Adult Social Care Workforce Research Partnership

SHORT TITLE: Care Work

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This protocol has regard for the Health Research Authority guidance.

SIGNATURE PAGE

The undersigned confirm that the following protocol has been agreed and accepted and that the Chief Investigators agree to conduct the research partnership in compliance with the approved protocol and will adhere to the principles outlined in the Declaration of Helsinki, the Sponsor's SOPs, and other regulatory requirement.

I agree to ensure that the confidential information contained in this document will not be used for any other purpose other than the evaluation or conduct of the investigation without the prior written consent of the Sponsor.

I also confirm that I will make the findings generated through the partnership publicly available through publication or other dissemination tools without any unnecessary delay and that an honest accurate and transparent account will be given; and that any discrepancies from this protocol will be explained.

Chief Investigators:

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Date:
03/10/2025

Name: (please print): Ann-Marie Towers

Signature:

Date:
03/10/2025

Name: (please print): Karen Spilsbury

LIST OF CONTENTS

ABBREVIATIONS AND DEFINITIONS

Abbreviation	Description	Definition
CIs	Chief Investigators	The Leads of the Adult Social Care Workforce Research Partnership
CIE	Community Involvement and Engagement	The inclusion of staff and users of social care in every stage of the partnership (prioritisation, design, delivery, dissemination, and implementation.)
Co-I	Co-Investigator	-
CoP	Community of Practice	-
DHSC	Department of Health and Social Care	-
EDI	Equality, diversity and inclusion	-
HCA	Homecare Association	-
ICB	Integrated Care Board	-
KCL	King's College London	-
LA	Local Authority	-
NCF	National Care Forum	-
-	Participant	An individual who takes part in the research
-	Partnership	The term used to describe the Adult Social Care Workforce Research Partnership
PI	Principal Investigator	The Lead of the co-designed studies within the partnership
PSC	Partnership Steering Committee	-
REC	Research Ethics Committee	-
RPP	Research Practice Partnership	The design methodology used for this project
RPS	Research priority setting	-
SfC	Skills for Care	-
SOP	Standard Operating Procedure	-
WP	Work Package	-

KEY CONTACTS

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SUMMARY

Title	Adult Social Care Workforce Research Partnership
Internal ref. no. (or short title)	Care Work
Design	Research Practice Partnership (RPP) design
Planned Duration	5 years: Phase 1: Co-design, scoping and Study 1 (0-18 months) Phase 2: Development and refinement of research studies, and Study 1 (18-24 months) Phase 3: Research active (25-36 months) Phase 4: Research delivery and dissemination (37-60 months)
Research Question/Aim(s)	Our partnership aims to generate evidence on sustainable solutions to foster an effective, competent, and well-supported social care workforce in England. Our overarching research question is: *How can health and social care collaboratively foster an effective, competent, and well-supported social care workforce?*

FUNDING

The Adult Social Care Workforce Research Partnership (Care Work) is funded by the National Institute for Health and Care Research (NIHR) Health and Social Care Delivery Research (HSDR) programme (NIHR159860). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

ROLE OF SPONSOR AND FUNDER

King's College London, as the Sponsor, will take responsibility for arrangements to initiate, manage, and monitor the partnership. The Sponsor will ensure responsibility and accountability for conduct and procedures associated with the protocol.

NIHR HSDR provides sole funding for this partnership. The funder will not have a direct role in design, conduct, data analysis, interpretation and manuscript writing, but will require annual reports on progress in line with plans outlined in the application for funding.

ROLES AND RESPONSIBILITIES OF PARTNERSHIP MANAGEMENT COMMITEES

Partnership Management Team

The CIs and co-applicant team are responsible for research delivery and capacity building. We will follow the three core principles of the researcher Development Concordat of environment and culture, employment, and professional and career development in our governance and academic capacity building. This is reflected in the partnership team and plans to support and develop the careers of early and mid-career researchers.

Partnership Steering Committee

The Partnership Steering Committee (PSC) has been approved by NIHR and have agreed their Terms of Reference. The committee is chaired by Professor Jon Glasby (University of Birmingham) and members include: Dr Juliette Malley (London School of Economics and Political Science), Dr Mark Wilberforce (University of York), Elaine Kelly (IFS, REAL Centre at the Health Foundation), Professor Catherine Needham (University of Birmingham), Martin Green (Care England), Professor Deborah Sturdy (DHSC), Hannah Kingsford (Social Worker), Liz Jones (public member with lived experience), Cindy Sharkey (retired Social Worker and public member with lived experience) and Peter Sharkey (retired Social Worker and public member with lived experience).

The committee will meet online every 6 months to contribute to work planning, help ensure the contract is on schedule and advise on the evolving social care landscape and its health interface. We will also use it as an opportunity to bring together stakeholders not directly involved in the work to gather real time intelligence and feedback.

