidity, dementia and mental health.