**PROJECT TITLE**
**RE**cruiting and Ret**A**ining nurses, and care workers in **C**are **H**omes: what works, for which staff, under what circumstances, and at what cost? The **REACH** Realist Review

**NIHR131016**

**PROTOCOL**

**VERSION 2.0**

**May 2022**

| Amendment No. | Protocol version no. | Date issued | Author(s) of changes | Details of changes made |
|---|---|---|---|---|
| 1 | Version 2 | 25th May 2022 | Reena Devi | Step 1 care home expert stakeholder consultations |

REcruiting and RetAining nurses, and care workers in Care Homes: what works, for which staff, under what circumstances, and at what cost? The REACH Realist Review Protocol

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**Project duration:** 18 months
**Source of funding:** Research funded by the National Institute for Health Research (NIHR), Health Services and Delivery Research Programme
**PROSPERO registration number:** CRD42021261112

## Abstract
*Background:* Care homes have an important role in the provision of care for older people who are frail have dementia and are unable to live independently. This role will increase as the population ages. The care home sector relies on its nursing and care assistant workforce to deliver quality of care for residents with multiple complex needs. Attracting, recruiting and retaining care home staff is one of the biggest challenges facing the sector and an important policy and service priority. Whilst difficulties with staff recruitment and retention are well documented by policy makers and providers, not all care providers experience this to the same extent. There is an urgent need to develop an understanding of strategies to enhance recruitment and retention of staff in the sector. To unpack the 'black box' of what supports staff recruitment and retention we propose using a realist review methodology to review the evidence and understand which strategies are effective and why, as well as the associated resource implications. The review will produce important and timely evidence and guidance for the sector.

*Aim:* To develop an explanatory framework (underpinned by programme theories) of effective strategies to recruit and retain Registered Nurses (RNs) and care workers in care homes.

*Research Question:* what strategies are effective (and ineffective) for attracting, recruiting, and retaining registered nurses (RNs) and care workers in the long-term care sector? What works, for which staff, under what circumstances, and at what cost?

*Methods:* A realist review will build, test, and refine programme theories that explain what recruitment and retention strategies work, for whom, why, and in what circumstances. The programme theories will be shaped iteratively over 4 steps: (1) initial programme theories will be developed through expert stakeholder consultations, interviews with RNs and care workers, and scoping literature searches; (2) systematic literature searches and screening for credible and relevant evidence; (3) data extraction and analysis using realist logic to develop context-mechanism-outcome configurations; (4) synthesising evidence and drawing conclusions.

*Outputs:* The findings of this review will be relevant for a range of stakeholders including residents, relatives, care home staff, providers, commissioners, regulators and policy makers. Guidance will be shared with care homes using artwork sketches, and a plain English summary, and shared through various national networks; The National Care Forum (NCF), Care Provider Alliance (CPA), and Skills for Care (SfC). We will also work with the Department of Health and Social Care (DHSC) to inform workforce policy and strategy. Findings will be published in scientific and care provider journals. Throughout the project we will write and share blogs. The findings will also be presented at national and international conferences, and at a local dissemination event.

## **Background and rationale**
In England 600,000 people work in care homes (Skills for Care, 2019a, Skills for Care, 2019b) and are fundamental in supporting society's most frail and vulnerable older people. Care homes provide long term 24-hour support for people needing assistance with activities of daily living (Sanford et al., 2015). In the UK, both RNs and care workers are employed to provide direct care to residents living in care homes with nursing, and care workers are employed in care homes without nursing (with nursing care provided by primary and community services). In both types of care homes (with or without nursing) care workers are unregulated, and employed at different levels (e.g. care assistants, and senior care workers), with wide variation in preparation and training for their role across the sector. Nurses working in this sector are often isolated and may not benefit from the equivalent continuing professional development that is available in NHS settings. This is a workforce providing everyday essential care to older people who have on average six co-morbidities and take eight different types of medications, with the majority living with a degree of cognitive impairment (Gordon et al., 2013). Future demand for care home places is difficult to predict as different approaches to long term care are developed. It is projected however, that the number of older people with high and complex care needs will increases by 127% over the next 20 years (Kingston et al., 2018), a population who will need 24 hour care.

