

Care home residency and its association with key outcomes in the ambulance setting

David Sinclair

Population Health Sciences Institute

Newcastle University

David.R.Sinclair@Newcastle.ac.uk

Co-authors

Karl Charlton – North East Ambulance Service

Daniel Stow – Queen Mary University of London

Emma Burrow – North East Ambulance Service

Barbara Hanratty – Newcastle University



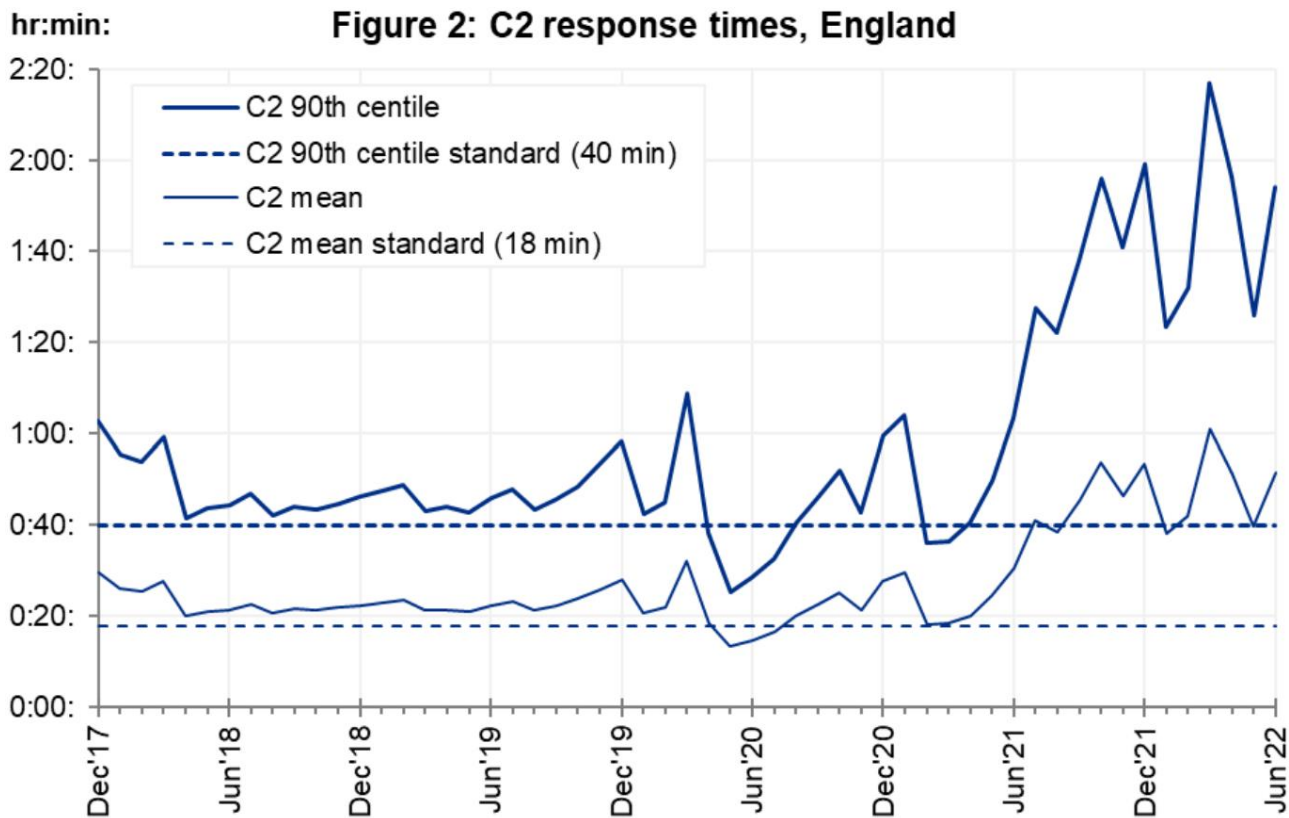
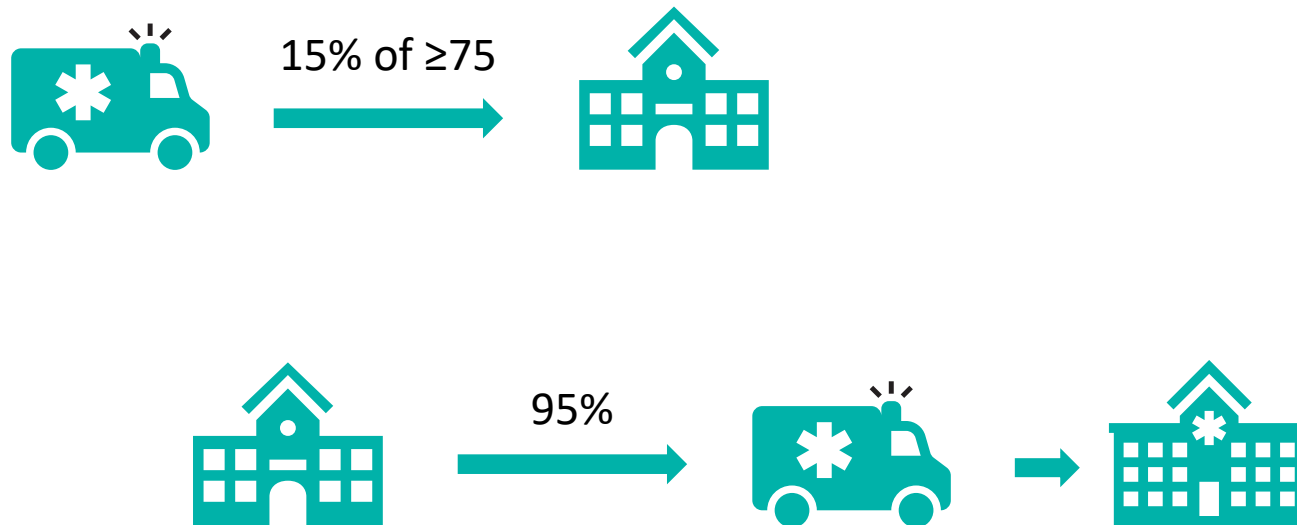


