# "Things won't improve if they're just left to fester”. A qualitative study exploring how UK care home staff perceive and experience engagement in health research.

**Context**: Care homes are challenging environments in which to conduct research and are under-represented within research literature compared to healthcare settings. This is concerning as research can improve organisational and individual outcomes. Evidence exploring how care home staff perceive and experience research engagement is scant and the topic requires further inquiry.

**Objective(s):** To generate additional insights into how care home staff perceive and experience research engagement.

**Methods:** A phenomenological approach using structured micro-interviews with a convenience, snowball sample of 26 care home staff in one care home. An inductive approach using thematic analysis was employed to analyse interview data.

**Findings:** Most participants were unfamiliar with research, and cited time constraints, workload, and a lack of opportunity as barriers to participation. Despite their unfamiliarity, participants understood research to mean the attainment of knowledge and recognised positive and tangible outcomes as markers of successful research. Staff were generally unsure what would facilitate their engagement with research, although a few participants highlighted the role of the researcher as a determinant. Many care home staff in this study did not consider research to be part of their responsibility.

**Limitations:** The study was limited by being based on one case study organisation, possible selection bias amongst participants, and the inability to transfer findings beyond Cornwall.

**Implications:** More needs to be done to engage care home staff in research to improve their overall representation within research. More research is needed across different localities to replicate and validate the findings from this study.

**Keywords:** Care homes, care home staff, research, research engagement, participation, inclusion.

***Background***

Internationally, research conducted in care homes is sparse (Katz, 2011) and underdeveloped (National Institute for Health Research, NIHR, 2017). A national survey in Scotland (Law 2016) noted that only 7% of care homes had participated in research over a ten-year period. Accordingly, care homes are underrepresented in research (NHS Research Scotland, 2021), with reports of care home staff being unfamiliar (Giné-Garriga *et al.*, 2020) and hesitant towards research (Goodman *et al.*, 2011)**.** According to research funded by NIHR, care homes are complex and challenging environments in which to conduct research (Brooks *et al.,* 2019). This is related to various barriers (Davies *et al.,* 2014), including time constraints (Lam *et al.*, 2018), limited resources, low staffing levels, and management issues (NIHR, 2021). These barriers are likely to affect the recruitment and retention of care home staff in research (Ersek *et al.*, 2016). This is a clear concern because research can inform (Collingridge Moore *et al.*, 2019) and improve health and long-term/social care (Hanney *et al.*, 2013) and patient/resident outcomes (Austin, 2021).

Care homes have an important role in delivering health and social care (Robbins *et al.*, 2013) to approximately 400,000 individuals in the UK (Laing-Busson, 2018). This figure is likely to rise alongside the ageing population (Kingston *et al*., 2018), which is expected to place greater demands on care homes (Deschodt *et al.*, 2017). In 2015, the Prime Minister of the United Kingdom called for more research to be conducted in care homes (Department of Health, 2015), and this call remains relevant. According to the NIHR (2021), organisations that do not engage in research may fail to meet health and social needs. Therefore, it is important that care homes are engaged in research so that individuals now and in the future receive the best and most appropriate evidence-based care. To help achieve this, a deeper understanding is needed of how care home staff perceive research engagement, including throughout the Covid-19 pandemic (Law & Ashworth, 2022).

A search of Pubmed conducted in July 2021 focusing explicitly on the experiences and perceptions of care home staff with regard to research identified no relevant peer-reviewed publications, emphasising the paucity of evidence on this topic. To contribute to the research literature on the experiences and perceptions of research among care home staff, the present research addressed the following research question: *‘‘How do care home staff perceive and experience engagement with health research?”*

***Methods***

***Methodological Approach***

This study adopted a phenomenological methodology using a qualitative approach that aims to understand interactions occurring within the social world (Denney & Tewksbury, 2013). Qualitative approaches help to answer research questions related to perspective (Hammarberg *et al.,* 2016) and thus were considered the most appropriate way to illuminate the perceptions and experiences of care home staff. To explore these perceptions, a structured interview guide consisting of seven open-ended questions was constructed:

1. *‘Please tell me about any previous experiences of research projects in the care home setting.’*
2. *‘What do you think is the purpose of research within care homes?’*
3. *‘What do you think prevents care home staff from engaging in research?’*
4. *‘What does research mean to you?’*
5. *‘What do you think helps care home staff engage in research?’*
6. *‘Please tell me what successful research would look or feel like in the care home setting.’*
7. *‘Please describe your professional role.’*

Ethical approval for this study was obtained from the Falmouth University Ethics Committee (RIEC 21 056).

