NIHR | Applied Research Collaboration West

Management of COVID in care homes in Bath and North East Somerset and West of England: a quantitative and qualitative analysis

A collaborative study between NIHR ARC West and Bath and North East Somerset Council

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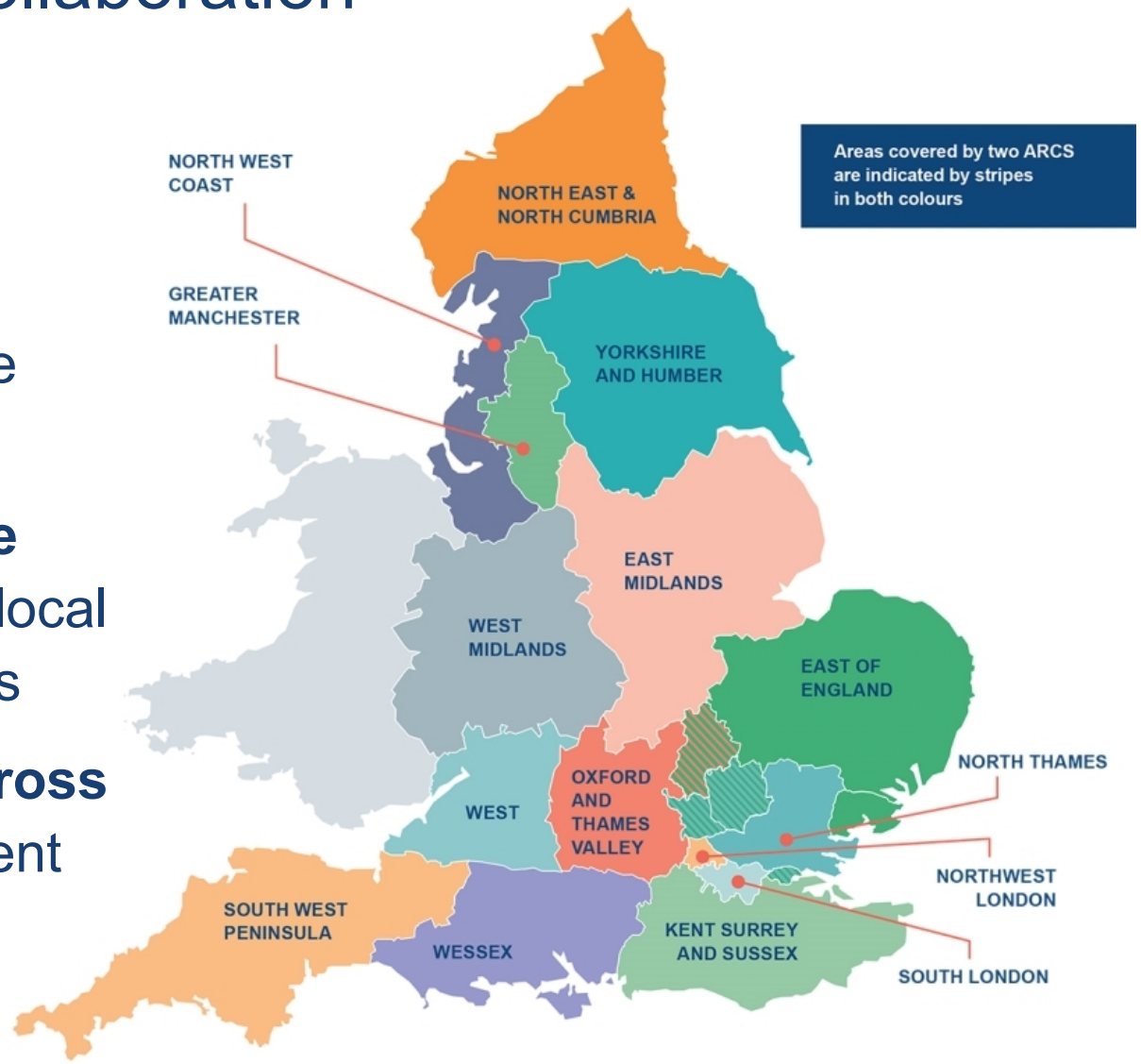
Presentation overview

- NIHR ARC West – who we are and we what we do
- Study evolution, design and planning
- Results – quantitative data
- Results – qualitative data
- Summary
- Discussion and questions

