

A case study

Modelling relationships between care quality and workforce characteristics Led by the University of Leeds

The University of Leeds are leading an innovative three year research project and we're very pleased to be part of the team.

Background

- In 2016, we formed part of a successful bid led by Professor Karen Spilsbury at the University of Leeds responding to a call for research by the National Institute for Health Research Health Services and Delivery Research programme (NIHR HSDR). The team is made up of leading social care, health and economics academics from the University of Leeds, University of Surrey, City University London, University of East Anglia and Newcastle University, as well as senior managers from BUPA UK.
- The ground breaking project is a three year study looking at the **Relationship between care home staffing and quality of care**.
- The focus for Skills for Care is linking NMDS-SC and the Care Quality Commission (CQC) data to make one connected dataset – then to analyse the relationships between CQC ratings and workforce characteristics that the NMDS-SC holds.
- The Skills for Care team is working with academic staff from the University of Leeds to statistically model and test for relationships between care home workforce data and quality of care (CQC) data.

What we're working on

We've worked closely with the wider project team to adapt and improve our outputs to suit the varied needs of the team and to meet the robust requirements of the NIHR.

- Skills for Care has matched (then anonymised) NMDS-SC workforce data and Care Quality Commission (CQC) inspections data to create one dataset. This means that all care homes in the NMDS-SC have been matched to their ratings and other data held by the CQC.
- We presented the initial findings to the University of Leeds to help guide the next steps in the study. This included looking at associations between CQC ratings and turnover, qualification levels, pay rates, workforce demographics, and other workforce variables.
- The workforce intelligence team are now working with the University of Leeds to model the data and look for statistical relationships between key staffing variables and inspection scores against each of the five key lines of enquiry.



Outcomes

- This is a three year project, so it is a little early to talk about outcomes. However, early analysis has found numerous relationships between NMDS-SC workforce data and CQC inspections data that will feed into the rest of the project.
- The NMDS-SC data has been rigorously scrutinised by academics from several universities and is being shown to be a very useful and insightful dataset of great worth within this high profile project.

Testimonial

“Skills for Care is an important partner in this work and we are excited that this partnership offers an opportunity to exploit the analytic potential of the NMDS-SC to answer an important societal question about how best to deploy the care home workforce to meet the increasing health and care needs of residents in care homes.

We are 6 months into this 3 year study and the data analysis team have made significant progress with data linkage between NMDS-SC and CQC inspection scores. They have also undertaken some preliminary descriptive analyses of these data. We look forward to continuing to work with the team to model the relationship between care quality (as measured in CQC inspection reports) and the workforce characteristics of care and nursing homes (drawing on data on home and workforce characteristics from the NMDS-SC).

Care quality outcomes will be modelled as functions of the staffing resources of the homes while accounting for resident characteristics and the organisational characteristics of the home operator. We will also consider the costs associated with quality for care home providers alongside the wider impacts on the health and social care system.

This will be the first UK study to address this important focus on the care home workforce and its relationship to quality. It will make an important contribution to health and social care, and also constitutes an exciting methodological development in the field and for use of the NMDS-SC. Watch this space!”

Karen Spilsbury, Professor of Nursing, School of Healthcare, University of Leeds