***Sampling and recruitment***

This study was part of a wider project called *‘The Connected Healthcare Project’*,which was funded by the European Space Agency and aimed to assess the acceptability of satellite-enabled technology within care homes. A single care home was selected for this study as the researchers had pre-established access and relationships with gatekeepers at the care home. This study was limited to one care home owing to the complexities of conducting research during Covid-19 (Research Authority, 2021), which restricted our ability to engage with and recruit from other care homes. For example, another care home in the region was invited to participate in the study but declined due to a lack of resources, which may have reflected the increased demands placed upon care home staff during the pandemic (Hanna *et al.,* 2022).

A convenience, snowball sample of thirty-two staff working in a residential care home in Cornwall, England was invited in person to take part in the study. Six individuals declined to participate, citing a lack of time or an unwillingness to participate, or both. Twenty-six individuals (81.25%) were recruited for the study. Access to participants had been previously established, although interviewees were unaware of the purpose of this study before the interview and were not known to the researchers. While care home residents can participate in the research (Backhouse *et al.,* 2016), their inclusion would not have helped to answer the research question. Furthermore, the inclusion of residents would have required more stringent ethical approval procedures, which would have delayed or prohibited access to the care home in line with Covid-19 guidance. Lastly, the potential risks associated with including residents within the research, such as Covid-19 transmission, outweighed the benefits of their inclusion within the study. Before enrollment, all participants received verbal and written information about the study and had the option to decline participation and withdraw their consent at any point. No participants declined.

***Data Collection***

A structured interview guide was designed based on the experience of the research team. A simple, structured approach was chosen over a semi-structured approach to maximise the clarity of the research process for participants. This was an important consideration as care home staff are often unfamiliar with research (Giné-Garriga *et al.*, 2020). Phenomenological interviews were used to explore individuals’ experiences and the meanings attributed to those experiences (Seidman, 2012) and, therefore, were an appropriate method to answer the research question. “Micro-interviews” that were short in length (Mertala, 2021) were considered an appropriate and transferable method. Originally piloted on children, this method was considered more sensitive than traditional interviews to time constraints that hamper the ability of care home staff to engage in research (Lam *et al.*, 2018).

The method and interview guide could not be piloted amongst care home staff owing to difficulties accessing them during the Covid-19 pandemic. In total, twenty-six participants were interviewed by MS, in the care setting between August and November 2021. Interviews were conducted in communal dining spaces where residents and staff were occasionally present, owing to a lack of private facilities and the need for staff to be readily available to residents. Interviews were audio-recorded with participants’ verbal and written consent. Despite participants having the opportunity to discuss answers freely, the mean interview length was four minutes. We anticipated that the interviews would be short, as care home staff are sometimes suspicious of researchers (Lam *et al.,* 2018) and that it may have been the first exposure to research among the participants. Follow-up of participants was not feasible owing to the complexities of gaining access to staff, whose working patterns varied, and who were facing additional work demands whilst working through the pandemic. Anonymity was maintained by assigning each participant and their corresponding audio recording a random number. Interviews were transcribed verbatim by MS. Audio recordings were stored digitally in a password-protected file and deleted upon transcription.

***Data analysis***

An inductive, reflexive thematic analysis approach (Braun and Clarke, 2017) based on Grounded Theory techniques (Glaser *et al.,* 1968) was used to derive common codes and themes within the data. Transcripts were read, re-read, coded, and organised into themes by MS using QSR NVivo 11 for Windows (released in March 2020). Regular meetings were held with researchers from The Connected Healthcare Project to review the developing codes and to interpret and discuss themes so that thematic areas could be developed while avoiding other elements from being overlooked. Saturation was achieved when no new codes could be derived from the data per Urquhart (2012). Saturation can be achieved after twelve interviews (Guest *et al.,* 2006), although more interviews were conducted in our study to address heterogeneity and increase the variety of responses. Validation of themes was sought from the care home manager, who had no additional comments regarding the accuracy of themes.