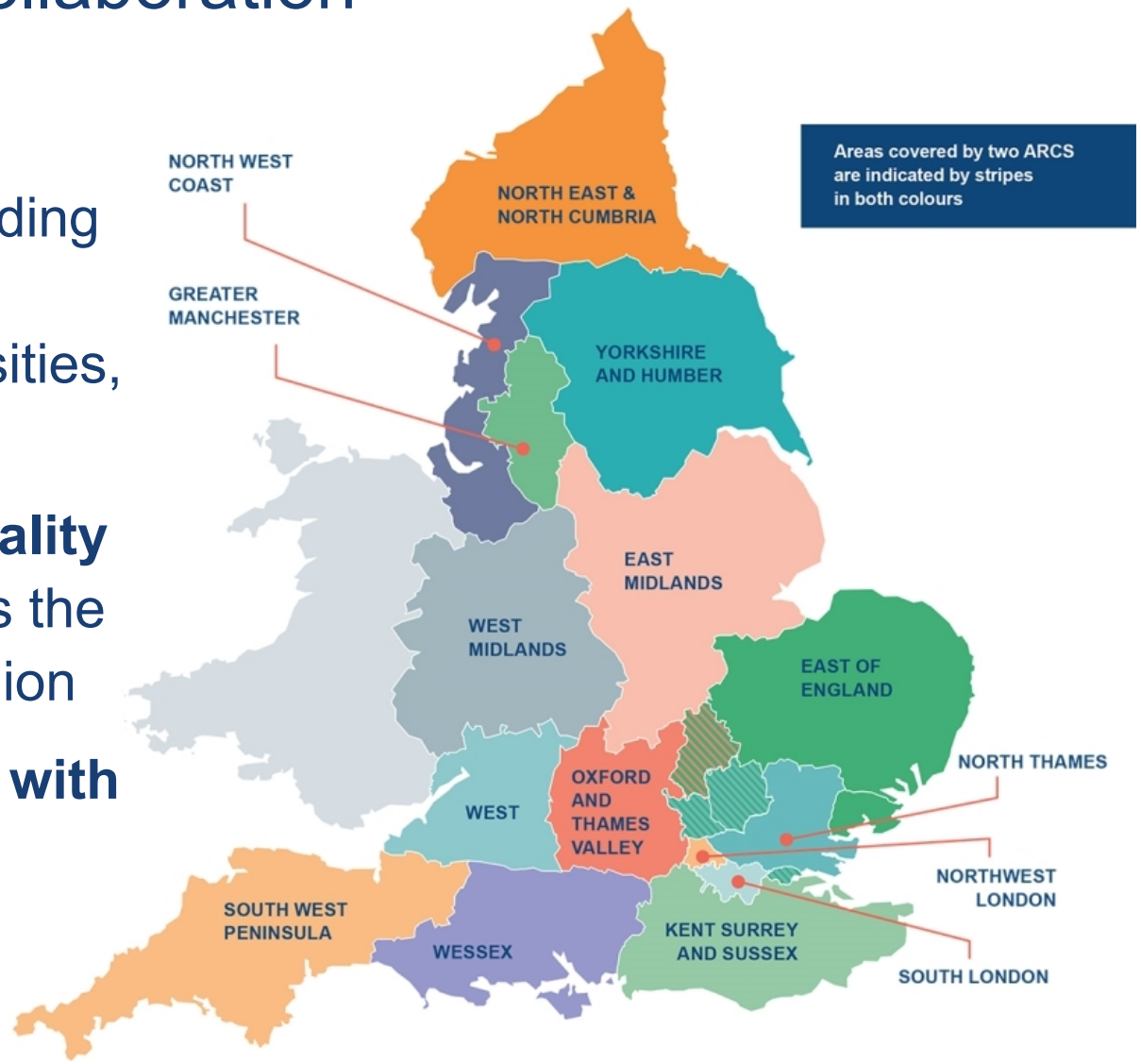
What is an Applied Research Collaboration or ARC?

- **Funded by the National Institute for Health and Care Research (NIHR)**, the nation's largest funder of health and care research
- **ARCs support applied health and care research** that responds to the needs of local populations and health and care systems
- **NIHR ARC West is one of 15 ARCs across England**, part of a £135 million investment by the NIHR over five years



What is an Applied Research Collaboration or ARC?

