International Journal of Population Data Science (2018) 3:2:042

# International Journal of Population Data Science

Journal Website: www.ijpds.org





## Social care and health outcomes in ageing: exploring measures of multimorbidity

Henery, P<sup>1\*</sup>

<sup>1</sup>University of Stirling

## Background

The older population within developed countries is increasing, leading to increased pressure on health services. Most of this demographic have multiple conditions (multimorbidity), which is difficult to measure in a methodological context. In Scotland, efforts are being made to integrate health and social care under one body in order to provide a person-centred environment where older people with complex needs receive tailored care. In this context it is important to consider the effect of social care in conjunction with multimorbidity on health outcomes to target care provision.

### Objectives

This study intends to determine which is the best tool for predicting both mortality and care uptake amongst older people. The effect of care on mortality in conjunction with multimorbidity is also considered. This study also attempts to derive the best predictive model for both mortality and care uptake, using additional explanatory variables such as deprivation.

#### Methods

This quantitative longitudinal study uses a linked SMR admissions and social care census dataset from 2010-2015. It considers the impact of multiple measures of multimorbidity (such as ICD-10 flagged condition indices or prescription scores) on outcomes such as mortality, receipt of informal care or admissions using nested logistic regression models with summary statistics such as the AIC, BIC, R-squared and ROC curve.

### **Projected results**

Based on literature, it is hypothesised that diagnosis-based indices (such as the Charlson Index) will perform best at predicting mortality, whilst prescription-based scores (such as the Chronic Disease Score) will perform best at predicting admissions.



\*Corresponding Author: Email Address: p.m.henery@stir.ac.uk (P Henery)