The following terms have been used to describe the data: ‘a few’ to describe less than 25% of participants; ‘some’ to refer to 25%-50% of participants; ‘many’ to refer to 50-75% of participants and ‘most’ to refer to over 75% of participants. Table 1 outlines the key characteristics of the sample. Most participants were female (n = 22), healthcare assistants (n=15), and between 20-29 (n=7) or 50-59 years old (n=7).

**Table 1: Participant demographics**

**Demographic category n=26 (%)**

|  |  |
| --- | --- |
| **Gender** |  |
| Female | 22 (84.6%) |
| Male | 4 (15.4%) |
| **Age group** |  |
| <20 years old  20-29 years old  30-39 years old  40-49 years old  50-59 years old  60-69 years old | 1 (3.8%)  7 (26.9%)  4 (15.4%)  5 (19.2%)  5 (19.2%)  2 (7.7%) |
| **Job role** |  |
| Healthcare Assistant  Housekeeper  Manager  Deputy manager  Chef  Caretaker  Customer relations administrator  Activity coordinator | 15 (57.7%)  4 (15.4%)  1 (3.8%)  1 (3.8%)  1 (3.8%)  1 (3.8%)  1 (3.8%)  1 (3.8%) |

***Findings and analysis***

Seven prominent themes were derived from the data: (1) Gaining a deeper understanding; (2) The attainment of knowledge; (3) Unfamiliarity with research; (4) Time constraints; (5) Confusion regarding what factors facilitate research; (6) Association between positive change and successful research; and (7) Recognition of caregiving as a professional responsibility. These themes are discussed in greater detail alongside minor themes in the following section.

What research means to care home staff

Most participants (n=20) felt that research meant the attainment of a deeper understanding, by *“looking at things from all different angles”* and *“getting as much information as you can.”* A few participants (n=3) appeared to associate research with professionals wearing *“lab coats”* researching diseases: *“People in the labs like researching, I don’t know, like big things like cancer and all that malarkey, medically and science [sic]."* (Participant 1324). Moreover, a few participants (n=4) were unsure of what research meant to them: *“I've never really thought about it, uh? I don't really know.” (*Participant 2695). The finding that most participants in this study felt that research meant *‘the obtainment of knowledge’* is consistent with previous findings (e.g., Popovic, 2003). Further, the influential role researchers have played during the Covid-19 pandemic may explain why some participants in this study associate researchers and research with the ‘white lab coat’ stereotype (Thomson *et al.,* 2019).

Differences between job roles and the likelihood of being enrolled within health and long-term care research may explain why some care home staff were unable to describe what research meant to them. Nevertheless, this paper suggests that the meaning of research varies among care home staff, with most staff recognising it it as an activity that seeks to gain information.

Care home staff and their perception of the purpose of research

Many participants (n=14) perceived the purpose of research was to attain knowledge: "*Finding out things that you wouldn't normally be able to find out, you could look into things more deeply.”* (Participant 2695). Research was seen as *“educational”* and as a vehicle that enabled the dissemination of information which enabled staff to “*stay up to date".* Furthermore, some participants (n=7) felt that the purpose of research was to identify areas for improvement: *“things won't improve if they’re just left to fester and don't get looked at”* (Participant 1598). A few participants (n=3) elaborated on this and claimed that the objective of research was to promote good quality care and quality of life amongst residents which suggests that care home staff have a broad understanding of the purpose of research.

Participants in this study echoed the idea that research can lead to improved outcomes (Royal College of Physicians, 2018), including the advancement of knowledge, identification of areas for improvement, and the promotion of good quality care (Wensing & Grol, 2019). Moreover, participants appeared to understand research from an outcome perspective rather than a process one, which diverges from the notion that research is explorative, descriptive, and explanatory (Babbie, 2013; Morris, 2006; Royse, 2004).