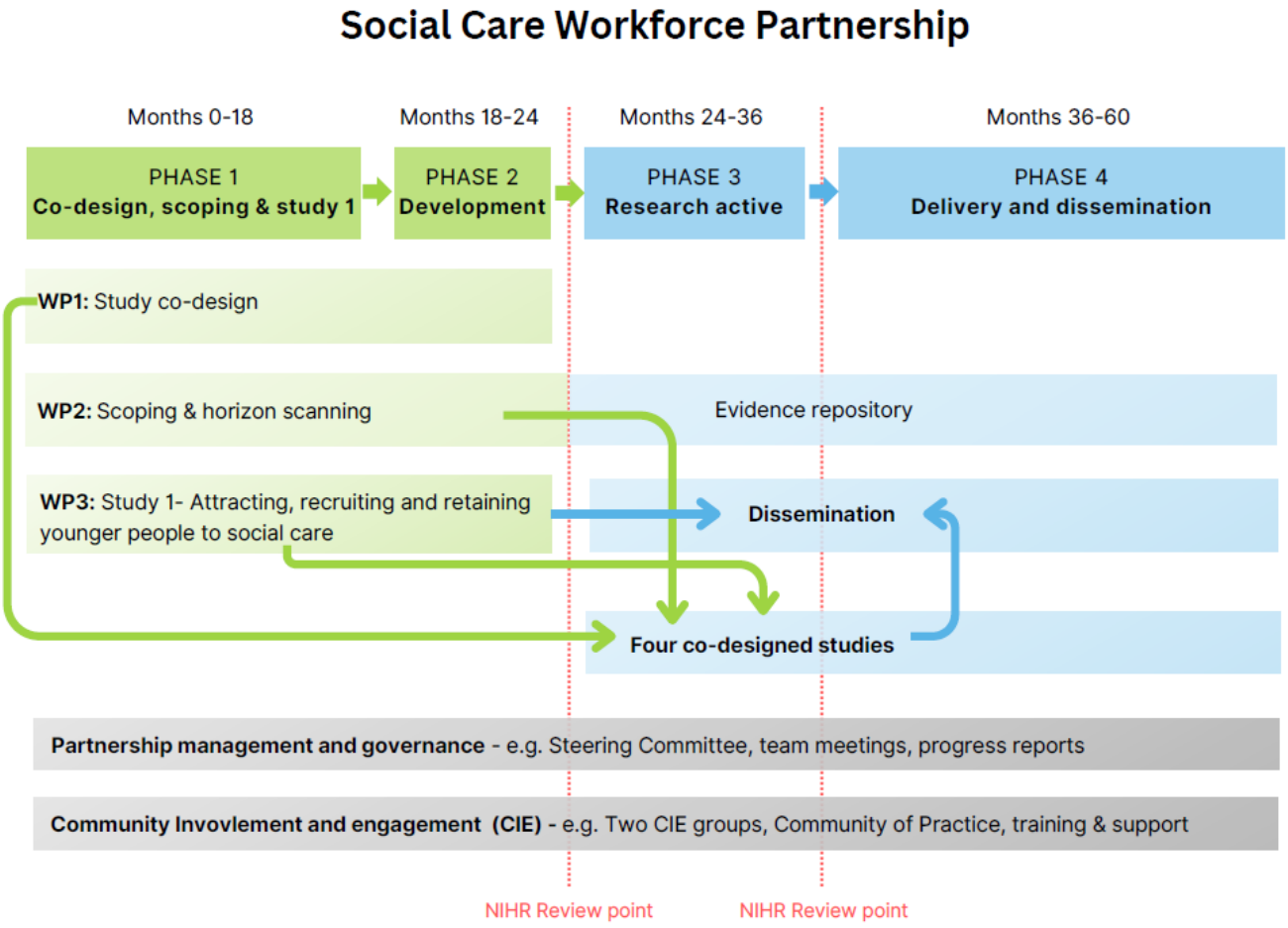
Role assignment matrix

Task/objective	Responsible (R)	Accountable (A)	Consulted (C)	Informed (I)
Overall leadership	Towers, Spilsbury	Towers, Spilsbury	Care Work - Core Team	Care Work - Whole Team
Community involvement and engagement	Samsi, Taylor, Surr, Jones	Towers, Spilsbury	External stakeholders, Care Work Core Team	Care Work - Whole Team
WP1 (Study co-design)	Vicario, Brookes and theme leads	Brookes, Towers, Spilsbury	External stakeholders, Care Work Core Team	Care Work - Whole Team
WP2 (Scoping and horizon scanning)	Kislov, King and theme leads	Kislov, Towers, Spilsbury	Care Work Core Team	Care Work - Whole Team
WP3 (Study 1)	Spilsbury, Atkinson, Kislov, Thompson, Haunch, King, Heath, Hardy,	Atkinson, Towers, Spilsbury	OSCAR study team	Care Work - Whole Team
Evidence repository	Kislov and theme leads	Kislov, Towers, Spilsbury	Care Work Core Team	Care Work - Whole Team
Study 2	Zhang, Towers,	Zhang, Towers, Spilsbury	Care Work Core Team	Care Work - Whole Team

- Responsible (R): The person(s) who do the work to complete the task.
- Accountable (A): The person(s) who delegate work and ultimately answerable for the correct and thorough completion of the task.
- Consulted (C): The person(s) who provide input, information and feedback.
- Informed (I): The person(s) who need to be kept up-to-date on progress (rather than involved in every detail).

