



Better Knowledge Better Society

Enhancing the data
infrastructure

Chris Dibben



Administrative Data
Research Network

An ESRC Data
Investment

Improving evidence on health and environment (low carbon) behaviours: Linked administrative data

- ▶ How can two ESRC resources help:
 - ▷ Administrative Data Research Network
 - ▷ UK Census Longitudinal Studies
- ▶ Introduce the services
- ▶ Examples of data available
- ▶ How to access the data



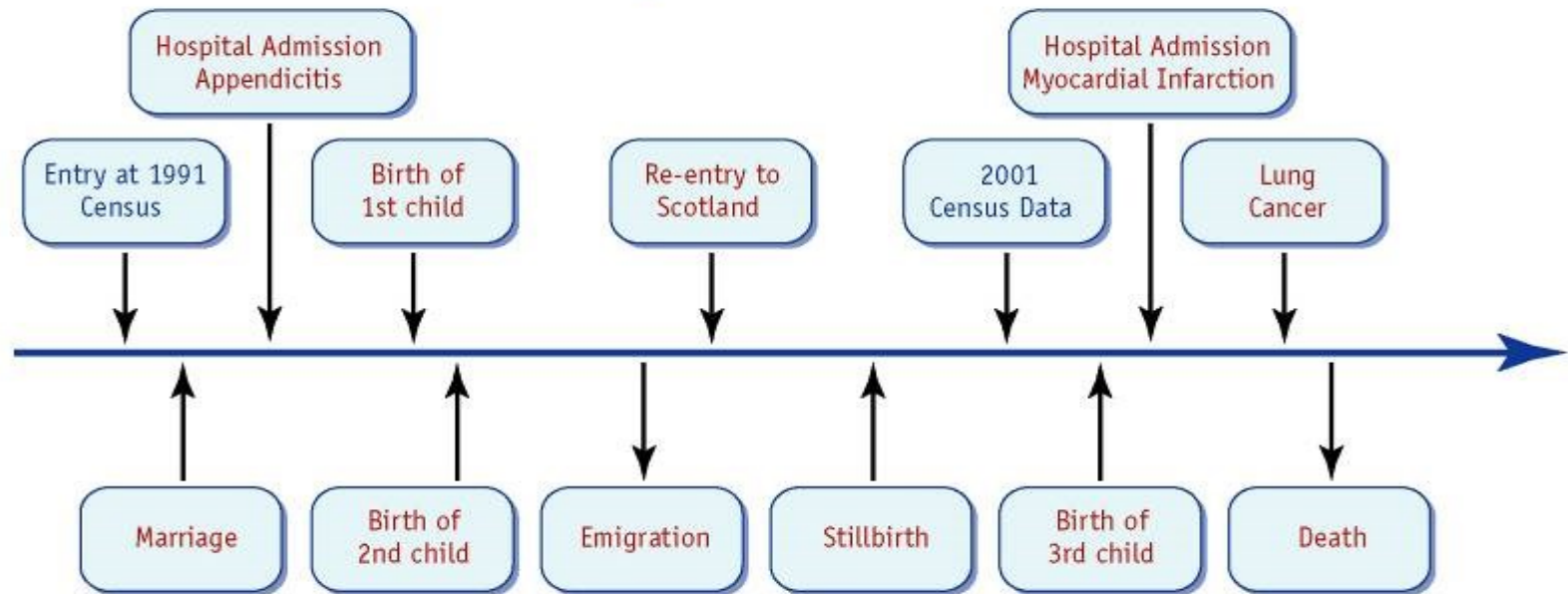
ADRN and UK LS

- ▶ ADRN – linking administrative and potentially census data – 100% of populations
 - ▷ Very large studies ie ~millions of individuals
 - ▷ Data limited to that asked
- ▶ UK LS – 40 years of follow-up of samples ~ 300,000 - 500,000
 - ▷ Census, vital registration, education
 - ▷ Households