Care home staff and their familiarity with research

Most participants (n=23) were unfamiliar with research, and a few (n=4) reported that this study was their first exposure to being involved in research. “*I've not ever been part of like a research sort of project within a care home [sic.] ... This will be the first one.”* (Participant 3482). One participant explained how they thought that no one had *“bothered”* to conduct research within the care home during the ongoing Covid-19 pandemic. Conversely, another participant explained how Covid-19 had brought about a *“big project”* in the care home*.* The few participants who considered themselves familiar with research (n=6) recognised it as a process of data collection and dissemination within the care home: *“There are handouts now and then for carers and residents to fill out and we have meetings here, which I guess would be classed as research”* (Participant 1598).

These findings support evidence that care home staff are generally unfamiliar with research (Brooks *et al*., 2019). This may be in part attributable to the ongoing Covid-19 pandemic, which has hampered some research (Research Authority, 2021), whilst promoting research directly concerned with the Covid-19 pandemic (Omary *et al.*, 2020). Moreover, these findings show a discrepancy in how research is understood, which may be due to expected differences in understanding between clinical and non-clinical staff within the care home. These disparities in understanding reinforce Illiffe and colleagues (2017) who claim that research is seen differently by care home staff compared to some other health and care colleagues. For instance, unlike the Department of Health (2019) which described research as an information-*generating* activity, participants in this study understood research as an information-*seeking* activity.

Barriers that prevent care home staff from engaging in research

A lack of time was perceived by some participants (n=8) as a barrier that prevented care home staff from engaging in research: *“Time. Cos [sic] as you see today, we’re just always on the go.”* (Participant 3406).

Workload, resident acuity, inadequate staffing levels and *“stigma”* surrounding paperwork were considered barriers that prevented staff from engaging in research. Furthermore, a few participants (n=4) highlighted *“a lack of opportunity”* as abarrier that prevents care home staff from engaging in research. Two participants elaborated on this, explaining how research tended to adopt a biomedical focus with the NHS being the place “*they find all the answers” (*Participant 2020)*.*

Consistent with previous research (Davies *et al.,* 2014 & Jenkins *et al.,* 2016), most participants in this study highlighted time constraints as a barrier that prevents care home staff from engaging in research. According to a report by Age UK (2020), care home staff are overworked and manage demanding workloads (Launder, 2020), which reflects chronic staff shortages across the care sector (Ford, 2021). It is therefore perhaps not unsurprising that research in this context is perceived as *‘someone else’s business’* (Royal College of Physicians, 2018).

Participants in this study described how they lacked the opportunity and capability to engage in research. These feelings may be exacerbated by disparities in how health and social care research is funded, with social care research receiving 92.8% less funding in 2019/20 compared to primary care research (National Institute of Health Research, 2021).This research reinforces the wider opinion that social care plays *‘second-fiddle’* to acute services (Macdonald, 2021) and infers that care home staff may require increased opportunities and resources to engage with or promote research.

Determinants that promote research engagement amongst care home

Some participants (n=8) were unsure what promoted research engagement amongst care home staff, owing to their unfamiliarity with research: *“Um, I literally don't know... I've not come across it like I said”* (Participant 1324). Conversely, a few participants (n=4) highlighted how the researcher influenced research engagement amongst care home staff: *“Umm, somebody like yourself coming in, I would say, prompting us in the right direction… asking us questions”* (Participant 3714). Furthermore, a few participants (n=4) described how the determinants that promote research engagement amongst care home staff depended on the research question.

These findings suggest that care home staff are unaware of the determinants that promote research engagement, highlighting how research in care homes remains in its infancy (Williams, 2019). However, some participants in this study recognised that the researcher could promote research engagement amongst care home staff. This is consistent with Newington & Metcalfe (2014) who found that researchers’ personalities and knowledge influenced research participation, all highlighting how the views and beliefs of a researcher can influence participants' decision to engage in research (de Salis *et al.,* 2008).

Care home staff and their perception of ‘successful’ research

Some participants (n=11) felt that successful research would result in *“positive”*, *“physical”* change and/or improvement: *“It would look like an improvement in some way to the environment I guess.”* (Participant 1598). A few participants (n=5) felt that successful research would contribute toward a deeper understanding and professional development: *“Anything that benefits them really and benefits us and our knowledge and progression”* (Participant 2960). For some participants (n=4) successful research would result in their voices *“being heard”*. A few participants (n=2) felt that successful research would enable care home staff to become moreaware of *“how”* and *“where”* to research.