The threat to the sector's ability to meet demand and maintain quality care is workforce shortages. The sector struggles with poor staff retention (Skills for Care, 2019a, Skills for Care, 2019b), and a lack of new workers entering the sector (Health Foundation, 2017). Some of the underlying causes include government underinvestment in the sector (Beech, 2019), national shortage of nurses (Mitchell, 2019), low public and professional perceptions of working in this setting (Spilsbury et al., 2015), long and unsociable hours with low pay (Health Foundation, 2017), zero hour contracts (Skills for Care, 2019a, Skills for Care, 2019b), and the physical and

emotional demanding nature of care work (Woodhead et al., 2016). There are also uncertainties around Brexit and the impact this will have on recruiting staff from overseas (Beech, 2019). Even though there are difficulties with recruitment and retention across the sector not all care providers experience these challenges to the same extent. Studies repeatedly report, despite the many pressures, staff commitment and satisfaction in caring for older people (Gordon et al., 2018, Goodman et al., 2017, Devi et al., 2018, Ballard et al., 2017). Variation in staff stability and turnover across the sector provides an opportunity for us to learn from and understand cases where care homes have successfully (or unsuccessfully) recruited and retained staff.

There is considerable heterogeneity across care homes in terms of size, staffing levels, geographical location, staffing age groups, and working conditions. One solution to 'fix' the recruitment and retention challenge is unlikely and recommendations need to be tailored to reflect all types of care homes and staff groups. Care homes employ a wide range of age groups (ranging from school leavers, to those with extensive care experience but close to retirement). It is a predominately female workforce but with differing needs and expectations. For example, strategies that work to recruit and retain the millennial generation may differ for older generations and those returning to work after a break (Broom, 2010). Davis and Eastwood described millennials are attracted to jobs with meaning, attractive job adverts, and employers who can communicate well (Davis, 2019). There is evidence which suggests the factors that are important, for example, staff who feel supported by their supervisors, and perceive supervisors as championing their efforts are significantly less likely to leave (Matthews et al., 2018). Interventions which address factors known to influence staff retention, includes peer mentoring to create a supportive work environment (Hegeman et al., 2007), flexible working arrangements (Weale et al., 2017), or using strategies to involve staff in the day to day organisation of the care home such as involving staff planning social events and taking part in quality improvement teams (Berridge et al., 2018).

To date, reviews of the evidence in this area have examined the factors influencing the retention of migrant care workers (Adebayo et al 2020), staff experiences of mentorship programmes (Liao et al., 2019), and the factors associated with stress and burnout (Costello et al., 2019) and job satisfaction (Squires et al. 2015). There are difficulties with these reviews, as there is an implicit assumption that recommendations for those working in social care will capture the experience of working in care homes. The intrinsic heterogeneity of the sector however, means that what could be useful for a large for profit provider may not apply for a single trader or smaller organisation. This review aims to capture and address these variations and develop an explanatory framework of effective strategies to recruit and retain RNs and care workers working in care homes.

A recent seminar led by social care and economic experts outlined the urgent need to prioritise and plan how to address the wider adult social care system (Health Foundation, 2019). The projected increasing number of older people living with high needs, and the current workforce shortages gives the impetus for this review. There are studies which describe how home culture, priorities, care and approach affect how staff engage with residents' care (Estabrooks et al. 2015, Young et al. 2017, Gordon et al. 2018). It is reasonable to assume that these factors will also influence

staff experience and decisions to join and stay in the sector. Similarly, sector wide issues such as unclear opportunities for career progression, social stigma and ageism associated with long term care are also likely to influence staff decisions. This research will review the evidence using a realist approach so that we can unpack the 'black box' and understand what will work, for which staff, under which circumstances, and the resource implications, and thus provide the guidance needed to effectively plan how to sustain the care home workforce.

## Research Aim

To develop an explanatory framework (underpinned by programme theories) of strategies that successfully attract, recruit, and retain RNs and care workers working in care homes.

## Research Question

what strategies are effective (and ineffective) for attracting, recruiting, and retaining registered nurses (RNs) and care workers in the long-term care sector? What works, for which staff, under what circumstances, and at what cost?

The overarching question will be answered by addressing the following:
1. How does the care home sector conceptualise 'effective recruitment and retention of nurses and care workers' and what outcomes are important to the sector?
2. In what contexts can these outcomes be expected and what are their characteristics?
3. What are the causal mechanisms that are likely to trigger these outcomes within each context?
4. Are there differences for different staffing groups (e.g. RNs, care workers, younger workforce, older workforce, new recruits, staff with years of experience in the sector, and staff from overseas)?
5. What are the costs (e.g. time, training, finance, resource) associated with context, and mechanisms which result in effective (and ineffective) recruitment and retention?