- **Collaborations of local partners**, including providers of NHS and care services, commissioners, local authorities, universities, companies and charities
- They work together to **conduct high quality applied health research** that addresses the specific health or care issues in their region
- The **research is done in collaboration with the partners** as well as the public and communities



What is applied research?

Applied health research aims to address the **immediate issues** facing the health and social care system.

ARC researchers **don't do fundamental research**, look through microscopes or wear white coats.

ARC researchers do **research that addresses the needs of the health and care system**, the people who use services and other communities.

The research problem

- Impact of COVID in care homes – cases 13 times higher than in the community
- Vulnerable population – higher risk of death & high number of deaths in care homes
- High death rates in care homes in B&NES – in comparison with similar areas
- Collaboration between B&NES and ARC West – why?

The research aims

1. Determine why B&NES appears to have higher death rates from COVID in care homes compared to other locations
2. Whether there are specific risk factors associated with COVID-19 infections and deaths in care-homes within B&NES
3. To examine what learning from the first and second wave of the pandemic can be used to improve policy and practice

Study design

- Quantitative
  - Risk factors for high COVID infection rates/death, e.g.
    - Care home size
    - Care home type
    - Care home ownership
    - Engagement with the B&NES Council
    - Plus eight others
  - Care-home level data supplied by B&NES (Second COVID wave)
  - Association between risk factors and infection/death rates

… But associations do not explain why or how ➔ complement with qualitative study

Study design

- Qualitative
  - Semi-structured interviews with care home staff
  - Sample of care homes of different sizes/types
  - Participants and data to be fully anonymised in reports
  - Presented as documenting experience to learn rather than an audit of practice
  - Draw on findings from the quantitative research to explore in detail

Challenges

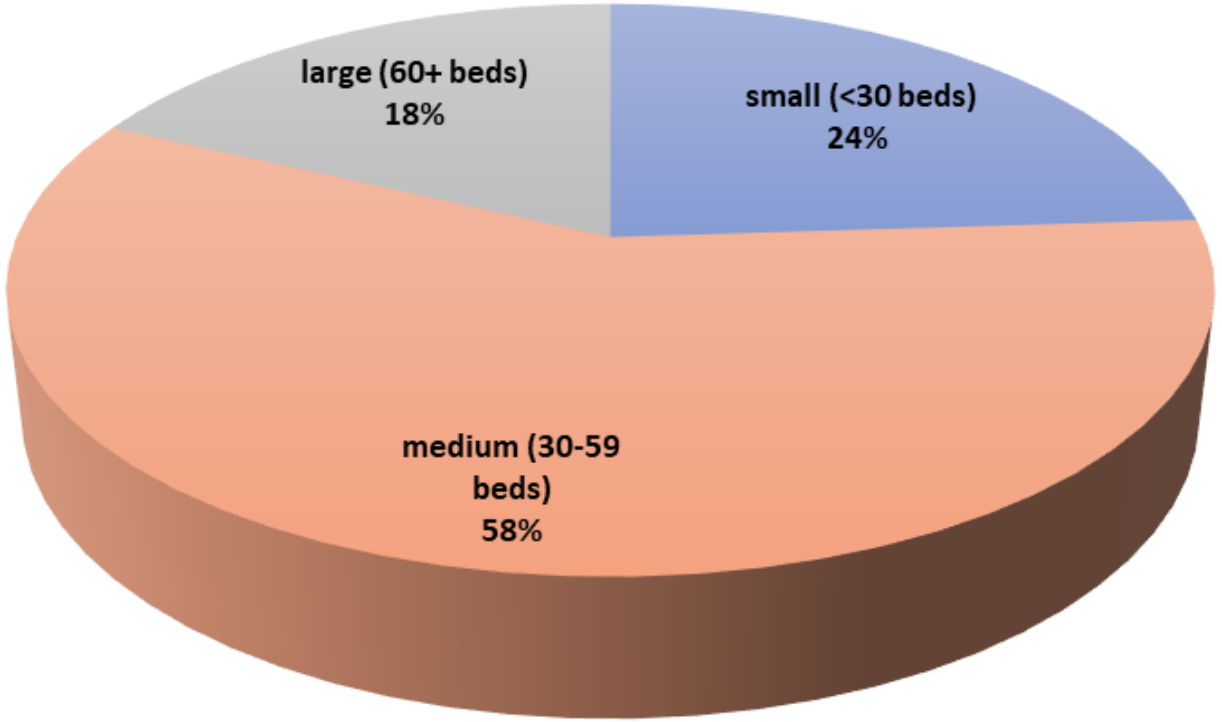
- Quantitative
  - Data quantity
    - Small number of care homes in the sample
    - Only covers a limited period (Sept 2020 – Feb 2021)
    - No data from comparator areas
  - Data quality
    - Only data at care home level is available
    - Not data on variables such as actual number of residents in the care homes, use of agency staff, vaccination status, staff infection rates or staff working across different sites.