KEY WORDS: Social care workforce, Research Practice Partnership, recruitment and retention, wellbeing, innovation, technology and data

FLOW CHART


Social Care Workforce Partnership
Months 0-18
Months 18-24
Months 24-36
Months 36-60
PHASE 1
Co-design, scoping & study 1
PHASE 2
Development
PHASE 3
Research active
PHASE 4
Delivery and dissemination
WP1: Study co-design
WP2: Scoping & horizon scanning
Evidence repository
WP3: Study 1- Attracting, recruiting and retaining younger people to social care
Dissemination
Four co-designed studies
Partnership management and governance - e.g. Steering Committee, team meetings, progress reports
Community Invovlement and engagement (CIE) - e.g. Two CIE groups, Community of Practice, training & support
NIHR Review point
NIHR Review point

PROTOCOL

Adult Social Care Workforce Research Partnership

1 BACKGROUND

The social care sector is facing a workforce crisis, with employers struggling to hire and keep staff. This has significant consequences not only for the workforce but also for the people supported by social care services. Despite wide recognition of the importance of joined-up health and social care, coordination between services and sectors has been poor, inefficient and widely criticised (1, 2). As a workforce, social care staff are more likely to be low paid (3), female (about 80%), ethnically diverse (13% come from non-EU countries), and over the age of 55 years, compared to other economically active English workers (4). Better pay and working conditions, inclusive employment (increasing the diversity of the workforce) and targeted activities, such as apprenticeships, are ways of improving inequalities and simultaneously meeting the recruitment and retention needs of the sector.

2 RATIONALE

Care Work aims to generate evidence on how to foster an effective, competent, and well-supported social care workforce in England. To inform the design and focus of the partnership, between December 2023 and January 2024 we undertook intensive scoping activities focused on research priority setting (RPS) and identifying promising innovations for evaluation/research. RPS involves identifying the uncertainties that are *most* worth trying to resolve through research. Uncertainties may be problems or issues to be understood or solutions to be developed or tested across broad or narrow areas. RPS consisted of three activities: consultations with stakeholders, rapid reviews of the current evidence and scoping the HSDR funding portfolio to identify relevant ongoing or recent research.

Consultations with stakeholders

This partnership was shaped by consultations with social care users, carers, and members of the public through three long-standing collaborations: (1) The Kent Research Partnership (KRP) Community of Practice (COP) on "*Enhancing, diversifying and sustaining social care workforce*". COP members include people drawing on social care and their unpaid carers and have a range of experiences, including domiciliary care, personal assistants and care homes. The group includes older people and adults with physical disabilities. (2) Leeds Beckett's Centre for Dementia Research PPI group, including people from minoritised ethnic, Lesbian, Gay, Bisexual, Trans plus (LGBTQ+) and lower socio-economic communities. (3) NICHE-Leeds, which regularly consults care home residents and a group of family and friends of people living in care homes.

Alongside input from these groups, we conducted online consultations with people working in social care (n=42), focusing on areas of uncertainty and research priorities for the social care workforce. Discursive approaches were employed to elicit more considered opinions on priorities and to ensure that all perspectives were considered (5). Workforce participants were diverse in terms of ethnicity, seniority, age, geography and role, including social workers, registered nurses, managers, and care

workers. Consultations were recorded and common themes and uncertainties identified. Findings were shared with our sector co-applicants and mapped against the latest intelligence on the state of the workforce (4).

Four interlinking research themes reflecting workforce priorities (6) were identified and theme leads (research team members) assigned to each theme.

Rapid reviews of current evidence

Theme 1: Labour supply, demand and markets (Leads: Vadean and Atkinson)

Delivering social care is labour intensive. Cost-effective systems must have the right number and mix of workers in the right place at the right time. Internationally, there are challenges related to the supply and demand of the workforce: (i) limited availability or supply of workers in systems at the right time; (ii) distributing, recruiting and retaining staff in systems where they are most needed; (iii) increasing volume of demand (for example due to ageing population, new care interventions); and (iv) increasingly complex care needs (due to comorbidities and multiple needs). Our work will focus on using intelligence and data to predict the availability of workers with the right skill-mix, generating new insights into why workers choose to work in social care and how employers can better keep the staff they have. We will adopt a mixed methods approach drawing on qualitative interview, focus group and case study methods (Atkinson) as well as econometric analysis (Vadean) expertise.

Recruitment and retention difficulties exist across all social care roles, including registered nurses, social workers, and frontline care workers (4). The emerging literature on drivers of recruitment and retention of care staff in the UK context are addressing, for example, the need for innovation to improve job quality (7), the role of pay and employment conditions (8), but also the need for solutions to take into account differences between workforce groups (9). In an ageing society, with a decreasing working age population, the recruitment pool may need to be broadened to generate a more diverse workforce, representative of local populations: more younger people, men, minority ethnic communities and Lesbian, Gay, Bisexual, Trans plus (LGBT+) members. Currently, evidence on how best to recruit and retain under-represented groups to help fill vacancies in social care is missing.

Emergent research shows links between workforce, job quality and care quality. For example, CQC quality ratings of care establishments are positively related to pay, skill development, flexible working, low turnover and vacancies (10-12). But unsuitable data means no evidence on the impact of skill mix and job quality on care recipients' outcomes (e.g. quality of life), and whether and how investing in care staff would improve their wellbeing. This is a substantial gap that would need to be addressed by future research.

Investment in frontline care worker skills is also needed as the care needs of an ageing population become increasingly complex, and initiatives such as NHS virtual wards, do not generate linear, simple and economically clear benefits. These developments are likely to lead to increased pressure on care workers to take on delegated health care tasks (13). More evidence and workforce planning is needed on the specialist training care workers need to deliver additional tasks and the implications for salaries, career structures and funding.