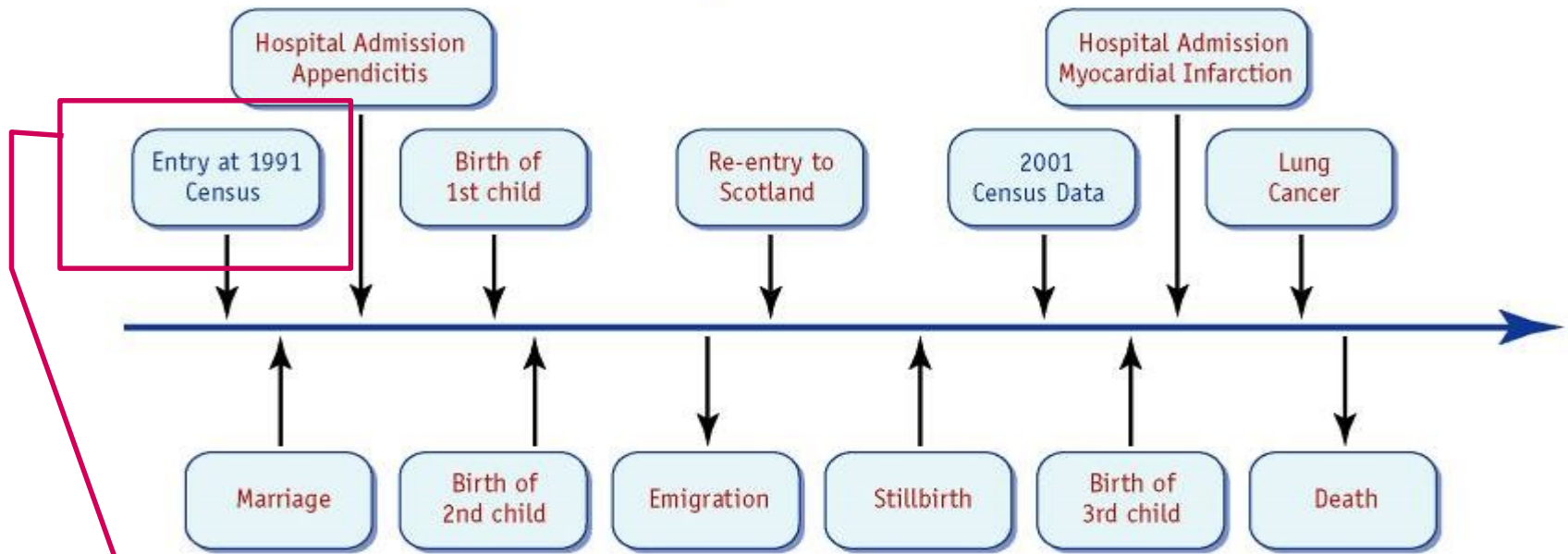
Lives linked over time

Example Event History of a Female LS Member aged 21 at 1991 Census



Lives linked over time

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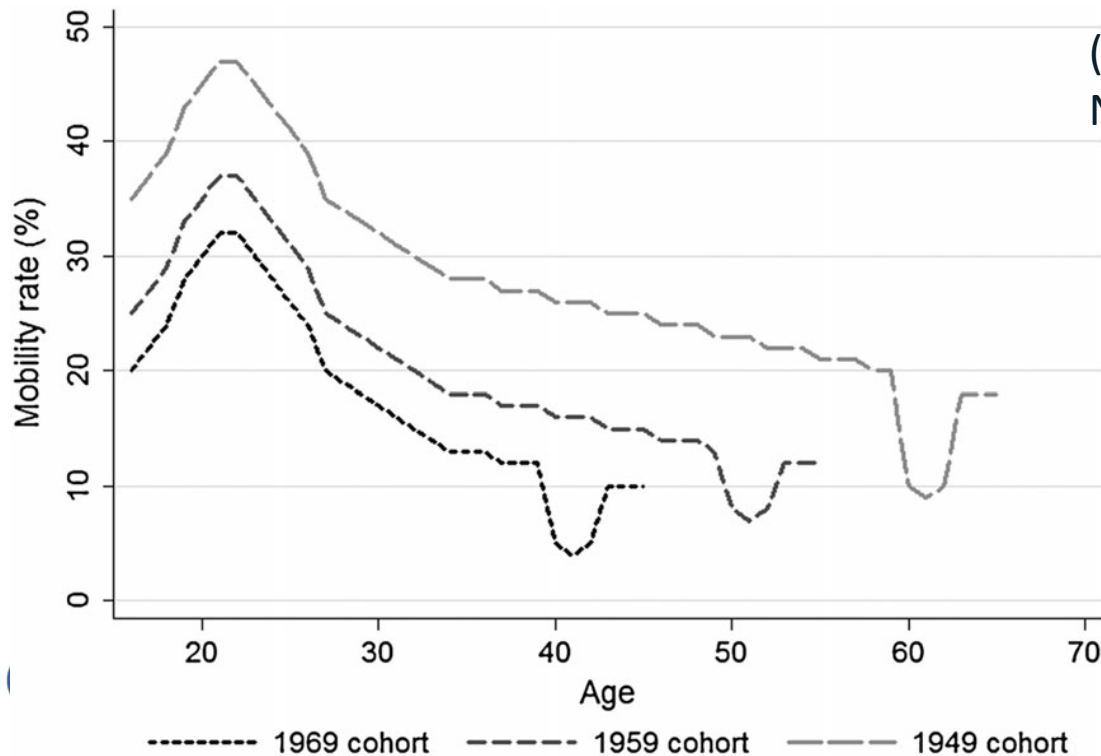