These findings suggest that where care home staff have a view about successful research, they perceive it to be something that results in a change and/or improvement to clinical practice or their knowledge bases. This finding supports claims that successful research is dependent on change (Curtis *et al.,* 2017) and is a transformative process (Trevors *et al.,* 2012).

Participants in this study also felt that successful research would increase awareness of research processes and would improve participation within research amongst care homes staff. This suggests an expectation that research should be inclusive (Denegri, 2015; Richards, 2017).

Care home staff and the perception of their role

Not surprisingly, participants tended to see caregiving as the key responsibility associated with their role, particularly related to assisting residents with activities of daily living: *“I do like the personal care and like getting them washed and dressed, um, assisting with feeding if they have like difficulties, and taking them to the toilet, getting them drinks.”* (Participant 2020). A few participants (n=4) understood their role as one that promoted emotional wellbeing amongst residents, including *“making them happy”*. Additionally, a few (n=2) described their role as a developing one that included managerial responsibilities and being part of a wider team. One participant saw that their role was *“to be seen as a fountain of knowledge”* whilst another understood research to be part of their responsibility. These findings suggest that care home staff perceive their main responsibility to be in the delivery of care. In comparison, few participants perceived research to be within their remit, suggesting that research activity is not considered an important element for care home staff. These findings resonate with those from sources that highlight shortages of staff across the care sector ([UK Commission for Employment and Skills](https://www.gov.uk/government/organisations/uk-commission-for-employment-and-skills), 2015), whereby 44% of social care managers and leaders consider their workforce to possess the ‘bare minimum’ skills needed to do their core jobs (The Open University, 2021), let alone engage in research.

***Discussion and Conclusions***

This study has provided a snapshot of how a sample of UK care home staff perceive and experience research. Combined with existing evidence, this study can be used to inform future efforts to recruit care home staff to be more engaged with research. This study reiterates observations by Long (2017) who noted that care home staff face barriers to engaging in research, including time constraints, workload, and a lack of opportunity. Many staff in our study did not consider research to be part of their role and were largely unfamiliar with research and had not thought about factors that influenced their potential engagement. Staff in our study appeared to have a basic and generalised understanding of research and understood it as an activity that advanced knowledge and produced positive and tangible outcomes.

A strength of the study is that it has elicited open and honest responses from the under-researched population of care home staff with regard to their views and knowledge of research in their sector. Another strength of the study is that it has validated micro-interviews as an acceptable and practicable method for collecting data amongst care home staff. Micro-interviews were an effective method of eliciting rich data from care home staff, despite their short length, and could be transferable to other samples of long-term care staff who face time pressures with regard to participating in research studies.

Our study had the following limitations. Firstly, there may have been a selection bias among the interviewees who felt comfortable disclosing work-related information to an interviewer and registered nurse. Second, this study was based on a small sample of residential care home staff, which may limit the transferability of findings to other contexts. Replication and validation of the present findings are recommended. Although piloting methods was not possible in this study because of the constraints of the pandemic, methods should be piloted prior to data collection in future studies.

To address these limitations, more research on the topic is needed using a broader and larger sample of care home staff. Future research may wish to deploy an unstructured or semi-structured interview guide to uncover deeper insights into this topic. Moreover, future research may wish to enquire about the types of resources and study designs care home staff need to promote participation in research. Further research is needed on interventions to address the issues identified here to help care homes and staff within them to be more engaged with using and producing research evidence.

Researchers should anticipate barriers, particularly time constraints when designing future research studies engaging care home staff and be generous in their timeframes during the recruitment phase (Davies *et al.*, 2014). Researchers may also consider using digital technologies to collect data to minimise the *‘stigma of documentation’* as this mode has shown to be suitable within an interview study (Charalambous & Goldberg, 2016). At a macro-level, social care researchers should take full advantage of opportunities, such as those available from an innovation and collaboration fund (HM Government, 2021), aimed at training and familiarising care home staff with research. Care homes and researchers should embrace the resources available within ENRICH, an NIHR initiative designed to promote research across care homes (NIHR, 2021). Although these recommendations are unlikely to embed a culture of research within care homes on their own, they may prove to be useful steps that avoid practice from being *“left to fester.”*

***Acknowledgements***

Thank you to the European Space Agency, funders of The Connected Healthcare Project which supported this work. Thank you also to Anna Mankee-Williams and Gwynedd Williams for their contributions in reviewing and interpreting the data.