Theme 2: Workforce wellbeing (Lead: Towers)

As a profession, social care roles intersect health and human services. At its core are people and relationships: supporting them to meet their basic needs, develop their personal resources and maintain a good standard of quality of life. Staff wellbeing is known to impact quality of service provision (14). Yet, there are a range of factors reported to negatively impact the wellbeing of the workforce: pressured working conditions, potential abuse, harassment and bullying of staff and excessive workloads (15). Other organisational factors, including lack of career progression opportunities, limited support and supervision at work and the perceived low status of the care sector, have also been identified as important (15). As an ethnically diverse, predominantly female and low paid workforce, people working in social care are also disproportionately impacted by social inequalities (4, 16).

Finding ways to sustain and improve the wellbeing of the workforce is a priority for the sector (17). The Department of Health and Social Care (DHSC) has commissioned a longitudinal (2023 and 2025) Social Care Employee Wellbeing Survey (18). As part of this commissioned work, Towers led the development and testing of a new measure of “care work-related quality of life”, which builds on the ASCOT (Adult Social Care Outcomes Toolkit) programme (19). ASCOT in a preference-weighted utility measure based on Sen’s Capability Framework (20) and is used internationally to measure the impact of social care on the quality of life of people using services and their unpaid carers. This new measure will enable us to also measure the quality of life of the workforce, offering new opportunities for research. In wave one (2023), data was collected from ~7000 people working in adult social care in England, including PAs, regulated professionals, managers and care workers. Secondary analysis of this data offers opportunities to answer priority research questions about workforce wellbeing generated through our partnership.

Theme 3: Innovation in work organisation, conditions and role design (Lead: Brookes)

There is and has been for many years political consensus in support of innovation as essential to improve quality, access and efficiency of public services. The well-documented pressures on the social care system have led to an increased interest in innovation in this area, and it has become one of the cornerstones of current social care policy. The workforce is key in whether the care system can deliver the objectives set out in People at the Heart of Care (17), that people: have choice, control, and support to live independent lives; can access outstanding quality and tailored care and support; and find adult social care fair and accessible. Sector partners see workforce issues as one of the biggest risks to the sustainability of care markets, and therefore for people who draw on care and support, their families and carers. These policy goals may not be achieved without the change needed through workforce innovation; developing the evidence base will help support the sector in this.

There have been descriptive accounts but very little robust evaluation of workforce approaches. For example, although focused only on care workers, a rapid review of attraction, recruitment and retention identified innovations that could be described as promising but the majority had not been evaluated (21). This theme will aim to address this knowledge gap by identifying, evaluating and assessing the scalability of workforce innovations to improve working conditions, redefine roles and organise work. We will build on work already undertaken by partnership members that surfaced a

picture of the extent and nature of workforce innovation, but focused specifically on workforce issues rather than how care is delivered or organised https://centreforcare.ac.uk/care-workforce-change/2023/12/workforce-innovation-update/. A pragmatic approach was adopted, including a literature-based innovation output indicator, stakeholder consultation, review of social care awards and broad internet search. The majority were inevitably aimed at recruitment and retention, but also specifically addressed improving working conditions, training and development, technology, new roles and profiles, well-being, equality, diversity and inclusion, and leadership programmes.

We will use theory-driven approaches, developing a theory of change for how the specific innovation is intended to work and the assumptions behind the theory. Approaches may include theory-based evaluation (22), theory-driven evaluation (23), and contribution analysis (24). A lens of organisation and management studies will be used to enhance understanding of the local conditions needed for spread and scale. Economic evaluation will also be crucial to support the interpretation of findings. We will work with partners to identify 'on the ground' pockets of innovation and where new currents of change exist, or could exist in the first phase. A co-produced case study approach will be developed with a mixed-methods design including interviews, diaries, observation, analysis of routine and project-related data and documents. Innovation will cut across other themes and projects.

Theme 4: Data and technology (Lead: Thompson)

A workforce ready to use better technology, data, and digital innovation effectively is a key component in many governments' attempts to reconcile limited labour and growing demands for social care (25). More specifically, investment in technology, the infrastructure to use it effectively, digitisation of knowledge contained in care records, a workforce skilled up for use, and a caretech industry enabled to evaluate and refine technology at scale and efficiently are central to the UK vision of a person-centred, technology-enabled, social care system (17). Initial evaluations of early strategic investment choices in technology-based innovation and digital transformation in social care suggest mixed, and often uncertain, results. NHS and Local Government decisions made in 2016, provided the basis for 26 promising and possibly scalable "pathfinder" organisation level innovations in care, with predicted "lifetime benefits" (sic.) of £157m (26). Evaluations of the specifics of these pathfinder innovations and of technology in social care more generally - to date suggest a mixed and complex picture (27) widespread reported agreement on benefits and impacts?, but variations in financial incentives; awareness and use of generic technology (email, video calls) but variable adoption and knowledge of care-specific technologies by workers and even less by care recipients; a catalysing effect from COVID-19 pandemic on technology use, but a potential widening of digital inequalities in access; younger workers being more comfortable with technology, but older workers keener to develop; the barriers and levers to adoption of technology and digital in social care are widespread but often only vaguely expressed and context-bound: from missing knowledge and awareness to budget pressures, investment and missing vision and leadership.

