

# Health and social care data linkage

An overview of resources used during my PhD

David Henderson

7th February 2019



# Project funding and supervision

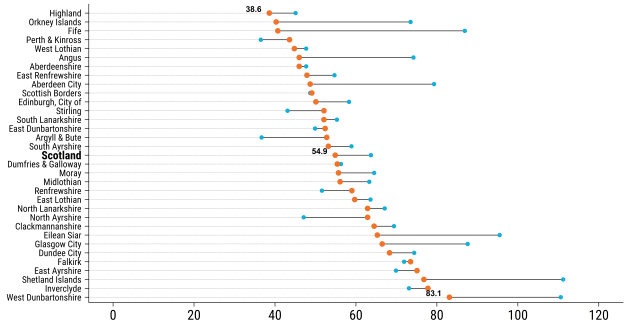
- Scottish Government/ESRC
- Nick Bailey, Colin McCowan, Stewart Mercer
- Based in UBDC at Glasgow University
- Shortly starting post-doc with ADRC-S/Edinburgh Napier



# Background

## Proportion of over 65s receiving home care

2016 & 2007



Standardised rate per 1000 people over 65

# Aims

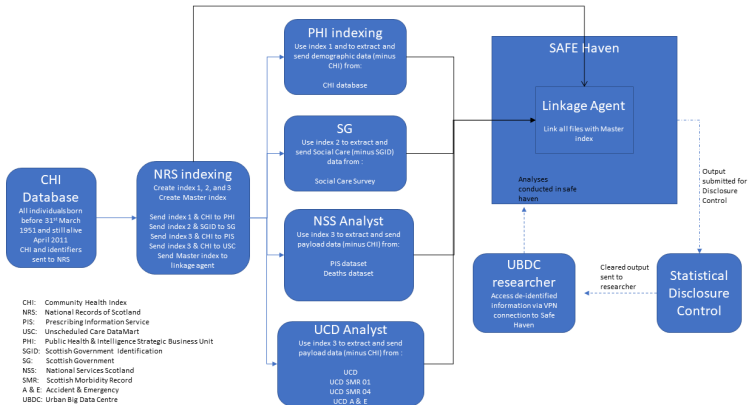
- Scope what administrative social care data is available for research in Scotland
- Create a linked health and social care dataset
- Assess the effect of multimorbidity and sociodemographic characteristics on social care use

## Data

- Social Care Survey
- Renfrewshire council social care data (not linked)

# Linkage project

Study period 2011-2016



# Results - Descriptive statistics

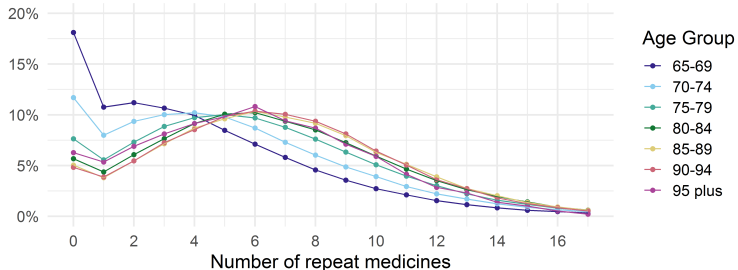
Percentage of individuals in SIMD deciles  
by Local Authority (2013/14)



SIMD decile 1 2 3 4 5 6 7 8 9 10

# Results - Descriptive statistics

Percentage of individuals with specific count of repeat medicines  
2013/14

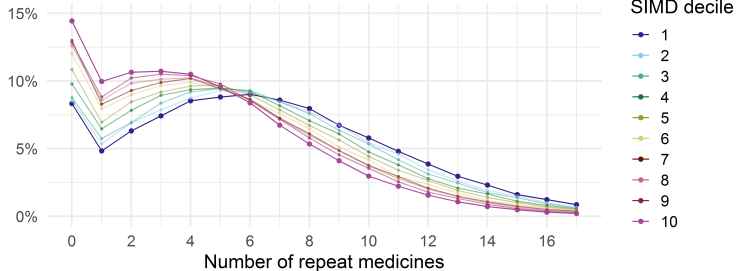


Outlying values > 17 medicines removed



# Results - Descriptive statistics

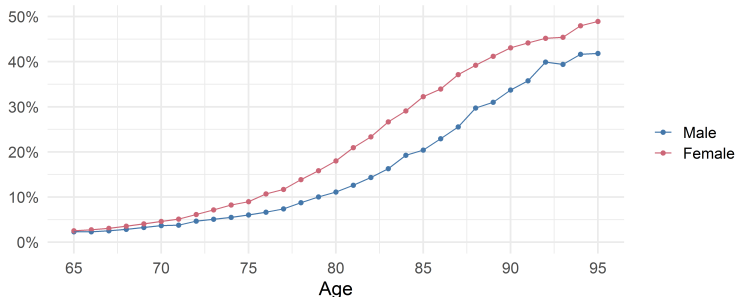
Percentage of individuals with specific count  
of repeat medicines  
2013/14



Outlying values > 17 medicines removed

## Results - Descriptive statistics

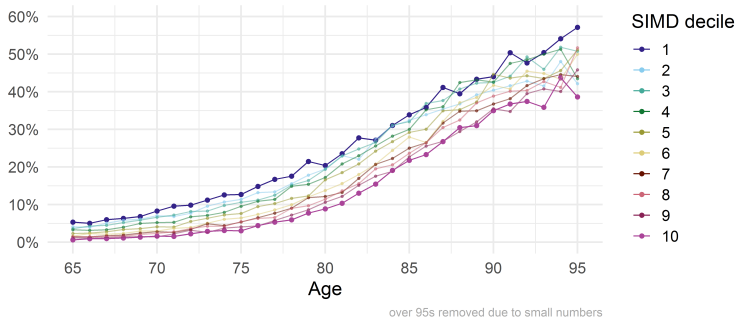
Percentage of individuals with any social care  
2013/14



over 95s removed due to small numbers

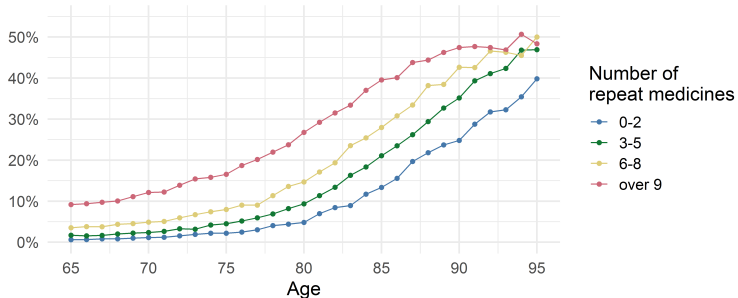
# Results - Descriptive statistics

Percentage of individuals with any social care  
2013/14



# Results - Descriptive statistics

Percentage of individuals with any social care  
2013/14



over 95s removed due to small numbers

## Limitations

- No measure to capture those living alone
- Variation in linkage rate of SCS to population spine at the local authority level
- No longitudinal analysis here
- Proxy multimorbidity measure

## Implications

- Age has the biggest effect on receipt of social care - Multimorbidity also important
- Females also more likely to receive care, but a lot of the difference seen in overall numbers is accounted for when adjusting for age and multimorbidity
- After adjusting for age and multimorbidity status, there remains variation in levels of care at the local authority level. Further investigation is warranted.