CAF/17/11 – Morbidity and mortality among people experiencing severe and multiple disadvantage: a cohort study using cross-sectoral data linkage

Homelessness, imprisonment, substance use disorder, and severe mental illness are all powerful risk factors for preventable ill-health and premature death. However, despite emerging evidence of their overlap in the population – a phenomenon known as 'severe and multiple disadvantage' (SMD) – most research to date has investigated these experiences singly, or at most in pairs.

To address this knowledge gap, I will undertake a retrospective cohort study using linked administrative data to:

1. describe the prevalence, patterning, and demographic associations of SMD in Scotland:

2. investigate the association between SMD and subsequent risk of morbidity and mortality, and how this association varies with other intersecting characteristics such as age and gender;

3. quantify secondary health care costs associated with SMD.

The study cohort will comprise individuals with one or more of the following exposures, matched to population controls of the same age, gender, local authority, and area-based deprivation decile: application for statutory homelessness support; incarceration in a Scottish prison; treatment for substance use disorder; or inpatient admission for severe mental illness. The cohort will be linked to outcome data on A&E attendance, acute hospital admissions, and deaths. Analyses will include latent class analysis (objective 1); Cox and Poisson regression (objective 2); and descriptive analysis of costs (objective 3).

By addressing key knowledge gaps as to the health outcomes associated with SMD, this study will identify priority areas for service design and planning, inform resource allocation decisions, and provide a foundation for the development of specific interventions and models of care.