Travels to work by bike a journey of 2 miles



Key Features of Longitudinal Change

- ▶ Comparison of same group over time (Age effects)
- ▶ Comparisons over time (Period comparisons)
- ▶ Comparisons between cohorts over time (Cohort effects)

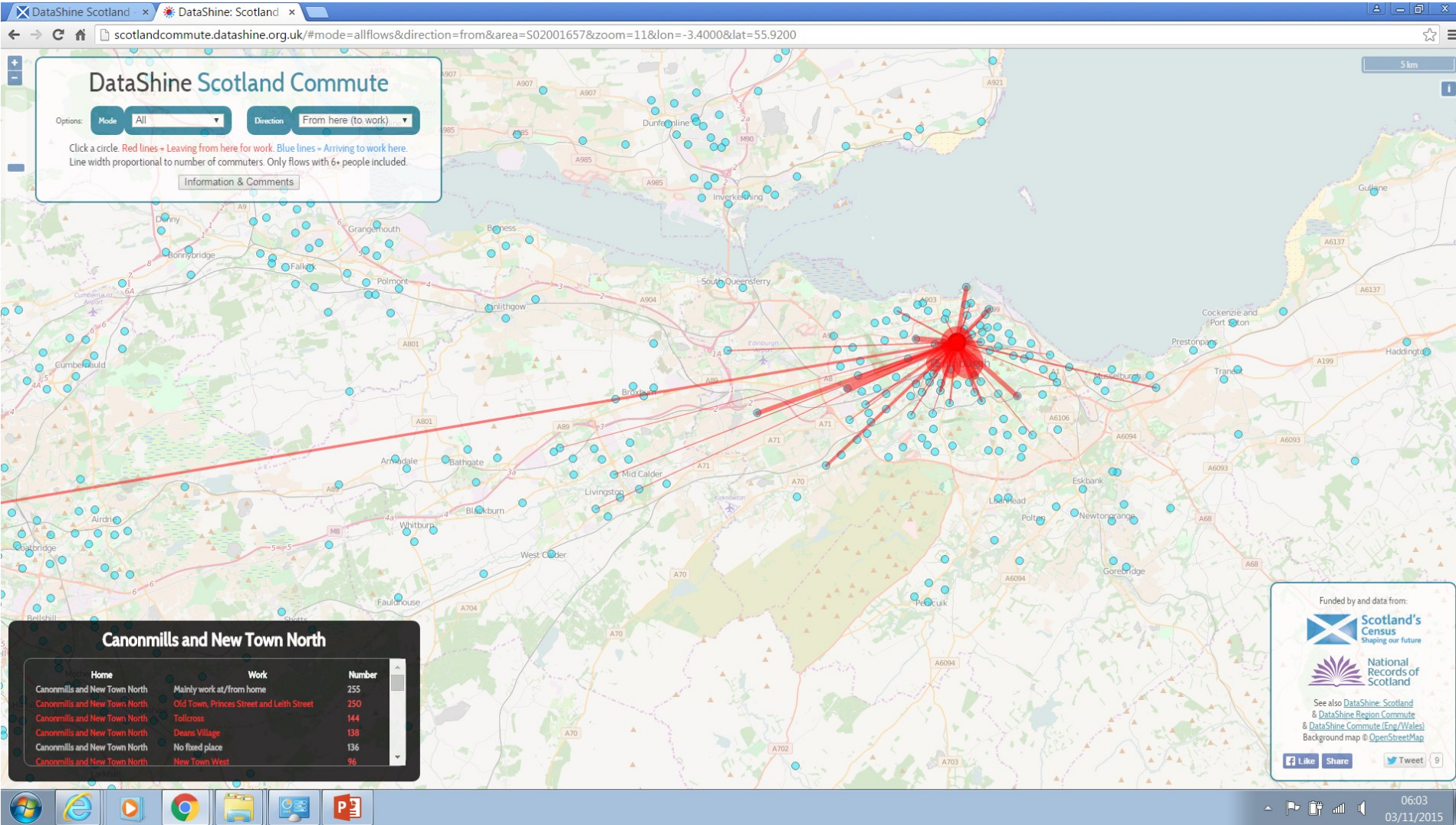


(Source: Findlay, McCollum et al, 2015)
New mobilities across the lifecycle,
Population Space and Place, 21)