## Objectives

1. Develop initial programme theories (IPTs) of staff recruitment and retention in care homes that account for how and why different types of staff choose or continue to work in care homes.
2. Identify outcomes which capture effective (and ineffective) RN and care workers recruitment and retention in care homes.
3. Identify the contexts where outcomes (desirable and undesirable) are expected, and in each context identify the underlying causal mechanisms that generate outcomes. Explain how mechanisms are influenced by context and generate outcomes.
4. Systematically identify evidence and extract and assess data to test and refine programme theories of recruitment and retention of RNs, and care workers in care homes, focusing on interactions between contexts, mechanisms and outcomes.
5. Identify the costs (e.g. time, training, finance, resource), and consequences (e.g. lowered recruitment costs, consistent care, staff stability) implications of

the programme theories; providing explanations of each cost, and consequence.

6. Provide an overarching explanatory framework underpinned by the refined programme theories which describes effective (and ineffective) strategies for recruiting and retaining RNs and care workers in care homes.

7. Develop guidance for care home providers, commissioners, and policy makers that explains what works and why to improve RN and care worker recruitment and retention in the sector.

8. Throughout the process prioritise the voice and experience of RNs and care worker, as experts in what supports recruitment and retention in care homes.

## Method

The research will take a realist approach to reviewing the literature. Realist methodologies set out to build, test and refine programme theories that explain how outcomes are generated, describing what works, for whom, in what circumstances, and why (Wong et al., 2012). The process is iterative; starting with developing initial theories, researchers then search for evidence that supports, or refutes these initial theories, enabling the development and refinement of the theories. The final, refined, and evidence based programme theories then provide a tailored explanation describing how to generate desired outcomes, for which people, in what situations, and why (Pawson, 2002). The theories will be underpinned by context-mechanism-outcome configurations (CMOs). The CMOs will describe how particular contexts (or conditions) (C) trigger underlying mechanisms (M), and how these together generate outcomes (Wong 2013). Mechanisms are not 'visible' and are context sensitive; whether or not mechanisms are triggered depends on the context (Pawson, 2002, Wong et al., 2012). The outcomes (O) describes the action, or change expected in those contexts, when a mechanism is triggered. A cost-benefit analysis that is sensitive to realist causation principles will be used to identify and compare the cost (e.g. time, resource) and benefits (outcomes) associated with programme theories.

Realist reviews are carried out over 4 steps:
Step 1: develop IPTs
Step 2: search for evidence
Step 3: article selection, quality assessment and data extraction and analysis
Step 4: synthesising evidence and drawing conclusions

Activities involved in each step are described below. While steps are presented and described sequentially the working practice will be iterative, and with overlap across steps.

### Step 1: Develop initial programme theories

IPTs will be developed through:

1. Consulting with care home expert stakeholders
2. Theory gleaning interviews with RNs and care workers
3. Scoping literature searches

*Consultations care home expert stakeholders*

For the purposes of this study, care home expert stakeholders are staff (RNs, care workers, managers, and human resources staff), residents, family members, and people who work in roles/organisations relevant to the social care workforce (such as,

Skills for Care (SfC), and the National Association of Care & Support Workers), and the wider social care sector (such as, National Care Forum (NCF) and Care England). Including diverse stakeholders will provide differing experiences, expertise, and knowledge of direct relevance to the review. For example, it will be important to consult with experts who can describe their experience of working in a care home which has a lower than average industry turnover, and also the opposite, working in care homes which has higher than average. During step 1 the nature of consultations will be focused on drawing out hunches, and initial theories and explanations. Consultations will take place online and depending on stakeholder availability we will consult with stakeholders in a group or one-to-one meetings. We envisage one-to-one meetings have advantages of being able to capture in-depth accounts of each stakeholder's perspective, and this is important when developing initial programme theories.

*Theory gleaning interviews with RNs and care workers*
Theory gleaning interviews will enable us to *glean tentative explanations* which articulate and develop the IPTs (Manzano et al 2016). A purposeful sampling approach will recruit RNs and care workers (15-20 participants), and recruit participants based on their 'CMO potential (Pawson and Tilley, 1997). RNs and care workers practice-based work and their experiences will add detailed explanations to the IPTs; thus ensuring theories closely reflect staff experiences around what works (or not), and why. For example, feeling fulfilled at work is regarded as important for staff retention, and will be explored in depth, asking how this affects staff retention and why this is perceived as important.