Challenges

- Qualitative
  - Care home recruitment
    - Staff shortages – research not prioritised
    - Staff changes - managers and staff in post during pandemic moved on
  - Study design change
    - Recruit outside B&NES WHY?
    - Interviews in B&NES ➔ interesting and valuable data but B&NES recruitment stalled ➔ data spoke to issues within and beyond B&NES
    - Decision to build on these data and recruit across ARC West patch
    - Inform and reflect on management of COVID in care homes in general

Results – Quantitative

- 33 care homes included in analysis (Sept 2020 – Feb 2021)



Results – Quantitative

- Total 290 COVID-19 cases
  - Average weekly cases = 0.35 (range 0-16)
  - Average age was 85 years
  - 71% female

- Total 101 COVID-related deaths
  - Average weekly deaths = 0.12 (range 0-6)
  - Average age was 89 years
  - 64% female

Results - Quantitative

COVID-19 cases

- Medium and large care homes were at greater risk
- Managers in post for less than a year were associated with fewer cases
- The following variables were not associated with number of cases:
  - type of care home
  - care home speciality
  - care home ownership
  - whether the care home had 'Discharge to Assess' beds
  - the care home's engagement with B&NES council
  - how regularly they completed the capacity tracker
  - staff turnover
  - GP involvement
  - whether LFTs were received and used
  - if staff stayed in shared accommodation

Results - Quantitative

COVID-19 deaths

- Having had an outbreak (2+ cases in one week) in the home associated with more deaths
- Having a manager in post for less than a year were associated with fewer deaths
- Note that fewer care homes (30) were included in this analysis due to missing data

Results – qualitative

- Recruitment and analysis
- 5 care homes
- 14 interviews (managers and support staff)
- Data analysed thematically

Results – qualitative

- Key themes – focus on
  - Infection prevention & control policies
  - Guidance and legislation
  - Relationships with outside bodies (local authorities and health services)
  - The psycho-social aspects of lockdown
  - Reorientation of practice
- Note – data presented represent participants' views and experiences rather than an audit of practice or behaviour – a reflection of how staff in care homes saw and experienced the pandemic

Results – qualitative

- A summary of the challenges,
  - *We were chasing medical professionals, paramedics. A lot of the routine appointments and tests and things fell by. Residents with dementia don't really understand why they were isolated to their rooms, why they couldn't cohort. Our staffing dependency increased because people became less able, they were less independent because they weren't doing things. Low mood took a big toll and people that are depressed generally don't do as much for themselves and then obviously with the staffing impact as well care wasn't at the same level that we would have hoped. (int 14)*

Results – qualitative

- Infection prevention and control
  - *There's a massive list of changes that we've done, from the way that team members would log-in into the home to start work, they would have to first step into a disinfected like a big barrel of disinfectant to make sure that they were not carrying any viruses or bacteria from outside into the home. So, they would step into that, and then they would disinfect themselves, washing their hands. We increase the checkpoints, like cleaning checkpoints. (Int 8)*
  - *I think with it being a small home as well and because we were on three floors and they're three completely separate floors they can be shut off, you can access each one from the outside, you don't have to go through the house, I think that made it easier as well. Of course, being an old building didn't help because trying to keep that sterile and everything it's not like a hospital, you've got nooks and crannies everywhere that you're trying to you know, make sure that they're sterile (Int 1)*

Results – qualitative

- Infection prevention and control – challenges
  - *We couldn't have a drink around the care home so we found that in the summer if we were having a really busy shift, they couldn't carry their bottle of water round with them because they couldn't take their mask off when they were near a resident … So a lot of staff complained of headaches and migraines. (Int 5)*
  - *The residents were having episodes of vomiting, they were having diarrhoea. We had to triple the collection of waste in a very short period of time. Everyone was working really hard, enter into rooms with PPE on, washing hands, everything. Yeah, the work increased so much, and it was difficult … I remember we had some team members that resigned at the time (int 8)*