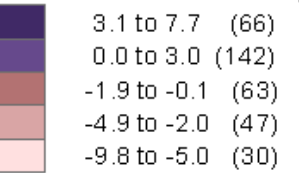
Some example data





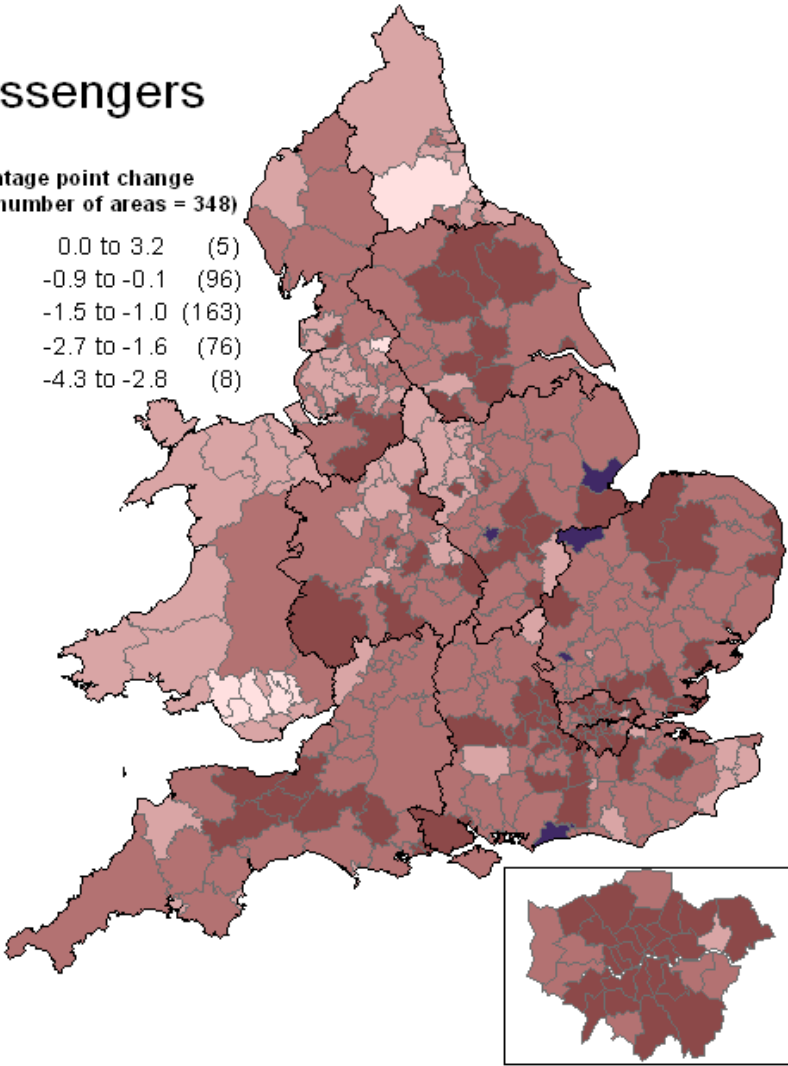
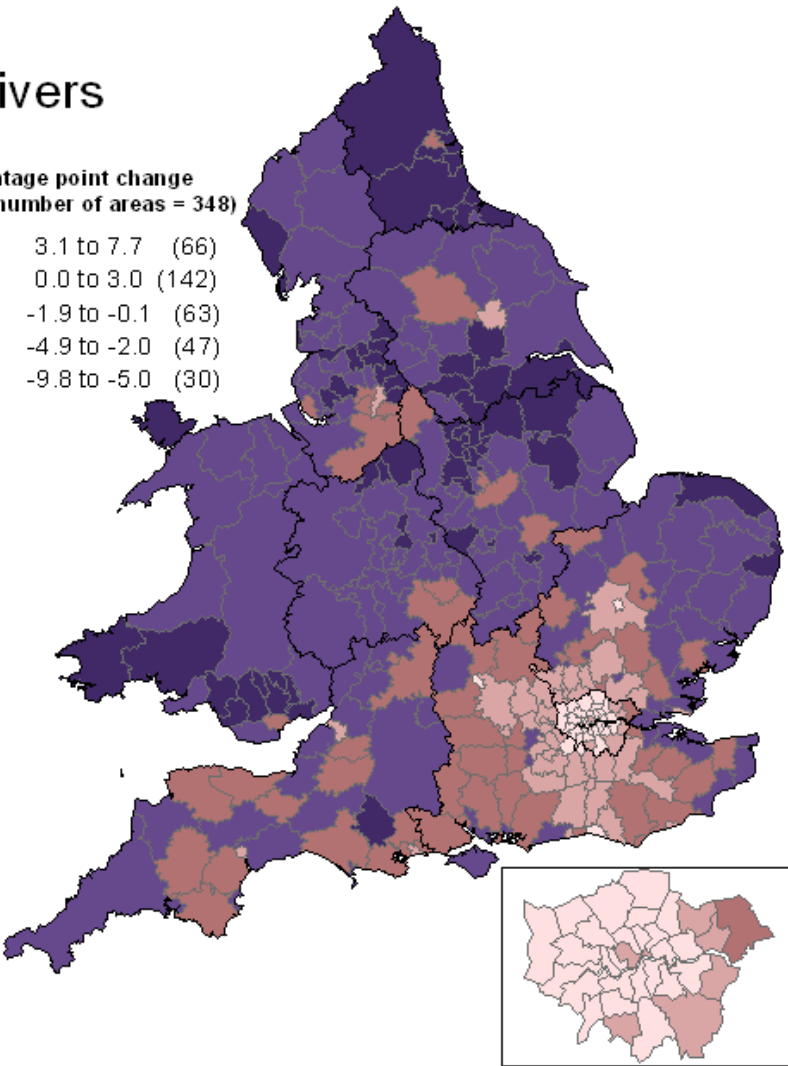
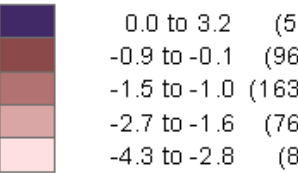
Drivers

Percentage point change
(Total number of areas = 348)



Passengers

Percentage point change
(Total number of areas = 348)



Source: Office for National Statistics
 Contains National Statistics data - Crown copyright and database right 2013
 Contains Ordnance Survey data - Crown copyright and database right 2013

Percentage point change in workers who commute to work as car or van drivers and percentage point change in workers who commute to work as car or van passengers England and Wales, local authorities, 2001-11



Grants for regeneration, insulation....