***References***

Age UK (2020) *Time to bring our care workers in from the cold*.

Austin, A. (2021) *What does the new clinical research vision mean for NHS patients and health professionals? [online].* Available from h[ttps://www.england.nhs.uk/blog/what-does-the-new-clinical-research-vision-mean-for-nhs-patients-and-health-professionals/](https://www.england.nhs.uk/blog/what-does-the-new-clinical-research-vision-mean-for-nhs-patients-and-health-professionals/) (Accessed 18 October 2021).

Babbie, E. R. (2013) *Social research counts*. Belmont, CA: Wadsworth Cengage Learning.

Backhouse, T. et al. (2016) Older care-home residents as collaborators or advisors in research: a systematic review. *Age and Ageing*. [Online] 45 (3), 337–345.

Brooks, J. *et al*. (2019) *Doing research in care homes: the experiences of researchers and participants*. Sheffield Hallam University.

Clarke, V. & Braun, V. (2017) Thematic Analysis. *The Journal of Positive Psychology*. [Online] 12 (3), 297–298.

Collingridge Moore, D. *et al.* (2019) Research, recruitment, and observational data collection in care homes: lessons from the PACE study. *BMC research notes*. [Online] 12 (1), 508.

Curtis, K. *et al*. (2017) Translating research findings to clinical nursing practice. *Journal of Clinical Nursing*. [Online] 26 (5–6), 862–872.

Davies, S. L. *et al*. (2014) Enabling research in care homes: an evaluation of a national network of research ready care homes. *BMC medical research methodology*. [Online] 1447.

de Salis, I. et al. (2008) Using qualitative research methods to improve recruitment to randomized controlled trials: The Quartet study. *Journal of Health Services Research & Policy*. [Online] 13 (3\_suppl), 92–96.

Denegri, S. (2015) ‘*“Going the extra mile: improving the nation’s health and wellbeing through public involvement in research”*’, in 27 March 2015 p.

Denney, A. S. & Tewksbury, R. (2013) *How to Write a Literature Review*. [Online]

Department for Health (2015) Prime Minister’s challenge on dementia 2020. *GOV.UK*. [online]. Available from: [newhttps://www.gov.uk/government/publications/prime-ministers-challenge-on-dementia-202new0/prime-ministers-challenge-on-dementia-2020](https://www.gov.uk/government/publications/prime-ministers-challenge-on-dementia-2020/prime-ministers-challenge-on-dementia-2020) (Accessed 21 July 2021).

Department of Health (2019) *Eligibility Criteria for NIHR Clinical Research Network Support*.

Deschodt, M. *et al*. (2017) Challenges in Research and Practice in Residential Long-Term Care. *Journal of Nursing Scholarship*. [Online] 49.

Ersek, M. *et al.* (2012) Addressing methodological challenges in implementing the nursing home pain management algorithm randomized controlled trial. *Clinical Trials (London, England)*. [Online] 9 (5), 634–644.

Ford, M. (2021) Concerns £500m cash injection into care workforce will not go far enough. Nursing Times [online]. Available from:<https://www.nursingtimes.net/news/social-care/concerns-500m-cash-injection-into-care-workforce-will-not-go-far-enough-08-09-2021/> (Accessed 13 October 2021).

Giné-Garriga, M. *et al*. (2020) Mission (im)possible: Engaging care homes, staff and residents in research studies. *Journal of Frailty, Sarcopenia and Falls*. [Online] 5 (1), 6–9.

Glaser, B. G. *et al*. (1968) The Discovery of Grounded Theory; Strategies for Qualitative Research. *Nursing Research*. 17 (4), 364.

Guest, G. et al. (2006) How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*. [Online] 18 (1), 59–82.

Goodman, C. *et al.* (2011) Culture, consent, costs, and care homes: enabling older people with dementia to participate in research. *Aging & Mental Health*. [Online] 15 (4), 475–481.