RNs and care workers from a range of role and seniority levels (including newly appointed, long serving members of staff, and those who have left care home work) and personal characteristics (such as ethnicity, gender, age groups) will be recruited. It will be important to recruit a wide range of participants as different staff (depending on their role, experience, age, gender, employer type) will be able to comment on the theories relevant to them (Manzano, 2016).

Participants will be recruited through both national (e.g. Royal College of Nursing Older Peoples Forum) and local care home networks (e.g. Yorkshire and Humber Enabling Research in Care Homes Network - https://enrich.nihr.ac.uk/office/yorkshire-and-humber and Leeds Care Association - https://www.leedscare.co.uk/), social media (Twitter, care home Facebook groups, care home WhatsApp groups) and through the authors' care home contacts. Due to the ongoing COVID19 pandemic all interviews will be conducted virtually, taking place via either video (using Microsoft Teams software) or telephone calls (depending on participant preference/access).

Interviews will begin with general 'warm up' questions designed to help identify the interviewee's role, level of experience, and perceptions and experiences of their role (Seidman, 2006), such as *'how long have you worked at this care home, how has your experience been so far, what attracted you to care home work, what has kept you in care home work'?* This will help ascertain the relevant lines of enquiry for the interviewee (Manzano, 2016). The subsequent questions will encourage participants to describe features of the particular circumstances where different outcomes can be expected and why, for example, *can you describe the situations where you feel valued (or undervalued)?* Questions will also encourage participants to explain why those

outcomes occur, for example, *what is it about that situation helps you to feel valued (or undervalued)?* In order to ensure the IPTs developed are sensitive to economic evaluation, these interviews will also explore how resources relevant to the interviewee (financial, human and time) are tied to outcomes and activities. Data analysis will employ both indictive and deductive approaches and carried out by the research fellow with intensive support from RD, SD and AB. Coded data will be organised using NVivo software with nodes created for each developing theory, and child nodes created for insight within each, and coded data imported to appropriate nodes (Gilmore et al., 2019). Data analysis will involve whole team discussions employing retroduction; the team will verify interpretations of the data, identify emerging patterns and generate and refine realist programme theories.

*Scoping literature searches*
As recommended when carrying out realist reviews the team includes an information specialist (JW) (Booth et al., 2018). Scoping searches will be carried out to allow the research team to further develop the IPTs (Booth et al., 2018, Pawson et al., 2005) and identify any additional theories. The searches will identify reviews, opinion pieces and reports likely to mention theories (or chains of reasoning) underlying recruitment and retention trends in the care home workforce. UK, and international based evidence will be retrieved, and the searches guided by insights from the stakeholder consultations, interviews, and key papers known to the research team (Costello et al., 2019, Hegeman et al., 2007, Matthews et al., 2018, Liao et al., 2019). Appendix 1 (attached with our application) provides a draft search strategy to be adapted for use in Medline, CINAHL, Business Source Premier and Social Care Online. Draft searches in preparation of this bid indicate approximately 200 database records to screen. Complementary CLUSTER search techniques such as citation searches will be used to seek further relevant reports in areas where the scoping searches have found few/none (Booth et al., 2013). A targeted search of the Google search engine, limited to screening the first 200 records will supplement the database search.

Given the national, and international focus on care homes during the pandemic our literature searches, stakeholder consultation, and interviews, will pick up new emerging evidence, and insights around what worked, for which staff, and the cost of attracting, recruiting and retaining staff during the COVID-19 pandemic. This evidence will help to form and shape the programme theories. In a similar way, we will also consider the impact of BREXIT and labour restrictions on attracting, recruiting and retaining staff. Stakeholders working in cities where there is a high percentage of ethnically diverse populations will be sought and included.

All activities carried out throughout step 1 (stakeholder consultations, theory gleaning interviews, and scoping literature searches) will also focus on
- Clarifying review scope: As Pawson et al (2005) describes, '*a realist approach starts with sharpening of the question to be posed*'. Consultations with care home expert stakeholders will include checks to see whether the research aims, questions and objectives require changes to reflect recent changes which may have impacted on the social care workforce, for example, COVID-19 and/or Brexit.
- Conceptualising the outcomes underpinning effective (and ineffective) recruitment and retention. During stakeholder consultations and theory gleaning interviews specific outcomes which conceptualise effective and

ineffective recruitment and retention will be identified, e.g. care home work is seen as a good career choice, having a positive new starter experience, high staff morale, job fulfilment, flexible working hours.
- Scope the costs and outcomes associated with initial programme theories: the costs (for example training, time, activities, finance, personal costs, organisation costs) and benefits (e.g. increased morale, fulfilled staff, team spirit) of the initial programme theories will be explored throughout theory gleaning interviews, stakeholder consultations, and scoping literature searches.
- Prioritising IPTs to take forward: stakeholder consultations, theory gleaning interviews, and scoping literature searches will result in many and varied IPTs. It will not be possible to take all theories to the next step (searching for evidence) and for this reason the study team and stakeholders will review and prioritise which theories will be taken forward.