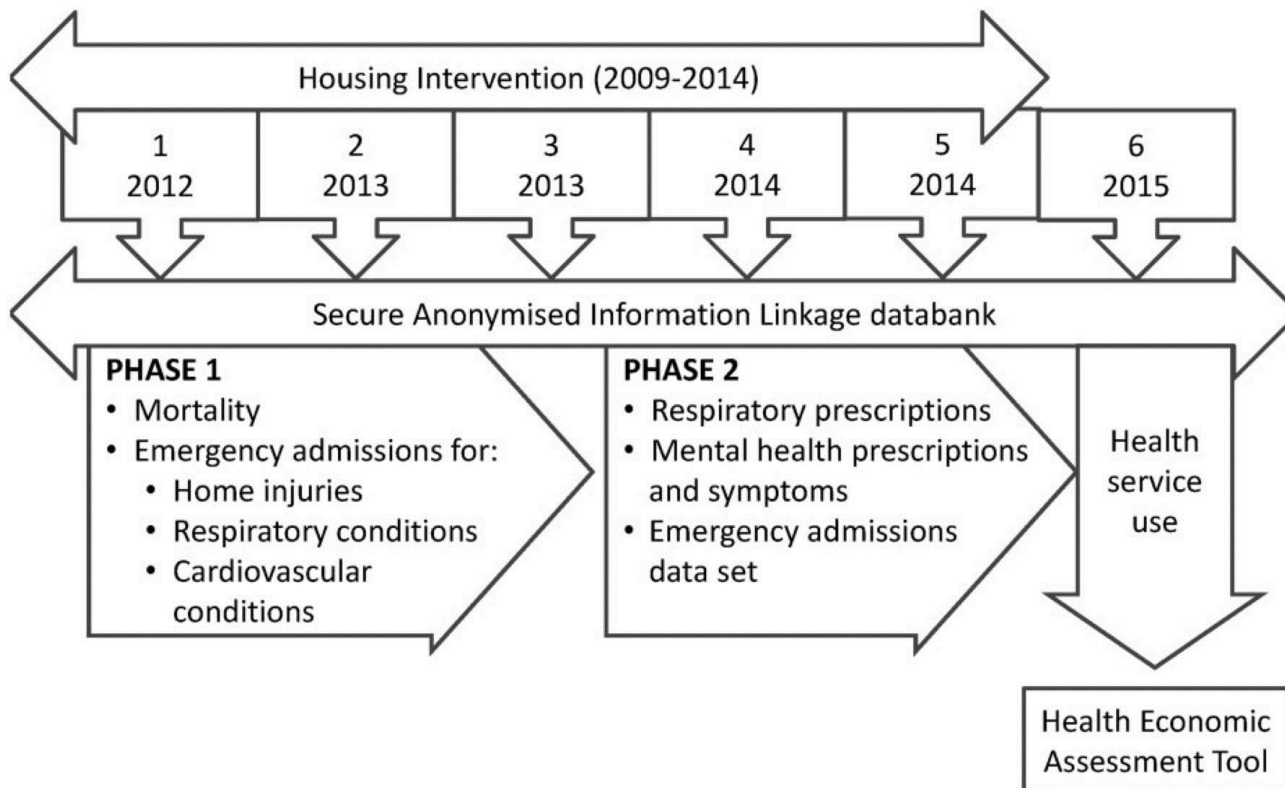
COHORT PROFILE

Cohort Profile: The Housing Regeneration and Health Study

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Kerina H Jones,¹ Stephen R Palmer,³ Ceri J Phillips,⁴ Robert Smith,⁵ Ann John,¹ Gwyneth A Davies⁶
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ADRN Structure

- ▶ 4 Administrative Data Research Centres each with a lead University
 - ▶ England – University of Southampton
 - ▶ Northern Ireland – Queens Uni Belfast
 - ▶ **Scotland – University of Edinburgh**
 - ▶ Wales – Swansea University

plus

- ▶ Administrative Data Service - University of Essex



Three Census-Linked Longitudinal Studies



CeLSIUS (supporting ONS Longitudinal Study)

SLS-DSU (supporting Scottish Longitudinal Study)

NILS-RSU (supporting Northern Ireland Longitudinal Study)



How the ADRN works

- ▶ Application
- ▶ Ethical review, privacy assessment, feasibility, public benefit & scientific merit
- ▶ Approvals Panel of independent experts
- ▶ Accreditation and training
- ▶ Negotiation for permission to access & link
- ▶ Linkage via Trusted Third Party
- ▶ Analysis in a secure environment
- ▶ Results of analyses checked before released
- ▶ Plain English summaries of research published



How to find out more about the ADRN

▶ Contact info

www.adrn.ac.uk/about/contact



www.adrn.ac.uk



twitter.com/ADRN_UK



adrc-s@ed.ac.uk



How to find out more about the UK LSs



<http://calls.ac.uk/>



https://twitter.com/CALLS_Hub



<http://calls.ac.uk/more/contact-us/>



ADRC-Scotland at 9 Edinburgh Bioquarter



Introducing the Administrative Data Research Network