Two striking features of the limited evaluation evidence base for technology in social care are i) the relative (to healthcare) absence of implementing scientific ideas and theory, and the consequent absence of a social care contribution to implementation science around technology adoption, and ii) a discourse [language, thinking, solutions] around technology and social care that resembles "silver

bullet" thinking (28) big hitting, simple solutions that are easily adopted and spread, but ultimately prone to failure.

The costs of "new" tech work may be more expensive, for uncertain gains in outcomes, especially for older and more frail recipients. When high-quality theoretically-informed analysis and clear criteria for effect are applied to claims from complex contexts, these claims can often be questioned or are not as powerful as assumed (28, 29). Moreover, many innovations implemented will fail. In order to systematically learn from - often justifiable – failure (30) we will use appropriate theory and rigorous, robust systematic social research methods to ensure that we produce trustworthy, relevant answers to drive evidence-informed approaches to technology adoption. Building on our recent evaluation of technologies in a care home pandemic context (31-33) we will use Normalisation Process Theory (34) and Greenhalgh's NASS framework (29) to explain and improve efforts to learn from innovation. We will tackle and evaluate the questions that matter to social care generated by the (workforce) partnership's first phase.

Relevant ongoing or recent research within the NIHR portfolio

Six HSDR-funded social care research capacity building partnerships were funded between 2020 and 2025. Of these, only the Kent Research Partnership (Towers) has a community of practice on the social care workforce. There are three HSDR-funded rapid evaluation teams, but of these only SOCRATES (Social Care Rapid Evaluation Team) is likely to produce evidence specifically related to our partnership's themes. We have made links to this team through the partnership's Study Steering Committee. Other relevant research programmes members of this time are involved in, including: Health and Social Care Workforce Policy Research Unit (King's); Adult Social Care Policy Research Unit (Kent); NIHR School for Social Care Research (Leeds and Leeds Beckett); the Health Foundation's REAL Supply Research Unit (Kent); ESRC Centre for Care (Kent) are also likely to address social care workforce issues over the next 3-5 years. As Co-Is on these we are well placed to avoid potential duplication.

Considering the rapid investment and growth of research in social care, every project undertaken within this partnership will have a Horizon Scanning component, to ensure we keep on top of ongoing and new research in the field.

3 THEORETICAL FRAMEWORK

We will use a Research Practice Partnership (RPP) design (see Figure 1). RPPs are long-term, collaborative approaches bringing together relevant research and practice stakeholders to produce research that is useful, useable and used. RPPs support knowledge implementation by transforming the relationships and power dynamics between researchers, practitioners and the community they serve (35). In social care, this means involving commissioners, practitioners and people who draw on care and support (and their unpaid carers) as the producers, as well as users and disseminators, of knowledge. This requires deliberate action on behalf of the research team to address power imbalances and give practitioners and people with lived experience the confidence, skills and opportunities to be involved in all stages of research (36, 37). Accordingly, our RPP has four core principles:

1. Community Involvement and Engagement (CIE): in every stage, from prioritisation, through to design, delivery, dissemination, and implementation.

2. Equality, Diversity and Inclusion (EDI): to identify under-represented groups and develop strategies to involve and engage.

3. Capacity building: to build research engagement, confidence, knowledge and leadership within the sector.

4. Better outcomes for people working in and using social care.

Figure 1: Research Practice Partnership conceptual model

https://centreforcare.ac.uk/care-workforce-change/2023/12/workforce-innovation-update/

4 RESEARCH QUESTION/AIM(S)

This partnership aims to generate evidence on sustainable solutions to foster an effective, competent, and well-supported social care workforce in England. Our overarching research question is: *How can health and social care collaboratively foster an effective, competent, and well-supported social care workforce?*

4.1 Objectives

1. Identify uncertainties, knowledge gaps, and innovative solutions in social care that merit further research.
2. Co-design and co-produce high quality, inclusive, research projects of national significance to address research priorities.

3. Undertake responsive research in our partnership themes (detailed previously) and as agreed with the funder.
4. Build research capacity in the workforce.
5. Create and contribute to opportunities for cross-partnership learning through communities of practice and cross-partnership events.
6. Share knowledge produced during the partnership to a wide range of evidence users to maximise reach and impact, benefiting those working in and drawing on social care.

4.2 Outcome

The success of Care Work will be judged using indicators recommended by Henrick (37) in his five dimensions of effectiveness for Research-Practice Partnerships: (1) building trust and cultivating partnerships (e.g. establish routines that promote collaborative decisions); (2) conducting rigorous research to inform action (e.g. conducts research to clarify and further specify problems of practice, prior to identifying and assessing strategies for addressing those problems); (3) Supporting sector organisations to achieve their goals (e.g. RPP helps stakeholders identify productive strategies for addressing workforce problems); (4) Producing knowledge to inform improvement efforts (e.g. developing and sharing knowledge and theory that contributes to the research evidence base); (5) Building the capacity of participating researchers, practitioners, practice organisations, and research organisations to engage in partnership work (e.g. team members assume new roles and develop the capacity to conduct partnership activities). Under the leadership of the CIs, the project manager will be responsible for collecting and reporting evidence and measures for each indicator throughout the partnerships, including in progress reports to NIHR.