Step 2: searching for evidence

This step will involve multiple search strategies aimed at retrieving materials to test specific theories developed in step one (Pawson et al., 2005). Iterative searches carried out throughout the review will aim to explain elements of developing theories, explain particular findings or examine specific aspects of particular processes (Wong, 2018). The searches will be complete when sufficient evidence is found and supports the coherence and plausibility of the programme theory. All search strategies and activities will be recorded to ensure search method transparency in the final report.

It is not possible at this stage to articulate the exact evidence base that will be drawn on or search terms that will be used until IPTs are formulated. Research articles and documents published in scientific journals (e.g. conference papers, or editorials, opinion pieces) are likely to be obtained from multidisciplinary, health, social care and occupational research databases (e.g. Medline, CINHAL, Embase, ASSIA, and Business Source Premier). If there is a lack of evidence from health and social care sources we will search for learning from other disciplines (e.g. management databases). Grey literature searches for organisation reports, guidelines, and dissertations will also be conducted in websites and repositories such as SfC, NICE Evidence, Social Care Online, and Web of Science. Other grey literature will be found via websites of specialist consultants working in the field of social care workforce (e.g. Neil Eastwood in the UK (http://www.savingsocialcare.com), and Leigh Davis in the USA (https://www.davisdelany.com) will provide relevant evidence).

The included evidence will not be limited by study type or publication type e.g. literature reviews, qualitative, quantitative, grey literature, policy documents, social care related reports/evaluations, blogs, social media (e.g. Twitter), editorials, letters, books (Booth et al., 2018). It is envisaged that sources such as blogs, links to video recorded events/presentations, social media, editorials, and letters will offer useful contextual information.

Step 3: Article selection, quality assessment, and data extraction and analysis

*Article selection*

The search results will be imported into EndNote and all sources of evidence screened, and full documents deemed to be eligible retrieved. Eligible evidence

sources are those that are both credible (rigour) and contribute to developing the programme theories (relevance) (Pawson et al., 2005). 50% of all included documents will be read by a second researcher (split between RD, SD, and AB) to check there is consistency and agreement with the selected included articles. If there are disagreements these will be resolved through discussion with the research team. Reasons for exclusion will be documented in an Excel spreadsheet to ensure transparency.

*Data extraction and analysis*
NVivo will be used to carry out data extraction and analysis. All sources selected during article selection will be imported into an NVivo file (version 12).

Data extraction will consist of reading (or listening to audio or video files) data sources and highlighting sections which provide evidence that support or challenges/refines programme theories (Pawson et al., 2005). All articles will be quality assessed using realist principles of relevance and rigour (Pawson et al., 2005). When reviewing evidence the researchers will focus on what works to generate positive outcomes, and what does not work (unexpected outcomes) and the cost associated with both types of outcomes. We will report all relevant data that has been used to build the arguments that underpin programme theories to promote transparency of the review processes.

Whilst undergoing the process of article selection, and data extraction/analysis we will regularly share, consult, and test the progressing data analysis and CMO formations with care home expert stakeholders. Hearing stakeholder views and discussions will generate a deeper insights and understanding of theories (Srivastava and Hopwood, 2009).

In addition, as programme theories (and underlying CMOs) develop the researchers will re-visit data sources, to consider new insights or interpretations. There may be insights not previously considered and so re-visiting will be important to allow for a thorough exploration and iteratively progressing understanding of how programme theories work (Berkowitz, 1997).

*Measuring and valuing the costs and benefits associated with IPTs*
Data pertaining to measures and values associated with resource use and outcomes attached to the programme theories will also be extracted, such as training, time, activities, finance, personal costs, organisation costs, as well as the outcome measures around staff recruitment and retention. Additional searching (targeted) to identify additional measures and values for resource use and outcomes associated with programme theories may be required if these data are not available in the articles selected for the synthesis.

*Additional searching*
During data analysis we will carry out purposive searches for mid-range theories which may provide additional insights for interpreting data. We will also carry out additional focused literature searches whenever data extraction/analysis (or stakeholder consultations) reveals insights which were not previously considered.

