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# Establishing data linkage between welfare and health data in the UK: Overcoming barriers to linking government datasets

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#### Objectives

Employment and welfare policy have major impacts on population health and health inequalities. We sought to develop a novel data linkage between administrative welfare data (held by the UK Government's Department for Work and Pensions, DWP) and health records (from the National Health Service, NHS). We describe the challenges we faced establishing this linkage and explain how they have been overcome over five years.

#### Approach

National Records Scotland (NRS) is the organisation responsible for statutory demographic data in Scotland, including conducting the decennial census, registering births and deaths. They will act as a Trusted Third Party to facilitate linkage under Scots common law. This work will be supported by the UK's Administrative Data Research Network. Following a successful pilot, a further project is intended to link data for England and Wales (subject to further applications).

#### Results

The Work & Pensions Longitudinal Study (WPLS) is a personlevel longitudinal dataset that links benefit and programme information held by DWP since January 2004 with employment records from Her Majesty's Revenue & Customs for people who have had a benefit spell. The WPLS allows transitions between different benefits and/or employment statuses to be ascertained, including timing of transitions and salaried income post-employment. However, the WPLS includes very limited health information. NHS Scotland has exceptional administrative health records, including person-level information on deaths, hospital admissions (including admission/discharge dates, diagnoses, procedures etc.), cancer registrations (including type, stage, treatment) and community prescriptions. A particular strength is the availability of a unique population identifier which facilitates deterministic linkage across health records.

Key issues that needed to be addressed to facilitate the linkage included identification of appropriate research questions that were of high priority to government policymakers, the availability of research infrastructure and reassurances about data security. However, delays in establishing the linkage have been common - particularly as a consequence of the multiple organisations involved and time constraints on public sector staff required to process the linkage. Research topics to be investigated include improved prediction of health and welfare outcomes, investigating the health impacts of job insecurity and evaluating impacts of welfare reform.

### Conclusion

Evidence to improve alignment between health and welfare goals will be achieved through linkage of administrative records in this five year research programme. It has been essential to consider how best to achieve public benefit and minimise privacy risks, while ensuring the needs of policymakers are central to the development of the research.



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