5 DESIGN AND METHODS OF DATA COLLECTION AND DATA ANALYIS

The 5-year partnership is divided into four phases. This protocol provides detail on phases one and two (up to the end of year two), in which we co-design studies that will be delivered and disseminated in subsequent phases. Broad descriptions of planned activities for phases three and four are outlined, with reference to key milestones. Protocols for the studies conducted later in the partnership will be agreed with the funder and published on the Care Work website.

Phase 1: Co-design, scoping and Study 1 (0-18 months) (objectives 1-4)

Phase 1 comprises 3 parallel work packages (WPs):

WP1: Study co-design

WP2: Horizon scanning

WP3: Study 1

WP1: Study co-design (Brookes + theme leads) (Objectives 1 -5)

*Aim: Ag*ree the research portfolio to be taken forward in subsequent years.

Study one (see, WP3) was agreed as part of the application process and is included in Phase One. We envisage delivering up to 4 further projects, depending on scale and scope, but including one or

two ambitious large-scale studies. We will work with sector stakeholders to refine the research questions, assemble a team from the partnership, and develop a plan of the methods.

Methods: 'Stakeholder mapping' will help us pinpoint who to directly involve in the consultations, ensuring regional variation and adequate representation from different parts of the sector, including NIHR. Sector collaborators (4 ICBs, 4 LAs and national provider representative bodies) are well placed to support this, alongside regionally-based SfC locality managers. Four national consultation groups (up to 15 people per group) will focus on one theme each, meeting online on two occasions per group (n=8). Stakeholders will receive a thorough briefing and support to fully participate and, as with the rapid scoping phase above, discursive approaches to deliberating research priorities will be used to refine priorities, and to ensure that all perspectives are considered (5). We will adapt methods as needed to support involvement of a diverse range of stakeholders, sustain communication and provide updates during the process to maintain momentum and interest. Rapid reviews of the literature, undertaken by an information specialist (King) in WP2, will inform the process and ensure questions are novel. Theme leads will work with sector partners and CIE advisory group members to form a project team and co-design research projects in Phase 2 (18-24 months).

Responsive research: It is possible that during the stakeholder consultations NIHR/DHSC will identify responsive research that they wish us to undertake within this partnership (*objective 3*). We will consult with our NIHR programme manager to discuss emerging areas of focus, balancing the priorities of the sector with the emerging needs of policy makers. If no responsive research is identified at this stage, we will agree with NIHR whether they wish us to hold back funding for responsive work in years 3-5 or allocate remaining resources to co-produced projects reflecting sector stakeholder priorities.

WP2: Horizon scanning (Lead: Kislov, King + theme leads) (objectives 1, 2 and 4)

Horizon Scanning will provide important context and knowledge for our proposed studies, as well as signalling future opportunities. We will use the information gathered to establish a resource for the sector, supporting knowledge mobilisation and ensuring evidence is made available in an accessible and timely format.

*Aim: S*ystematically examine information sources to enable early detection of important developments or knowledge to inform the research and create a resource for the sector.

Methods: Beginning in Phase 1, WP2 will continue throughout all four phases. In Phase 1 the following steps will be iterative to ensure rapid reviews support the refinement of research questions and co-design of studies in WP1.

Identification and detection: A structured search strategy in academic databases related to each research question will be developed (supporting WP1). This will be supplemented with web searches of reports, policy, blogs and resources from key organisations such as Kings Fund, Health Foundation and our sector Co-Is. We will also monitor NIHR and other funding bodies to identify and track recently awarded projects relevant to the workforce partnership and monitor social media following key leaders in the field.

Criteria and methods of filtration and selection: We will develop criteria to screen and select relevant information sources. For example, focused on social care workforce in UK, current (i.e. within last 5 years). Criteria will depend on projects co-produced.

Assessment: Information will be appraised (e.g. CASP (academic literature) AACODS (grey literature) for the purposes of refining our agreed research questions (WP1). In addition, we will develop our approach to providing access to the information sources gleaned through horizon scanning in a format that is acceptable and meaningful for sector stakeholders.

Dissemination: A **partnership repository,** directing readers to relevant research, policy documents and grey literature will be created and hosted on our website. We will produce accessible summaries of rapid reviews, new innovations and evidence briefings developed through our CIE activities, drawing on Team expertise (described above).

Updating: Once we have completed one-cycle of steps 1 to 4 (by month 18) we will update by running the search and repeating these steps twice per year.

We will document the methodology as it develops for transparency and so we can develop best methods for horizon scanning evidence for the social care workforce research. We will ensure engagement of social care stakeholders through our CIE activities with this phase. We recognise that different interested stakeholders will have different information needs. Therefore, this phase will provide valuable insights and opportunities for the partnership's knowledge mobilisation activities and related to all our planned outputs. Further, horizon scanning will support identification of significant gaps in evidence or innovation for future social care workforce research.