Step 4: Synthesising evidence and drawing conclusions

During evidence synthesis the explanations underlying the programme theories will be interrogated; through this process refined and fine-tuned theories will result (Pawson 2005). Each theory will be presented to relevant stakeholders who will be able to comment on the integrity of each theory. Rival theories will be compared and contrasted, and through examining evidence the theories refined. In addition, theories will be synthesised through considering how the theory compares in comparative settings, for example, seeing how workforce is recruited and retained for unregulated and unqualified healthcare assistants in hospital settings. These techniques will enable the theories to be synthesised, and conclusions drawn.

*Synthesis of resource use and outcome data*
As part of the synthesis we will also draw together the data on resource use and outcomes associated with the refined programme theories. We will construct models of the realist programme theories, their associated resource use and outcomes, and the assumptions underpinning these (including the implications of context) to produce a comparative assessment of the costs and benefits associated different recruitment and retention strategies. The costs and benefits of comparative courses of action will be summarised in terms of their return on investment.

## Ethics approval
Ethical approval for conducting the theory gleaning interviews with RNs and care workers has been provided by the University of Leeds (School of Healthcare Research Ethics Committee (ref: HREC 20-004).

## Dissemination
We will move current knowledge from a basic description of the reasons why staff decide to leave/stay in care homes to producing an evidence based framework which is sensitive to the crucial contexts identified in care homes, and highlights the generative mechanisms which need to be activated to generate positive outcomes. This framework will therefore outlines what is needed to successfully recruit and retain nurses and care workers in care homes, the associated cost, and the benefits to be gained.

Our dissemination strategy includes outputs which will engage and reach different audiences; care home, wider social care sector, and academic communities. Creative and engaging sketches and a user friendly summary will be produced and shared nationally with care home managers, care home owners, and staff. The team will work with The Department of Health and Social Care to feed the findings into relevant social care and/or workforce planning, strategy, and recruitment campaigns. In addition, throughout the project the project journey will be described using blogs, and links to the blogs shared via Twitter. The final findings will also be published in an academic journal and in a care provider journal, and presented at national and international conferences. Members of the study team lead (KS) and work on (RD) an initiative called Nurturing Innovation in Care Home Excellence in Leeds (NICHE-Leeds). KS, and RD will work with local care homes in Leeds, share the findings, and support them to implement the findings into practice.

## Project milestones
- Recruit expert stakeholder group
- Complete theory gleaning interviews

- Complete interview data analysis
- Conduct scoping literature searches (step 1)
- Construct initial programme theories (step 2)
- Conduct comprehensive and focused literature searches (step 2)
- Complete screening searches and article selection (step 3)
- Complete data extraction and analysis (step 3)
- Complete synthesising and drawing conclusions (step 4)
- Construct with the care home sector a plain English summary of the findings
- Work with a freelance artist to complete creative sketches illustrating the main findings
- Submit final manuscript to an academic journal
- Submit final report to project funder

## Disclaimer

This study is funded by the National Institute for Health Research (NIHR), Health Services and Delivery Research (reference NIHR131016). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

## References

ADEBAYO, B., NICHOLS, P, ALBRECHT, M.A, BRIJNATH B., and HESLOP, K. 2020. Investigating the Impacts of Acculturation Stress on Migrant Care Workers in Australian Residential Aged Care Facilities. *Journal of Transcultural Nursing*, p.1043659620947810.

BALLARD, C., ORRELL, M., SUN, Y., MONIZ-COOK, E., STAFFORD, J., WHITAKER, R., WOODS, B., CORBETT, A., BANERJEE, S. & TESTAD, I. 2017. Impact of antipsychotic review and non-pharmacological intervention on health-related quality of life in people with dementia living in care homes: WHELD—a factorial cluster randomised controlled trial. *International journal of geriatric psychiatry,* 32**,** 1094-1103.

BEECH, J., BOTTERY, S., CHARLESWORTH, A., EVANS, H., GERSHLICK, B., HEMMINGS, N., IMISON, C., KAHTAN P., MCKENNA, H., MURRAY R., AND PALMER B. 2019. Closing the gap: key areas for action on the health and care workforce. The Kings Fund

BERKOWITZ, S. 1997. Analyzing qualitative data. *In:* FRECHTLING, J., SHARP, L.M. (ed.) *User-friendly handbook for mixed method evaluations.* Diane Publishing.

