

Local health protection teams are providing support to a large number of care homes with outbreaks, but we lack information on the uptake and effectiveness of disease control measures such as cohorting across all care homes. This makes it difficult to identify opportunities for intervention in care homes that are reporting cases, but it also limits the inferences that can be drawn about the effectiveness of different control measures.

To the best of our knowledge, only one care home study has taken place during the pandemic, known as “The Easter Six”, which was led by Public Health England (study number NR0204). PHE undertook intensive testing in six care homes in London, all of which were reporting outbreaks. A total of 268 residents and 250 staff were tested for SARS-CoV-2. 107/268 (49.1%) residents and 51/250 (20.4%) staff were SARS-CoV-2 positive. There is an urgent need for estimates of infection prevalence across all care homes. The results of this survey will support this goal.

## **Aims and objectives**

To estimate the prevalence of SARS-CoV-2 infection, use of disease control measures and population at risk (staff and residents) in each care home in England, by surveying care home managers

- To collect data on the number of staff and residents in each care home
- To record care home characteristics
- To estimate the prevalence of infection among staff and residents by care home
- To collect information on the use of disease control measures by care home

## **Study Design**

This study is a cross-sectional survey. All care home managers in England are eligible to participate. We aim to complete the telephone surveys within 4 weeks.

## **Methodology**

Care homes will be identified from an existing list which is held by the Care Quality Commission and has been shared with the Office for National Statistics (ONS). We aim to interview all care home managers, but will start by contacting care homes that have been prioritised for PCR testing ie. Care homes with outbreaks and larger care homes. The list of care homes that have already been tested will be supplied each week by DHSC’s Pillar 2 testing team.

The questionnaire will be piloted with a small number of care home staff by ONS (who have expertise in designing questionnaires) and refined before it is deployed. A list of questions will be sent to the participants with an introductory letter before the interview to give them time to think about the questions and collect any additional information that may be required.

A trained interviewer from a company subcontracted to ONS will telephone each care home, ask to speak to the care home manager and seek informed consent to undertake a telephone interview. The interviewer will follow a script, complete the consent form and work through each of the questions with the interviewee. Consent forms will be emailed to the interviewee. We will record the name of the care home but no identifiable information will be collected from the interviewee or about care home staff or residents. Interviews will last approximately 30 minutes. Information collected during the survey will be recorded electronically by the interviewer and stored in a secure database. The dataset will be summarised using descriptive statistics (counts and proportions). A formal sample size calculation has not been included as we aim to recruit all care homes in England. Results will be written up as a short report and submitted for publication. The dataset will be held by PHE, and shared with the NHS Foundry to allow care home level information to be linked to test results for each care home.

This proposal poses a low risk to participants as it only requires a telephone interview. We will only use trained interviewers. We aim to complete the project within 4 weeks. Drs Hopkins and Shallcross will