Results – qualitative

- Infection prevention and control – challenges
  - *So, this idea that you could try cohorts and keep COVID positive residents separate was a complete farce, it just didn't work, and it was impossible. And almost cruel because you know, they don't understand why they have to stay in their room*

Results – qualitative

- Guidance and legislation
  - *We used to receive emails from different people, local authority was sending a link and then you'll have in the infection control sending you another link. And then you have the head office sending you another link and you had three links saying three different things. That was very challenging and stressful. (Int 7)*
  - *have one side saying 'No, no, no, they're supposed to do this' and [colleague] will say 'No, I didn't read it that way'. Then I would say 'Well which one are you looking at?' 'I'm looking at yesterdays' and I'll say 'Well this one has come in today'. 'Really?' It wasn't like it was weeks; sometimes it could be two or three in one week. (Int 11)*

Results – qualitative

- Relationship with other bodies
  - *We had regular meetings with [local authority] and other care homes and so they would be, you know, a way to you know introduce us to any new changes that the Government had put in place or Public Health England had put in place, and they would you know, help us to work out ways we can implement those policies and those changes. And also, obviously they started to supply the PPE for us so there was the NHS portal that we could get supplies and equipment. (Int 3)*
  - *[Local authority] had the infection control nurse on each call. She was keeping us up to date with the number of cases in UK and locally and the pressure on hospital and all those things. Also when I had the outbreak as I said over a year in the pandemic. She did come and she done an infection control audit in the home as well, you know, just to make sure that we do follow the good practice which did find it worth following good practice. So yes, that was the support that we had. (Int 7)*

Results – qualitative

- Relationship with other bodies
  - *When staff went off sick it wasn't for three days, it was for two weeks, three weeks, a month, six months, as some people had to shield, the staffing was crumbling, crumbling, crumbling, and we didn't have any help in this respect from [local authority], or from the government when we needed it the most, to have bodies in work. (Int 6)*

Feelings of isolation from the wider health care service

- *There was an incident where we did ring for an ambulance and we were told no, they're not coming out … because they said oh no, your resident's safe because they're in a care home. (Int 3)*

Results – qualitative

- Psycho-social challenges – residents
  - *It was difficult because obviously we had to separate the residents, they had to stay in their rooms. They were isolated in a way because we didn't have the staff who could sit with them for most of the day. We had to check on all the residents. It was tricky, it was difficult for the residents because they felt like their freedom was taken away. It was really tricky to explain to them what was happening, because of the way our residents are. (Int 4)*
  - *What we took from it was we want to be face-to-face, we want to connect … to not be able to touch someone felt strange and alien and especially with our residents that, like a cuddle or need a bit of touch support for reassurance and comfort, especially for those that can't see very well and those that can't hear and having your face covered it reflected very much how important that face-to-face communication is, and a lot of the residents were saying they didn't care if the virus made them poorly because they had no quality of life. (Int 14)*

Results – qualitative

- Reorientation of practice
  - *The one good thing that COVID did for particularly our nursing teams was that it empowered them to make serious decisions. We have nurses here that were making critical decisions because they had to because for ten months we didn't have a GP set foot in the building. They really upped their skill levels. So from something negative came a very very positive (Int 11)*
  - *We realised that we spend a lot of time dealing with professionals and families and all that time then got re-digested and put back into the residents. It was a great opportunity to change our model and what we do in comparison is we have a very big wellbeing team now so we have 12 people who deliver wellbeing throughout the week in this home. And it means that every day we don't just get people up and washed and, you know, give them meals and put them back to bed again, part of the day now which is given by the care staff is a social element … the outcomes for the residents are they're far more settled, they're relaxed, we've reduced psychotropic medications. (int 13)*

Summary and learning

- **<u>Results indicate</u> …**
- Care homes practices & behaviour **did not** contribute to the B&NES pandemic death rates
- Staffing shortages - biggest challenge
- Building layout and structure mitigated against resident isolation policies
- Looking forward ➔ More autonomy to balance infection control and psychosocial wellbeing
- Support and maintain lines of communication
  - ➢ Reduce feelings of care homes feeling abandoned
  - ➢ Reduce confusion caused by multiple sources of information

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