WP3: Study 1 - Attracting, recruiting and retaining younger people to social care (Spilsbury and Atkinson) (objective 2)

Identified as a priority when preparing this application, Study 1 runs across partnership Phases 1 and 2 (24 months). The overall aim of the study is to identify organisational factors and approaches with potential to support social care employers to attract, recruit and retain younger people (aged up to 30 years) as care workers and regulated professionals in adult social care. Our objectives are to:

1. Identify employers that 'excel' in attracting, recruiting and retaining younger people to work in adult social care
2. Understand what these employers are doing well and generating hypotheses about 'what works, how, why and for who' in adult social care
3. Develop approaches with potential to support employers to attract, recruit and retain younger people, exploring the real-world relevance of these approaches with a representative sample of adult social care employers
4. Refine and disseminate approaches with potential to be effective for adult social care employers, and provide the foundations for development and evaluation of a complex intervention in the future

This is a sequential, multi-method study, using a positive deviant approach (38, 39). By focusing on what works well in the existing system, the positive deviance approach shifts the emphasis from a deficit-based perspective to one that is solution-oriented and strengths-based. This aligns with the principles of asset-based community development, emphasising the utilisation of existing strengths

within social care communities (40, 41). The power of this approach lies in identification of ways to solve a problem from within the same community experiencing the problem (42). Such approaches are, arguably, more likely to be adopted and then sustained by the wider community.

The sequence of our work in 3 phases is:

1: Identifying “Positive Deviants” (study objective 1): We will use: (i) quantitative data (Adult Social Care Workforce Dataset, Skills for Care) to identify social care employers that ‘excel’ (when compared to other employers) in attracting, recruiting and retaining younger people in their workforce i.e. “positive deviants”; and (ii) qualitative interviews with senior staff employed by social care organisations (n=30) who ‘excel’ to understand and explore the approaches and strategies that they use and why. This will inform sampling for WP2.

2: In-depth analysis (study objective 2): Six comparative case studies (a case is a social care organisation) of innovative approaches for attracting, recruiting and retaining younger people in their workforce (identified through WP1), using interviews (up to 5 participants per case study) and documentary analysis. We will generate hypotheses about what works, how, why and for who, alongside strategies and approaches.

3: Developing and refining strategies for dissemination (study objective 3 and 4) Strategies and approaches (identified in earlier work packages) will be shared with a broader group of social care employers invited to a consultation group (n=5; maximum of 6 participants per group). We will ensure representation and engagement of employers with comparatively lower numbers of younger people in their workforce (identified in WP1). Interviews will be recorded and transcribed and analysed using Qualitative Comparative Analysis (43). We will explore the real-world relevance of our hypotheses and research findings, alongside planning dissemination for the sector.

For further details on the OSCAR study, please refer to the protocol saved on the Care Work website: https://www.careworkresearch.co.uk/

Phase 1 Key Deliverables (at end of 18-month period, unless indicated):

- CIE group members recruited and trained (month 4).
- Community of Practice set up and running.
- Website up and running.
- Research questions identified and phase three studies codesigned (WP1)
- Horizon scanning piloted and evidence repository developed (WP2).
- Study 1 data collection and analysis completed for phases 1 and 2 (WP3).
- Knowledge mobilisation plan and communications strategy developed.
- Formal progress report (month 12).
- Formal review meeting with NIHR.

Phase 2: Development and refinement (18-24 months) (objectives 2, 4)

Through peer review and co-production, the partnership will develop and refine the phase three research studies. Different members of the partnership team will be involved in each study to ensure the necessary subject, sector and methodological knowledge, skill and expertise are in place for

successful delivery. Strategies to maintain or boost stakeholder participation with projects will be devised as required. As primary data collection is resource intensive (and ethical approval and research governance pose a risk to timelines), we anticipate that at least two studies will use secondary data sources (e.g. the Skills for Care Workforce Data, the DHSC Employee Wellbeing Survey). The research portfolio planned for years 3 to 5 will be formally reviewed and agreed with NIHR (month 24).

Phase 2 Key deliverables (24 months):

Securing NIHR-approval to progress, and completion of the following activities:

- Study 1 delivery of phase 3 and dissemination (WP3)
- Commencing recruitment of research staff to support projects in Phases 3 and 4.
- Assessing data availability and quality for secondary analysis.
- Ethics applications underway, including national studies needing local authority research governance and ADASS approvals.
- Selection and training of co-researchers (where appropriate).

Phase 3: Research active (months 25-36) (objectives 4-6)

Research studies designed in Phase 1 (WP1) and approved in Phase 2 will be underway, and we will collect data. We will also publish the results of the stakeholder consultations (WP1) and rapid reviews (WP2) and write a report to review how well the partnership is meeting its goals and objectives so far. Formal review with the NIHR at month 36.

Phase 4: Research delivery and dissemination (months 37-60) (objectives 4-6)

We will finish collecting and analysing the data and write up our findings. The partnership repository will be kept up to date (see, Phase 1 WP2). We will share the findings widely following our knowledge mobilisation plan and communications strategy. We will also write academic papers.

6 ETHICAL AND REGULATORY CONSIDERATIONS

Research undertaken within this partnership will adhere to the UK framework for Health and Social Care research. As contracting organisation, King's College London will be the sponsor. Ethical and governance approvals will vary according to the needs of each co-produced project. The team are very experienced at seeking approvals for both primary and secondary research. Possible applications include: University ethics committees, HRA research ethics committee (RECs), the Association of Directors of Adult Social Services (ADASS) and research governance (RG) approvals from participating LAs. Where appropriate, we will submit to the HRA Social Care REC or another committee with social care expertise.

6.1 Assessment and management of risk

Each co-designed study within this partnership will use different research methods and may involve different participant groups. Detailed risks for each study will be assessed and managed accordingly. Protocols for each partnership research project will be developed and published online (e.g. Open Science Framework, Care Work website).