Image: AQI Statistical Note, 14 July 2022, NHS

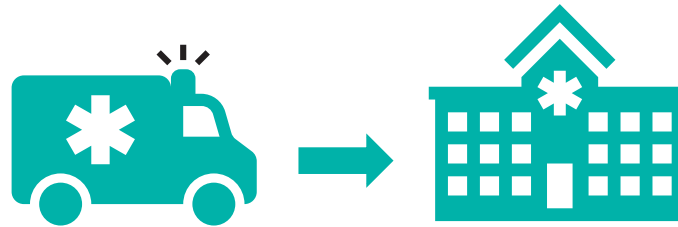
Background



Buswell M, et al, Using ambulance service PCR's to understand 999 call-outs to older people with dementia. *Journal of Paramedic Practice*. 2016;8(5):246-51
Girio-Fragkoulakis C, et al. Assessing the impact older people from care homes place on the emergency services. *European Journal of Emergency Medicine*. 2011;18(2)

Study aim

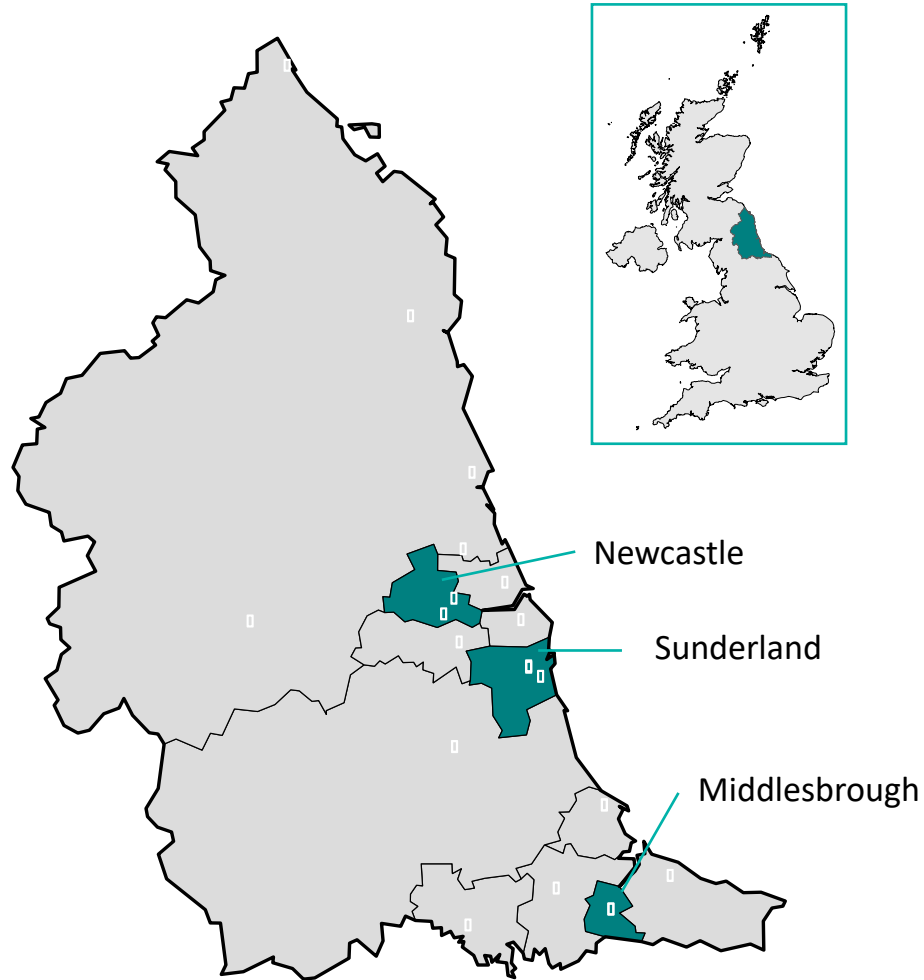
Conveyance rate



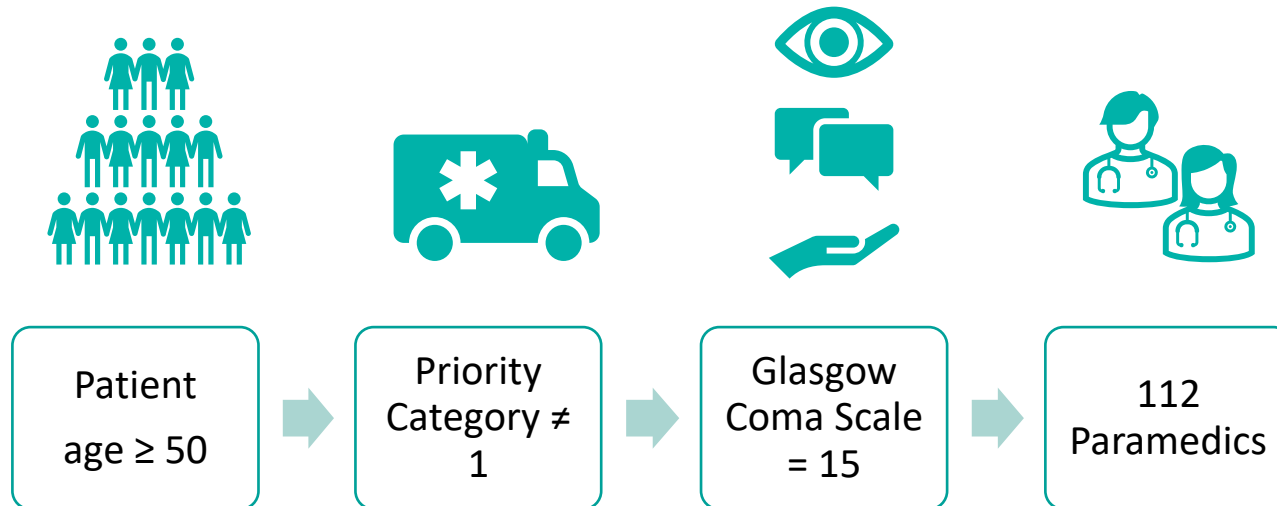
Time at scene



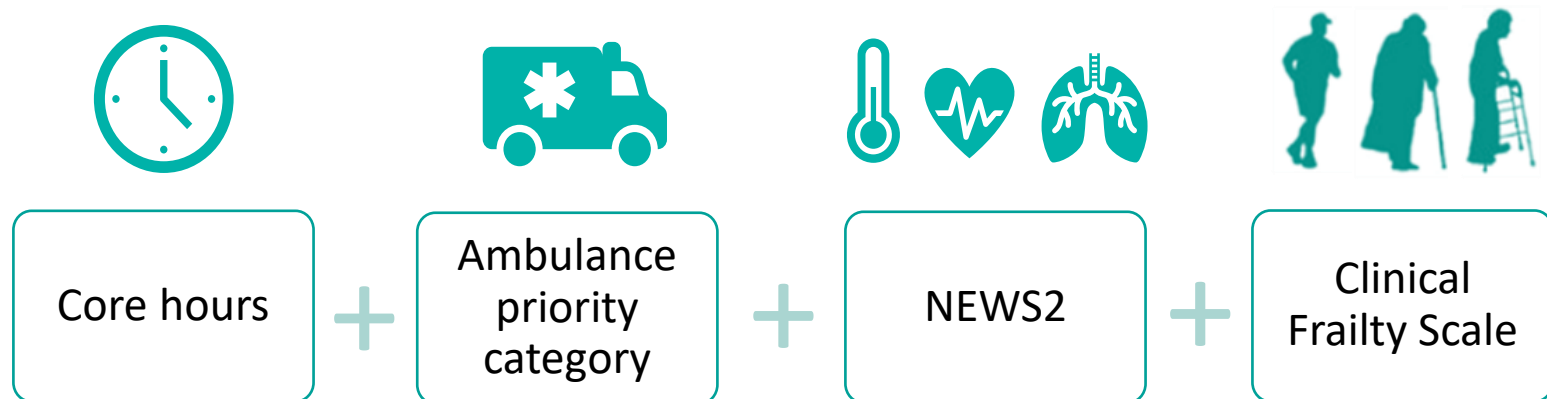
Study area



Study design

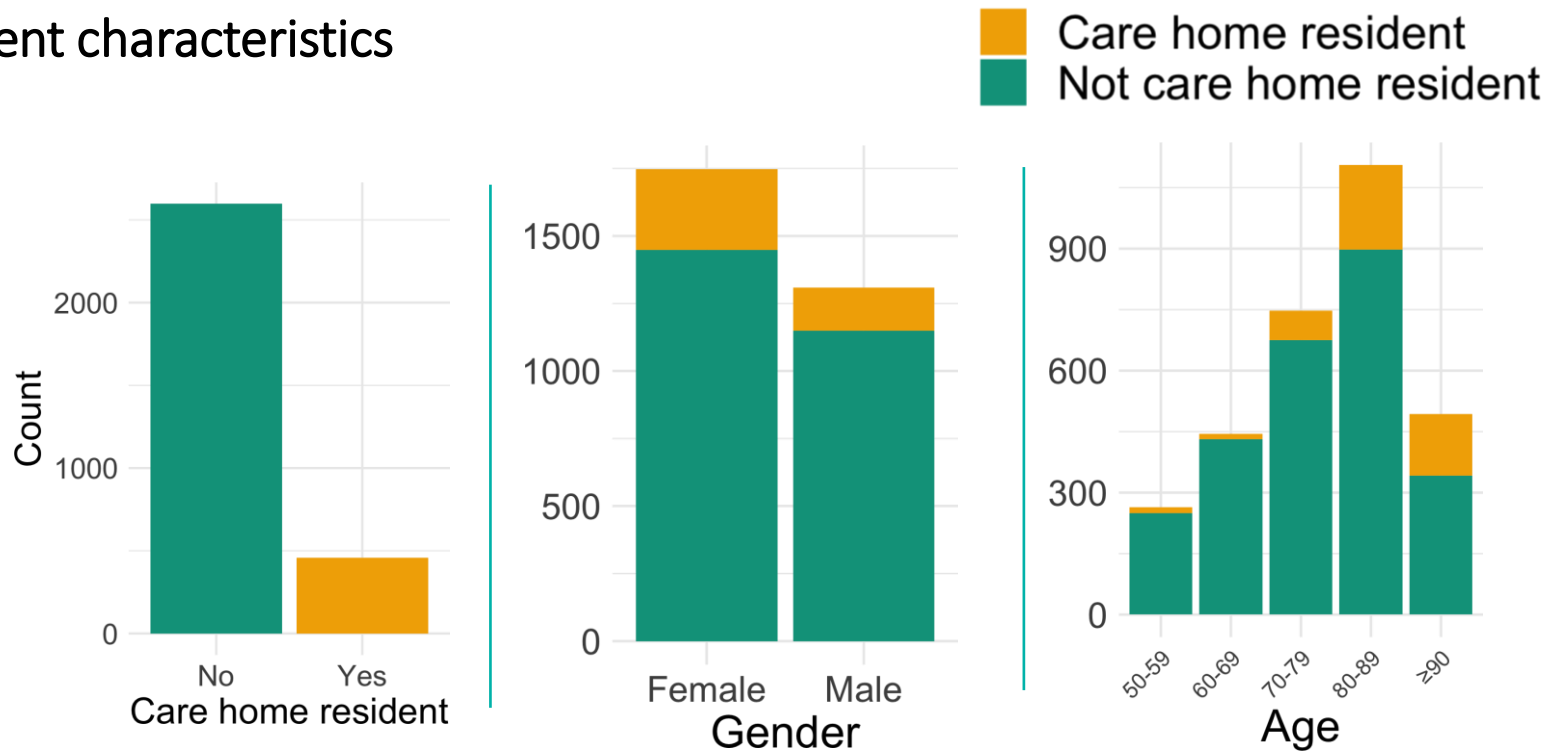


Study design: patient status



Frailty images: Rockwood, Dalhousie University

Patient characteristics



Statistical methods

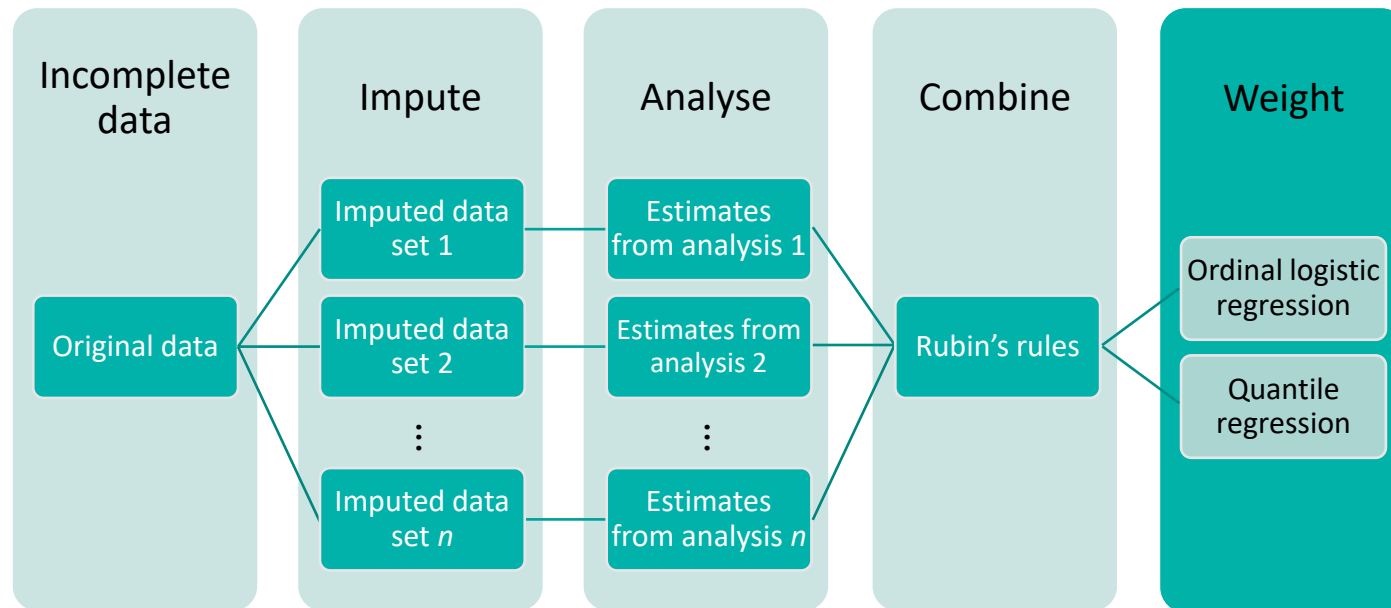
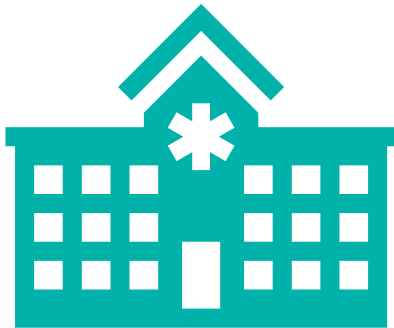


Diagram adapted from Wulff & Ejkskov, Multiple Imputation by Chained Equations in Praxis: Guidelines and Review, April 2017 Electronic Journal on Business Research Methods, 15(1):2017-2058

Results



Care home residency:
Decreases conveyance rate

Odds ratio: 0.75 [0.59-0.96]

Results

Care home residency:
Decreases time at scene



Conveyed: 7.0 [1.9-12.0] mins

Not conveyed: 2.8 [0.3-5.4] mins

Conclusions

- Care home residents less likely to be conveyed to hospital and require less treatment time on scene
- Care homes provide a safety net for their residents and assurance for paramedics regarding onward care
- Challenge is to reduce call outs that do not result in hospital conveyance
- Community services have a key role in reducing overall demand on ambulance services and hospitals