BERRIDGE, C., TYLER, D. A. & MILLER, S. C. 2018. Staff empowerment practices and CNA retention: Findings from a nationally representative Nursing Home Culture Change Survey. *Journal of Applied Gerontology,* 37**,** 419-434.

BOOTH, A., HARRIS, J., CROOT, E., SPRINGETT, J., CAMPBELL, F. & WILKINS, E. 2013. Towards a methodology for cluster searching to provide conceptual and contextual "richness" for systematic reviews of complex interventions: case study (CLUSTER). BMC medical research methodology, 13, 118.

BOOTH, A., WRIGHT, J. & BRISCOE, S. 2018. Scoping and searching to support realist approaches. *Doing realist research. London: Sage.*

BROOM, C. 2010. Entice, engage, endure: Adapting evidence-based retention strategies to a new generation of nurses. *Journal of Healthcare Leadership,* 2**,** 49.

COSTELLO, H., WALSH, S., COOPER, C. & LIVINGSTON, G. 2019. A systematic review and meta-analysis of the prevalence and associations of stress and burnout among staff in long-term care facilities for people with dementia. *International psychogeriatrics,* 31**,** 1203-1216.

DAVIS, L., EASTWOOD, N. 2019. Want to recruit & retain Millennials? Eight tips for care providers. Available from: https://www.linkedin.com/pulse/want-recruit-retain-millennials-eight-tips-care-neil-eastwood?trk=related_artice_Want%20to%20recruit%20%26amp%3Bamp%3Bamp%3B%20retain%20Millennials%3F%20Eight%20tips%20for%20care%20providers._article-card_title.

DEVI, R., MEYER, J., BANERJEE, J., GOODMAN, C., GLADMAN, J. R. F., DENING, T., CHADBORN, N., HINSLIFF-SMITH, K., LONG, A. & USMAN, A. 2018. Quality improvement collaborative aiming for Proactive HEAlthcare of Older People in Care Homes (PEACH): a realist evaluation protocol. *BMJ open,* 8**,** e023287.

ESTABROOKS, C. A., SQUIRES, J. E., HAYDUK, L., MORGAN, D., CUMMINGS, G. G., GINSBURG, L., STEWART, N., MCGILTON, K., KANG, S. H. & NORTON, P. G. 2015. The influence of organizational context on best practice use by care aides in residential long-term care settings. Journal of the American Medical Directors Association, 16, 537. e1-537. e10.

GILMORE, B., MCAULIFFE, E., POWER, J. & VALLIÈRES, F. 2019. Data analysis and synthesis within a realist evaluation: toward more transparent methodological approaches. *International Journal of Qualitative Methods,* 18**,** 1609406919859754.

GOODMAN, C., DAVIES, S. L., GORDON, A. L., DENING, T., GAGE, H., MEYER, J., SCHNEIDER, J., BELL, B., JORDAN, J. & MARTIN, F. 2017. Optimal NHS service delivery to care homes: a realist evaluation of the features and mechanisms that support effective working for the continuing care of older people in residential settings.

GORDON, A. L., FRANKLIN, M., BRADSHAW, L., LOGAN, P., ELLIOTT, R. & GLADMAN, J. R. 2013. Health status of UK care home residents: a cohort study. *Age and ageing,* 43**,** 97-103.

GORDON, A. L., GOODMAN, C., DAVIES, S. L., DENING, T., GAGE, H., MEYER, J., SCHNEIDER, J., BELL, B., JORDAN, J. & MARTIN, F. C. 2018. Optimal healthcare delivery to care homes in the UK: a realist evaluation of what supports effective working to improve healthcare outcomes. *Age and ageing,* 47**,** 595-603.

HEALTH FOUNDATION. 2017. *One in four social care staff leaving the profession every year* [Online]. Available: https://www.health.org.uk/press-release/one-in-four-social-care-staff-leaving-the-profession-every-year.

HEALTH FOUNDATION. 2019. *Event: What will it take to fix social care?* [Online]. Available: https://www.health.org.uk/about-the-health-foundation/get-involved/events/event%2525253A-what-will-it-take-to-fix-social-care%2525253F.

HEGEMAN, C., HOSKINSON, D., MUNRO, H., MAIDEN, P. & PILLEMER, K. 2007. Peer mentoring in long-term care: Rationale, design, and retention. *Gerontology & Geriatrics Education,* 28**,** 77-90.

KINGSTON, A., COMAS-HERRERA, A. & JAGGER, C. 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,* 3**,** e447-e455.

