



Swansea University  
Prifysgol Abertawe



## Cronfa - Swansea University Open Access Repository

---

This is an author produced version of a paper published in:  
*International Journal of Population Data Science*

Cronfa URL for this paper:  
<http://cronfa.swan.ac.uk/Record/cronfa49073>

---

### **Paper:**

Hollinghurst, J., Akbari, A., Fry, R. & Rodgers, S. (2018). Detecting Care Homes: Using Residential Anonymous Linking Fields to Identify Care Homes in Administrative Data. *International Journal of Population Data Science*, 3(2)  
<http://dx.doi.org/10.23889/ijpds.v3i2.483>

---

This item is brought to you by Swansea University. Any person downloading material is agreeing to abide by the terms of the repository licence. Copies of full text items may be used or reproduced in any format or medium, without prior permission for personal research or study, educational or non-commercial purposes only. The copyright for any work remains with the original author unless otherwise specified. The full-text must not be sold in any format or medium without the formal permission of the copyright holder.

Permission for multiple reproductions should be obtained from the original author.

Authors are personally responsible for adhering to copyright and publisher restrictions when uploading content to the repository.

<http://www.swansea.ac.uk/library/researchsupport/ris-support/>

## Detecting Care Homes: Using Residential Anonymous Linking Fields to Identify Care Homes in Administrative Data

Hollinghurst, J<sup>1\*</sup>, Akbari, A<sup>2</sup>, Fry, R<sup>2</sup>, and Rodgers, S<sup>2</sup>

<sup>1</sup>Swansea University

<sup>2</sup>Swansea University Medical School

### Background

Demographic profiling is an important aspect of anonymised healthcare research used to identify populations of interest. Typically, administrative data is used in conjunction with patient registers to create cohorts, but it can be a time consuming process.

### Objectives

We aim to create and apply a method of identifying care homes using existing administrative data. We also aim to test the accuracy of our method by comparing the results to a pseudonymised national care home registry. This will allow us to prove whether proxy methods may be of sufficient accuracy for data linkage research in the future.

### Methods (including data)

Our method uses quantifiable characteristics from longitudinal data to identify potential care homes. This includes the number and age of occupants, current residence and rate of change of occupancy.

### Conclusions

This method is a reproducible process that would be of particular benefit for projects where a registry is not available, or where time or cost would limit the availability. This method can also be generalised to any communal establishment, where often the identification of vulnerable populations (antibiotic resistance, infectious disease etc.) is particularly beneficial.

\*Corresponding Author:

Email Address: [j.p.hollinghurst@swansea.ac.uk](mailto:j.p.hollinghurst@swansea.ac.uk) (J Hollinghurst)