Hammarberg, K. *et al.* (2016) Qualitative research methods: when to use them and how to judge them. *Human Reproduction*. [Online] 31 (3), 498–501.

Hanna, K. et al. (2022) Working in a care home during the COVID-19 pandemic: How has the pandemic changed working practices? A qualitative study. BMC Geriatrics. [Online] 22 (1), 129.

Hanney, S. *et al.* (2013) *Engagement in research: an innovative three-stage review of the benefits for health-care performance*. Health Services and Delivery Research.

Southampton (UK): NIHR Journals Library. [online]. Available from:<http://www.ncbi.nlm.nih.gov/books/NBK259426/> (Accessed 20 July 2021).

Health Research Authority (2021) *Making changes to a research study to manage the impact of COVID-19* [online]. Available from:<https://www.hra.nhs.uk/covid-19-research/covid-19-guidance-sponsors-sites-and-researchers/> (Accessed 1 October 2021).

HM Government (2021) *Building Back Better: Our Plan for Health and Social Care*.

Iliffe, S. *et al*. (2017) Enabling Research in Care Homes. *Age and Ageing*. [Online] 46 (6), 1017.

Jenkins, C. *et al*. (2016) Overcoming challenges of conducting research in nursing homes. *Nursing Older People*. [Online] 28 (5), 16–23.

Kadri, A. *et al*. (2018) Care workers, the unacknowledged persons in person-centred care: A secondary qualitative analysis of UK care home staff interviews. *PLOS ONE*. [Online] 13 (7), e0200031.

Katz, P. R. (2011) An international perspective on long term care: focus on nursing homes. *Journal of the American Medical Directors Association*. [Online] 12 (7), 487-492.e1.

Kingston, A. *et al.* (2018) Forecasting the care needs of the older population in England over the next 20 years: estimates from the Population Ageing and Care Simulation (PACSim) modelling study. *The Lancet Public Health*. [Online] 3 (9), e447–e455.

LaFrenais, F. (2015) *Understanding care home research* [online]. Available from:<https://enrich.nihr.ac.uk/blogpost/understanding-care-home-research/> (Accessed 8 October 2021).

Laing-Busson (2018) *Care homes for older people - Market report*.

Lam, H. R. *et al*. (2018) Challenges of conducting research in long-term care facilities: a systematic review. *BMC Geriatrics*. [Online] 18 (1), 242.

Launder, M. (2020) *Nursing in Practice survey: Care homes grappling with extra work and reduced staff* [online]. Available from:<https://www.nursinginpractice.com/community-nursing/nursing-in-practice-survey-care-staff-grappling-with-extra-work-and-reduced-staff/> (Accessed 11 October 2021).

Law, E. (2016) *Research in Care Homes Issues of Participation and Citizenship*. [online]. Available from:<http://dspace.stir.ac.uk/handle/1893/25305> (Accessed 18 October 2021).

Law, E. & Ashworth, R. (2022) Facilitators and Barriers to Research Participation in Care Homes: Thematic Analysis of Interviews with Researchers, Staff, Residents and Residents’ Families. *Journal of Long-Term Care*. [Online] (2022), 49–60.

Long, A. (2017) *The challenges of research in the care home setting* [online]. Available from:<https://www.bgs.org.uk/blog/the-challenges-of-research-in-the-care-home-setting> (Accessed 1 October 2021).

Macdonald, N. (2021) Long awaited social care reform: is it enough for meaningful change? *Integrated Care Journal*. [online]. Available from:<https://integratedcarejournal.com/newsdit-article/ec345ebdc7fb4736d82d431f0c5ef56f/long-awaited-social-care-reform-is-it-enough-for-meaningful-change> (Accessed 21 October 2021).

McKew, M. (2018) *Gender disparity: research suggests male nurses reach band 7 four years earlier than female counterparts* [online]. Available from:<https://rcni.com/nursing-standard/newsroom/news/gender-disparity-research-suggests-male-nurses-reach-band-7-four-years-earlier-female-counterparts-130631> (Accessed 23 May 2022).