LIAO, L., XIAO, L. D., CHEN, H., WU, X. Y., ZHAO, Y., HU, M., HU, H., LI, H., YANG, X. & FENG, H. 2019. Nursing home staff experiences of implementing mentorship programmes: a systematic review and qualitative meta-synthesis. *Journal of nursing management*.

MANZANO, A. 2016. The craft of interviewing in realist evaluation. *Evaluation,* 22**,** 342-360.

MATTHEWS, M., CARSTEN, M. K., AYERS, D. J. & MENACHEMI, N. 2018. Determinants of turnover among low wage earners in long term care: the role of manager-employee relationships. *Geriatric Nursing,* 39**,** 407-413.

MITCHELL, G. 2019. *Care homes forced to drop nurse provision amid staffing crisis* [Online]. Available: https://www.nursingtimes.net/news/workforce/care-homes-forced-to-drop-nurse-provision-amid-staffing-crisis-15-08-2019/.

PAWSON, R. 2002. Evidence-based policy: The promise ofrealist synthesis'. *Evaluation,* 8**,** 340-358.

PAWSON, R., GREENHALGH, T., HARVEY, G. & WALSHE, K. 2005. Realist review-a new method of systematic review designed for complex policy interventions. *Journal of health services research & policy,* 10**,** 21-34.

PAWSON, R. & TILLEY, N. 1997. In with the new: Introducing scientific realism. *Realistic Evaluation. London: Sage Publications***,** 55-92.

SANFORD, A. M., ORRELL, M., TOLSON, D., ABBATECOLA, A. M., ARAI, H., BAUER, J. M., CRUZ-JENTOFT, A. J., DONG, B., GA, H. & GOEL, A. 2015. An international definition for "nursing home". *Journal of the American Medical Directors Association,* 16**,** 181-184.

SEIDMAN, I. 2006. *Interviewing as qualitative research: A guide for researchers in education and the social sciences*, Teachers college press.

SKILLS-FOR-CARE. 2019a. *Workforce Intelligence Summary, Care homes with nursing in the adult social care sector 2018/19.* [Online]. Skills for Care Available: https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/documents/State-of-the-adult-social-care-sector/Summary-of-care-home-services-with-nursing-2019.pdf.

SKILLS-FOR-CARE. 2019b. *Workforce Intelligence Summary, Care only homes in the adult social care sector 2018/19.* [Online]. Skills for Care. Available: https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/documents/State-of-the-adult-social-care-sector/Summary-of-care-only-home-services-2019.pdf.

SPILSBURY, K., HANRATTY, B. & MCCAUGHAN, D. 2015. Supporting Nursing in Care Homes; Project Report for the RCN Foundation. *Patient Care and Professional Development for Nursing Staff in Care and Nursing Homes: A Research and Consultation Project. University of York, York.[Google Scholar].*

SQUIRES, J. E., HOBEN, M., LINKLATER, S., CARLETON, H. L., GRAHAM, N. & ESTABROOKS, C. A. 2015. Job satisfaction among care aides in residential long-term care: a systematic review of contributing factors, both individual and organizational. Nursing Research and Practice, 2015.

SRIVASTAVA, P. & HOPWOOD, N. 2009. A practical iterative framework for qualitative data analysis. *International journal of qualitative methods,* 8**,** 76-84.

WEALE, V. P., WELLS, Y. D. & OAKMAN, J. 2017. Flexible working arrangements in residential aged care: applying a person–environment fit model. *Asia Pacific Journal of Human Resources,* 55**,** 356-374.

WONG, G. 2018. Data gathering in realist reviews: looking for needles in haystacks. *Doing realist research. London: SAGE.*

WONG, G., GREENHALGH, T., WESTHORP, G., BUCKINGHAM, J. & PAWSON, R. 2013. RAMESES publication standards: realist syntheses. *BMC medicine,* 11**,** 21.

WONG, G., GREENHALGH, T., WESTHORP, G. & PAWSON, R. 2012. Realist methods in medical education research: what are they and what can they contribute? *Medical education,* 46**,** 89-96.

WOODHEAD, E. L., NORTHROP, L. & EDELSTEIN, B. 2016. Stress, social support, and burnout among long-term care nursing staff. *Journal of Applied Gerontology,* 35**,** 84-105.

YOUNG, A., FROGGATT, K. & BREARLEY, S. G. 2017. 'Powerlessness' or 'doing the right thing'–Moral distress among nursing home staff caring for residents at the end of life: An interpretive descriptive study. Palliative medicine, 31, 853-860.