

Multimorbidity and Access to Social Care

Exploiting emerging administrative datasets in Scotland

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3rd April 2018



Introduction

- Personal Background
- Project funding and supervision
- Project outline
- Progress



Personal Background





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PHD STUDENTS have admitted it is just an excuse to spend another three years arsing about.

Julian Cook, who is currently writing a PhD thesis on the history of tables, said. "I really enjoyed my degree because I only had to do a relatively small amount of work and was able to have a bath during the day without anyone shouting at me.



<http://www.thedailymash.co.uk/news/science-technology/people-doing-phds-admit-its-just-an-excuse-to-fanny-about-201709261364>

Project funding and supervision

- Scottish Government
- ESRC
- UBDC
- Nick Bailey, Colin McCowan, Stewart Mercer



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Project outline

Background (a) Multimorbidity

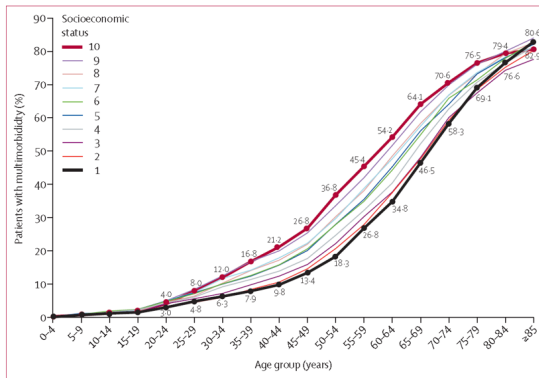


Figure 2: Prevalence of multimorbidity by age and socioeconomic status
On socioeconomic status scale, 1=most affluent and 10=most deprived.

Barnett et al (2012)

Project outline

Background (b) What we know..

- There is a strong socioeconomic gradient observed for those with multimorbidity
- This feeds the inverse care law in primary care services

MM associated with...

- Higher mortality
- Psychological distress
- Worse QOL
- Worse functional status
- Increased health care use...
- But what about social care?????



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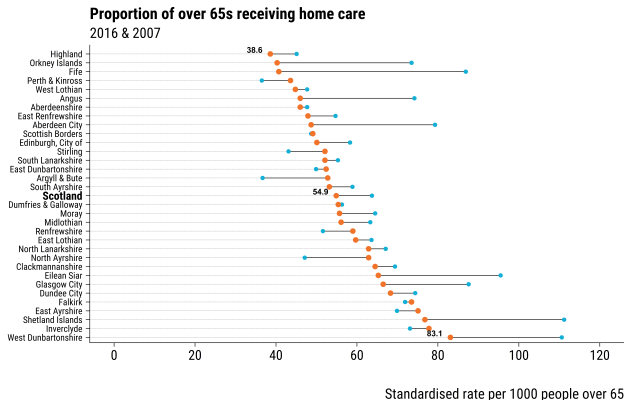
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Background (c) Social Care



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Aims

- Describe and and compare social inequalities in the use of social care services using linked health and social care data.
- Explore the effects of social care use for those with multimorbidity on;
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Project outline

Research questions:

In people over the age of 65 in Scotland:

1. (a) What are the socioeconomic, demographic, and geographic patterns in the use of social care?
(b) Is there an association between multimorbidity status and the amount and type of social care use over time? Does this vary by the patterns described in 1(a)?
2. (a) Is there an association in the use of social care services, multimorbidity status and unscheduled health care use?
(b) Do multimorbidity status and social care use predict mortality?

