# Care Home Addresses Why are they so hard to identify... ...and what can we do to fix it?

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## Definitions

'Identifying' care home residency – being able to differentiate care home residents from those living in other residences

Relevant in practice, evaluation, research and policy......particularly COVID

**Routinely-collected linked data** – collected as part of everyday health and care services which can be joined and analysed on an anonymised basis in secure environments

Some of my work has used **identifiable data** (e.g. name, address, CHI) ONLY with appropriate data safeguards and privacy protection in place

### Context

- SIZE 3 x more beds in Scotland's care homes than in our hospitals
- POPULATION vulnerable, frail and often complex needs cannot be met elsewhere
- DIFFICULT TO REACH challenging to recruit and must balance intrusion with respect for home environment

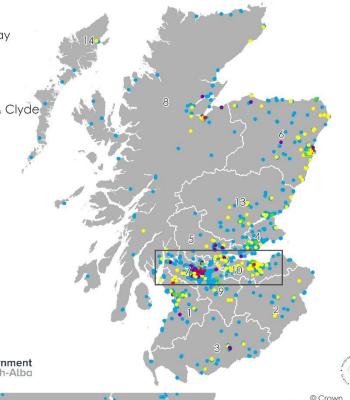
**ROUTINE DATA** offers a potential method for inclusive research and evaluation at scale

### Location of Adult Care Homes in Scotland 2012-2016

- Older People
- Learning Disabilities
- Mental Health Problems
- Physical and Sensory Impairment
- Other

#### **Health Board Boundaries**

- 1. Ayrshire & Arran
- 2. Borders
- 3. Dumfries & Galloway
- 4. Fife
- 5. Forth Valley
- 6. Grampian
- 7. Greater Glasgow & Clyde
- 8. Highland
- 9. Lanarkshire
- 10. Lothian
- 11. Orkney
- 12. Shetland
- 13. Tayside
- 14. Western Isles





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100024655).

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#### **EDITORIAL**

# Identifying who lives in a care home—a challenge to be conquered

No UK jurisdiction can currently identify their whole adult care home population in routine data sources

## Care home data sources in Scotland

ALL Care Homes are registered with Care Inspectorate

- Master CHI address fields
- 'Flags' in national data (e.g. CHI Institution Flag, Prescribing Flag)
- SMR Hospital admission/discharges coded fields & admission postcode
- NRS Death Records institution codes
- Scottish Care Home Census long-stay residents only

# Postcode matching

NHS Fife ≥65yr-olds			
N=5,000 CHI records			
556 (11.1%) Care Home Addresse	S		

Postcode match	580
Sensitivity	89.2%
Specificity	98.1%
Positive predictive value	85.5%
Negative predictive value	98.6%

### NHS Tayside ≥65yr-olds N=5,000 CHI records 431 (8.6%) Care Home Addresses

Postcode match	454
Sensitivity	89.6%
Specificity	98.5%
Positive predictive value	85.0%
Negative predictive value	99.0%

# CHI Institution Flag

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•	_
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Sensitivity Specificity	<b>58.6%</b> 99.9%

### NHS Tayside ≥65yr-olds N=5,000 CHI records 431 (8.6%) Care Home Addresses

Postcode match Sensitivity Specificity Positive predictive value Negative predictive value	454 <b>89.6%</b> 98.5% <b>85.0%</b> 99.0%
CHI Institution Flag Sensitivity Specificity Positive predictive value Negative predictive value	394 <b>89.3%</b> 99.8% <b>97.7%</b> 99.0%

Acceptable method depends on question of interest

### Summary CHI Institution flag

Usually correct where present

Not based on Care Inspectorate listings

Relies on GP registration

Caution in specialist facilities (substance misuse etc.)



# "finding care home addresses is easy"



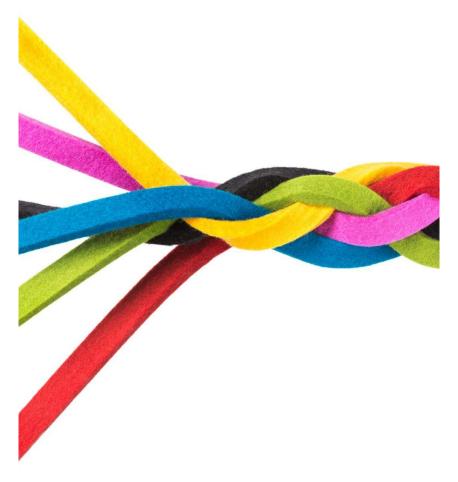
# Address matching is **not** the answer

- Lack of structured address lookups across NHS
- Heterogeneous format of presentation
  - E.g. room number, house, care home name, street name

 Care home service changes (e.g. new ownership): never reflected in CHI address multiple 'valid' addresses for same home (& residents)

# UPRN on CHI for Care Homes

# Promising innovation with potential to conduct analysis at level of care home But, before widespread adoption and use, some methodological issues Timing: residency 'dynamic' >17,000/43,000 in the 'unmatched' Manual work to 'correct' Mechanism for updating as people move



# Why does this matter?

We do not understand needs of those living and working in care homes

So many questions data could help us address:

- Model of care to support
- Interactions with primary, community and secondary care
- Changing role of care homes intermediate care, respite etc.
- Pathways into care
- Outcomes and experiences

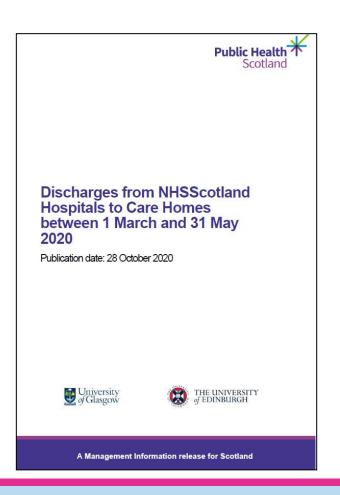
# Need to tackle our 'data quality issues'

#### Care home questions too long in the too difficult box

- Parliamentary questions unable to be answered
- Health and social care outcome under development

# Then came COVID and so many live questions of interest in relation to care homes

- **3 in 10** hospital discharges not identified routinely
  - Multiple linkages
  - Address matching
  - Manual allocations



# We can and must do better moving forwards

# Key elements for change



Collaboration and partnership working



Ensuring context of data collection and meaning retained



Shared identifiers to facilitate linkage



Time for methodological work



Dynamic data collection systems to reflect practice



Investment: technologies & analytical capacity

Ensure people collecting data derive benefit to improve quality, care and utility to society

### **MY VISION**

Evidence-based services, care pathways and policies to support older people informed by real data from the people of Scotland

### **#DATACHANGESLIVES**

