



Pulse oximetry in care homes during the COVID-19 pandemic

There are over 15,000 care homes in England, with a total of approximately 450,000 beds. Most residents are older adults, some with dementia, but others are people of any age with physical or learning disabilities. Using pulse oximetry alongside other diagnostic tools in care homes can help the monitoring and care of residents with COVID-19 and other conditions.



What is a pulse oximeter?

A pulse oximeter is a small device which painlessly measures a person's blood oxygen saturation level. If the oxygen level in blood falls too low, the situation can quickly become dangerous requiring urgent hospital treatment.

What did we investigate?

- 1 When and how is pulse oximetry being used in care homes?
- 2 What are the perceived benefits of using pulse oximetry in care homes?
- 3 What are the experiences of staff using pulse oximetry?
- 4 What guidance and resources are needed to support its use?

This evaluation was an extension of a study investigating use of pulse oximetry in people's homes. Both studies were undertaken during the COVID-19 pandemic.

Methods



A national online survey of managers of all care homes in England



34 interviews with care home staff, associated NHS staff and at relevant national organisations



Qualitative case studies



What did we find?



Pulse oximeters were in use in many, but not all, responding care homes before the pandemic and that use widened and expanded during the pandemic



67% of responding care homes had **already been using pulse oximeters** for over 1 year



Pulse oximeters were reported by managers as **easy for staff to use and could be readily accommodated** alongside the recording of other routine clinical measurements such as temperature and blood pressure



In some cases support from the NHS, including training, was sought but was not always available to the full extent desired



In the view of care home managers, residents generally benefited from the use of pulse oximeters and were more often reassured than made anxious



Use of pulse oximetry is thought by care home managers to have, on average, **reduced A&E attendances and hospital admissions of care home residents**



50% of responding care home managers thought the use of pulse oximeters **reduced the number of times a resident attended a hospital emergency department**



The NHS COVID oximetry at home (CO@H) programme seems to have been **well-received and beneficial at the care home sites in contact with it**. But, 60% of care home managers responding to the survey were unaware of the programme.



Primary care and other relevant health care services must be clear on the escalation protocols and what support will be provided to care home residents

What did we conclude?

- 1 Using pulse oximeters in care homes is considered by managers and staff to have been beneficial to care home residents
- 2 Pulse oximetry was reported by most care home managers as easy for staff to use
- 3 On-going training opportunities for care homes' staff in use of pulse oximeters would be beneficial