Project outline

Data sources

- Demographics, Deaths, and SIMD (CHI database and NSS)
- Social care survey (Scottish Government)
- Prescribing information (ISD)
- Unscheduled Care Data Mart (ISD)
- SMR01, SMR04, A & E, and USC LTC diagnoses

Study period

- 1st April 2011 to 31st March 2016

Cohort

- Everyone born before 31st March 1951 (over 65s)



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Measures

1. Multimorbidity

- (a) Count of regular medicines
- (b) Count of prescribing from BNF chapters
- (c) Cross reference with diagnoses data

2. Social Care

- (a) Any social care (yes/no)
- (b) Weekly hours of home care
- (c) Telecare (yes/no)

3. Unscheduled health care use

- 3.1 Any USC (yes/no)
- 3.2 Count of USC episodes
- 3.3 Count of USC category (A&E, Admissions)



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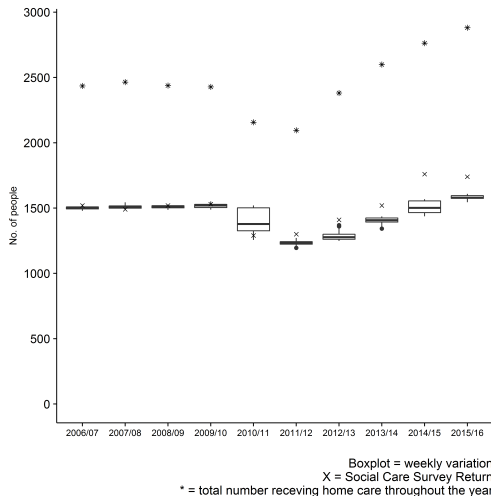
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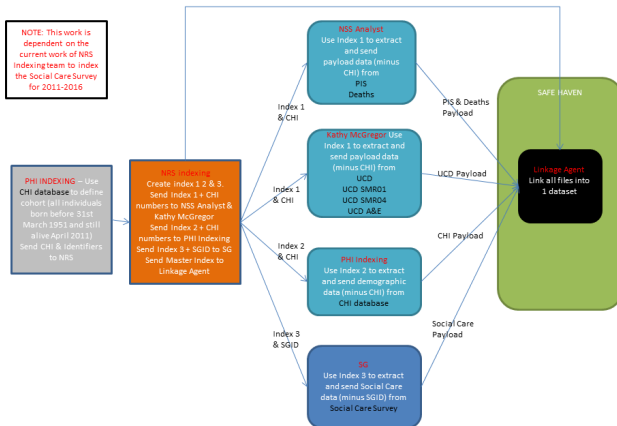
Project outline

Weekly variation in number of individuals receiving home care in Renfrewshire council area



Project outline

Data Linkage

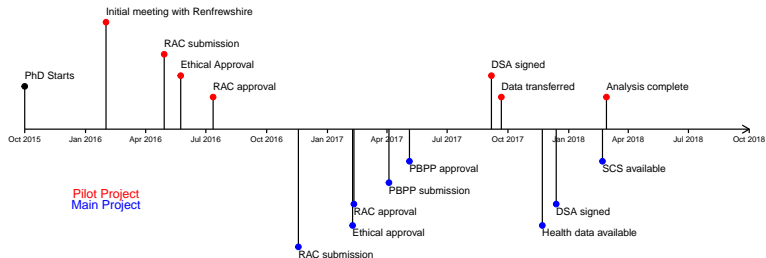


Linkage process for 1617-0304 - Using linked data to understand the relationships between Multimorbidity and the use of Health and Social Care – David Henderson

Project outline

	n	Total number of records
Total Cohort	1,134,445	
Total Deaths	274,011	
At least one prescription	1,109,168	134 million
Captured by social care survey	227,345	663,809
At least one episode USC	845,893	3,772,402

Progress



Pilot Project
Main Project

RAC = Research Approvals Committee
PBPP = Public Benefit and Privacy Panel
DSA = Data Sharing Agreement



Any Questions ??

If life gives you questions, Google gives you answers.



References

Barnett, K., S. W. Mercer, M. Norbury, G. Watt, S. Wyke, and B. Guthrie. 2012. "Epidemiology of Multimorbidity and Implications for Health Care, Research, and Medical Education: A Cross-Sectional Study." Journal Article. *Lancet* 380 (9836): 37–43. doi:10.1016/S0140-6736(12)60240-2.