Mertala, P. (2021) What, where when and how: Finnish children’s perceptions of learning in preschool. *Early Child Development and Care*. [Online] 0 (0), 1–13.

Morris, T. (2006) *Social Work Research Methods: Four Alternative Paradigms* [online]. Available from:<https://www.betterworldbooks.com/product/detail/9781412916745?shipto=GB&curcode=GBP&gclid=Cj0KCQjwwY-LBhD6ARIsACvT72OG19arBuWSogEazy85LF4nebqlQpYrd4br95a_7pP5872Dpu1KoWQaAperEALw_wcB> (Accessed 11 October 2021).

National Health Research (2021) *Annual Report 2019/2020*.

National Institute of Health Research (2017) *Advancing Care - Research with care homes*. [Online] [online]. Available from:<https://evidence.nihr.ac.uk/themedreview/advancing-care-research-with-care-homes/> (Accessed 19 July 2021).

National Institute of Health Research (2021) *Enrich: enabling research in care homes* [online]. Available from:<https://enrich.nihr.ac.uk/>.

Newington, L. & Metcalfe, A. (2014) Factors influencing recruitment to research: a qualitative study of the experiences and perceptions of research teams. *BMC Medical Research Methodology*. [Online] 1410.

NHS Research Scotland (2021) *ENRICH Scotland* [online]. Available from:<https://www.nhsresearchscotland.org.uk/research-in-scotland/facilities/enrich> (Accessed 18 October 2021).

Omary, M. B. *et al*. (2020) The COVID-19 pandemic and research shutdown: staying safe and productive. *The Journal of Clinical Investigation*. [Online] 130 (6), 2745–2748.

Popovic, V. (2003) *An Approach to Knowledge Generation by Research and its Utilisation in Practice – Situating Doctoral Research around Artifacts*. 10.

Richards, T. (2017) *Patient and public involvement in research goes global* [online]. Available from:<https://blogs.bmj.com/bmj/2017/11/30/tessa-richards-patient-and-public-involvement-in-research-goes-global/> (Accessed 20 October 2021).

Robbins, I. *et al.* (2013) Explaining the barriers to and tensions in delivering effective healthcare in UK care homes: a qualitative study. *BMJ Open*. [Online] 3 (7), e003178.

Royal College of Physicians (2018) *Recognising research: how research improves patient care* [online]. Available from:<https://www.rcplondon.ac.uk/news/recognising-research-how-research-improves-patient-care> (Accessed 18 October 2021).

Royse, D. (2004) *Research Methods in Social Work*.

Seidman, I. (2012) *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. Fourth edition. New York: Teachers College Press.

The Kings Fund (2021) *Social care workforce* [online]. Available from:<https://www.kingsfund.org.uk/projects/time-think-differently/trends-workforce-social-care> (Accessed 15 October 2021).

The Open University (2021) *The path forward for social care in England*.

Thomson, M. *et al*. (2019) Perceptions of Scientists and Stereotypes through the Eyes of Young School Children. *Education Research International*. [Online] 20191–13.

Trevors, J. T. *et al*. (2012) Transformative research: definitions, approaches, and consequences. *Theory in biosciences*. [Online] 131 (2), 117–123.

UK Commission for Employment and Skills (2015) *Sector insights: skills and performance challenges in the health and social care sector*.

QSR International Pty Ltd. (2020) NVivo (released in March 2020), <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>

Urquhart, C. (2012) Grounded Theory for Qualitative Research. [online]. Available from:<https://uk.sagepub.com/en-gb/eur/grounded-theory-for-qualitative-research/book232280> (Accessed 12 October 2021).

Weiner, D. L. *et al*. (2020) COVID-19 impact on research, lessons learned from COVID-19 research, implications for paediatric research. *Paediatric Research*. [Online] 88 (2), 148–150.

Wensing, M. & Grol, R. (2019) Knowledge translation in health: how implementation science could contribute more. *BMC Medicine*. [Online] 17 (1), 88.

Williams, S. (2019) Helping care home residents and staff to participate in clinical research. Nursing Times [online]. Available from:<https://www.nursingtimes.net/roles/clinical-research-nurses/helping-care-home-residents-and-staff-to-participate-in-clinical-research-02-01-2019/> (Accessed 7 October 2021).