



Protecting and improving the nation's health

VIVALDI 1 NATIONAL SURVEY OF CARE HOME MANAGERS - SUMMARY OF RESULTS

Why did we do this study?

To protect staff and residents from future infections, we need better information on how many people living and working in care homes have been infected with COVID-19 already, and how infection spreads.

What was the study about?

The VIVALDI-1 survey was set up before capacity tracker was widely used. It collected information on the number of staff and residents in each care home and the number of confirmed COVID-19 infections, because this information wasn't stored in one place. We also asked questions about care home practices (like the use of agency staff) and measures that aim to stop infection spreading (like cohorting and isolating residents with infection). The survey only included care homes in England that mainly provided dementia care or care to residents aged > 65 years (around 60% of all care homes).

What did the study do and what did we learn?

The study team telephoned care home managers in May-June and asked them to answer questions about what had been happening in the care home since March 1st 2020. Managers used the best data they had available to try and answer these questions. Survey responses were linked to swab results from the national testing programme, but the research team mainly used results from the survey to work out how many people had been infected, because the national testing programme did not start till late April/early May. The research team used statistics to take account of other reasons why care homes might have more infections, like the size of the care home.

More than half of all care home managers took part (5126 care homes). Overall, we estimated that 11% of residents and 4% of staff had tested positive for COVID-19 since the start of the pandemic. This is almost certainly an underestimate due to limited testing at the start of the pandemic.

Key findings were that infections and outbreaks were **less likely** in care homes that:

- Paid statutory or more than statutory sickness pay to staff (compared to homes that did not provide sickness pay at all)
- Made sure staff only worked with either infected or uninfected residents, not both
- Did not employ bank or agency nurses or carers
- Had higher numbers of staff per resident

Infections and outbreaks were **more likely** in care homes that:

- Reported that it was difficult to persuade residents to isolate, often due to conditions such as dementia
- Were “for profit”
- Had more new admissions to the care home
- Cleaned communal areas less often than twice per day
- Reported that their staff worked in more than one place

How reliable are these findings? What else would we like to know?

These results are based on a single survey of care home managers, but this is the best information that we have in England at the moment. We don't know if the factors listed above *cause* COVID-19 to spread because of how our study is designed, but our results do identify approaches that might help to stop infection spreading. Some of our findings (such as fewer infections in care homes with higher staff to resident ratios) have also been reported in studies from other countries. Unfortunately hardly any studies have looked at the effect of measures like cohorting or the use of agency staff on the spread of COVID-19 because this information is difficult to collect.

Ideally, we need to confirm our results in new studies. This might include using genetic data from the virus to see how it spreads between people in care homes, people in hospital and those in the community. We also need studies that focus on care home

staff, to find out whether they mainly become infected at work or outside the care home.

How are these results being used?

These findings are being used to support national policy decisions to prevent the spread of infection.

Who did the study?

The study was led by a research team from UCL, the Office for National Statistics and Public Health England and was funded by the Department of Health and Social Care. If you would like more information the full results of the analysis are available as a pre-print here: <https://www.medrxiv.org/content/10.1101/2020.10.02.20205591v1>.

