

Using Administrative Data for Social Research: An Example from the Linked Health and Social Care Data



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Overview

Project Summary

Linked Health and Social Care Data

Results

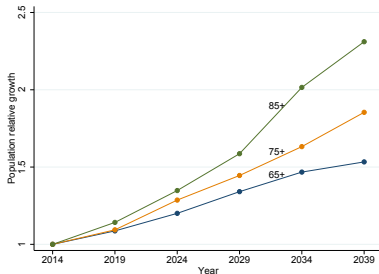
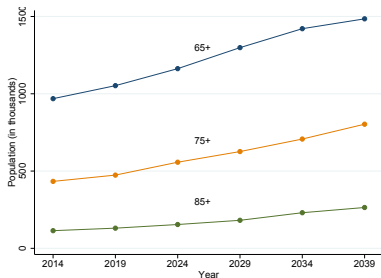
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Backgrounds: Population Ageing

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- An effective understanding of how the health and social care system interact at the present

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- Understand the interaction of health and social care services using population administrative data
- Develop an understanding of the practicalities and challenges in working with linked health and social care data

Research Questions

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Data

Linked Health and Social Care Data

- The Scottish Government, in collaboration with Information Services Division (ISD) Scotland, Scottish health boards and Scottish local authorities have developed a linkage of specific social care, housing support and health data in order to produce improved analytical evidence to enhance the delivery of these services
- Further information about the project can be found here:
<http://www.gov.scot/Topics/Statistics/Browse/Health/Datalinking/HealthSocialCareandHousin>

Data Components

Hospital Admission Data

Hospital episode data
for 2010/11 from
SMR01 & SMR04

Social Care Data

Home care and
self-directed support
data for 2010 & 2011

Prescribing Data

Dataset containing
counts of items
dispensed in 2010/11

Demographics Data

Demographics
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Personal ID

allows data to
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Data linkage is available for five local authorities:

- Edinburgh
- Stirling
- Clackmannanshire
- South Ayrshire
- South Lanarkshire

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- The dataset contains patient identifiers (such as name, date of birth, Community Health Index number, NHS number), postcode and ethnicity, admission date, admission type, waiting time, patients' conditions, diagnoses, operations, discharge date, discharge destination etc.

Social Care Data

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- The dataset contains local authority, ethnicity, living alone, home care/personal care, housing support, meals on wheels, frozen meals, shopping, laundry, IoRN score, community alarm, other telecare

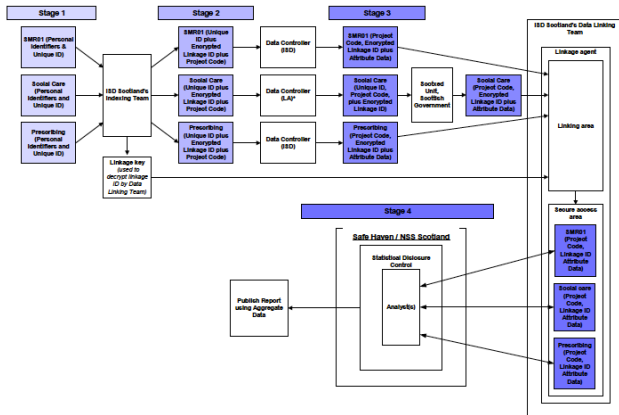
Prescribing Data

- All prescribing relating to all medicines and their costs that are prescribed and dispensed within NHS Scotland in 2010/11

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- This dataset contains CHI number, prescriber and dispenser details, costs and drug information

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- Further information can be found here:
www.isdscotland.org/Products-and-Services/EDRIS/

Data Access

- Remote desktop access
- Secure access points (data safe havens)
 - Currently, Scotland has regional safe havens located within Aberdeen, Dundee, Edinburgh and Glasgow, and a National safe haven at NSS
 - Research co-ordinators will be assigned
 - The researcher will be given a username and password to log on to a secure area to access your linked data file
 - Access only to named researchers
 - All outputs approved by disclosure committee before release

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 - Detailed diagnosis and procedure codes
- Provides historical information and allows time-series data to be built up

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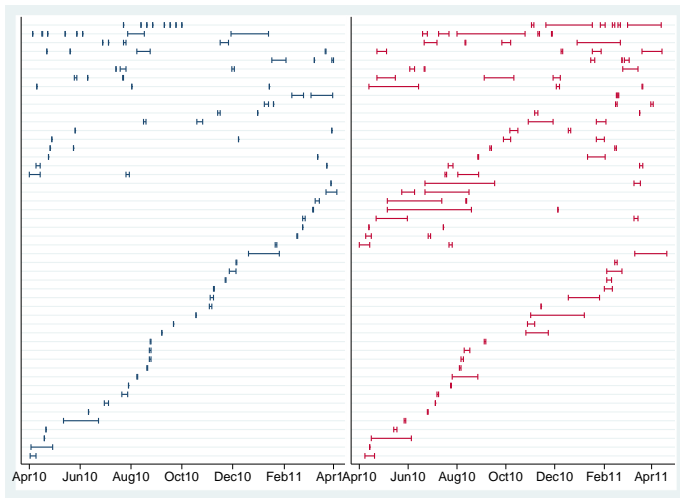
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- Lack of user guide or other document that explains coding and definitions of data
- Data quality: inaccurate, missing or unavailable data, duplicate records
- Inconsistency of data across health boards, local authorities or across time

Results

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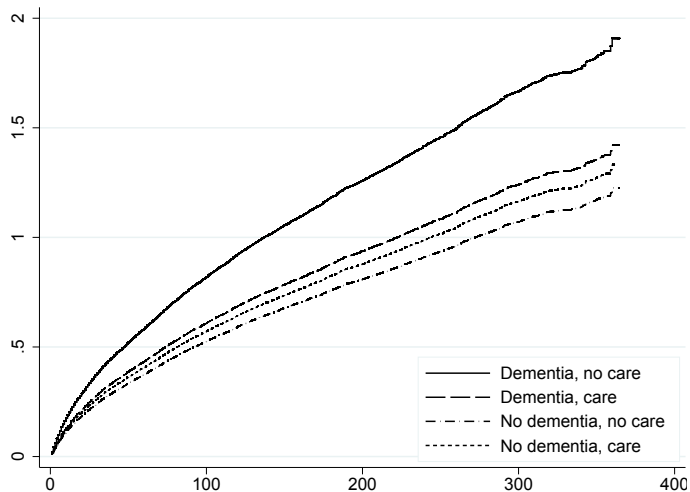


Results

Table: Results from survival analysis

	Coef.	SE	Haz. R	95% CI	
				Lower	Upper
Dementia	0.42	0.03	1.52	1.42	1.62
Live alone	0.37	0.05	1.45	1.31	1.60
Social care	0.07	0.04	1.08	1.00	1.14
Dementia*Social care	-0.37	0.07	0.69	0.61	0.79
Live alone*Social care	-0.31	0.11	0.74	0.59	0.92
Other control variable omitted	-	-	-	-	-

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- Research questions:
 - Does social care play a role in reducing the risk of hospital readmission for older people?
 - Is there any difference between older people with and without dementia?
- Answers:
 - We find no evidence that receiving social care reduces the risk of hospital readmissions for patients without dementia.
 - However, receiving social care is an effective way of preventing emergency readmissions for patients living with dementia.

Thank you!



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