Potential risks to Participants:

There are no foreseen risks in this partnership that may jeopardise the personal safety of participants. Where required, informed consent will be obtained from participants prior to them undergoing any research activity. There is risk associated with collecting personal data, which will be managed through our robust data management plan. There is no risk to the reputation of the social care organisations as all data will be anonymised in study outputs.

Potential risk to researchers:

We do not consider there to be any risks for researchers in this partnership.

Management Plan for Safeguarding Issues and Risk:

There is always a possibility that participants may disclose information which raises safety concerns relating to organisational practices and/ or policies. In this case we will not be able to maintain anonymity. The actions that would need to be taken in these circumstances will be made explicit in the relevant participant information sheets and consent forms so that participants are made aware of this exception from the outset.

6.2 Research Ethics Committee (REC) and other Regulatory review & reports

Before any co-designed study within the partnership commences, we will ensure that a favourable opinion is granted from the appropriate research ethics committee (REC). Ethical and governance approvals will vary according to the needs of each project. Where appropriate, we will submit to the HRA Social Care REC or another committee with social care expertise.

Any amendments deemed substantial and that require REC review will not be implemented until a review has been conducted and mechanisms are in place to implement at the relevant study site. All correspondence with the REC will be retained. If the study is ended prematurely, the CIs will inform the REC with the reason(s) for termination.

Regulatory Review & Compliance

Before seeking to recruit participants into one of the studies in this partnership, the Chief Investigators (Towers and Spilsbury) or their designees (e.g. study leads) will ensure that appropriate approvals from participating organisations are in place e.g. for studies involving social care organisations, the senior executive of the social care organisations will be provided with information about the study and plans to recruit staff. An expression of interest to participate and (where appropriate) introduction to staff members by email will record their approval for the organisation to take part.

Amendments

Protocol amendments will be agreed with the Sponsor and Funder and recorded through using versions numbers and in the Amendment History in Appendix 1. Any substantive changes will be communicated by the CIs to the Partnership Steering Committee and the CIE group by email or through a presentation at meetings.

Protocols for studies within the partnership will be submitted to the relevant regulatory bodies for review following sponsorship approval. Amendments will not be implemented without the required regulatory approvals in place. Correspondence with the sponsor and REC will be retained.

6.3 Peer review

As part of the application process, Care Work underwent independent, expert and proportionate peer review. This included a two-stage application process, within which the application was reviewed by experts in the field and people with professional/practice and/or lived experience of social care. The study team were also required to attend an in-person interview with a panel of independent experts.

6.4 Community Involvement and Engagement (CIE)

Research Practice Partnerships (RPPs) are co-productive by design. Through partnership working, embedded Community Involvement and Engagement (CIE), and by utilising highly participatory research methods, we aim to conduct research that will close the gap between the current workforce crisis and the desire for an effective, competent, and well-supported social care workforce.

CIE is central to this partnership, and we are engaging with a broad range of people to ensure equality, diversity and inclusion (EDI) are core to our research proposed.

Our strategy for partnership working will be informed by the following key principles:

1. Establish our identity and ethos as 'co-productive', working with partners rather than for them. The team brings extensive breadth and depth of experience of partnership working and co-production, with a strong track-record of working together already across the boundaries of research and practice.

2. Developing a coherent overarching strategy for engaging and communicating with the partners. To this end, we will form 2 CIE working groups: (1) service users and carers (n=10); (2) staff (n=10). Sector co-applicants and CIE members will be involved in every phase of the partnership: governance, priority setting and co-design, individual projects and knowledge exchange.

3. Opening the Partnership to sector stakeholders through national engagement events (WP1) and a community of practice.

4. Adopting the strategies of rapid engagement and knowledge transfer tailored to individual studies. This will include rapid evidence syntheses, non-traditional forms of outputs and knowledge mobilisation through ‘research allies’ embedded in local social care organisations. We will form a national, virtual community of practice (CoP) focused on the social care workforce, fostering the reciprocal exchange of knowledge and ideas and expanding the pool of participants in the research delivery phase. Stakeholders consulted in preparation for this application and during the lifetime of the partnership will be invited to join a CoP on enhancing and sustaining the social care workforce. Monthly online CoP meetings, offer opportunities to share research evidence, consult on uncertainties and priorities and share knowledge across traditional disciplinary and sector boundaries.

We are dedicated to Community Involvement and Engagement (CIE) with staff and users of social care, covering priority setting, study design, delivery, and dissemination (please see Figure 1 - conceptual model).

Under-represented groups working in social care are a research priority. Our team has the experience and expertise to engage such groups (minority ethnic communities and Lesbian, Gay, Bisexual, Trans plus (LGBT+) communities, men and younger adults; personal assistants (PAs) and those employed by care recipients) in co-produced research. In terms of involvement in co-production and priority setting, we will ensure diversity, particularly from commonly under-represented groups (e.g. minority ethnic communities, men and LGBT+) in our CIE advisory groups and national stakeholder consultation groups (WP1). The CIE team and WP1 lead will work collaboratively with the EDI lead and SfC to recruit CIE members through established networks, including The Diversity Trust and Opening Doors London. CIE leads and wider team have extensive experience of using creative participatory methods to support wider inclusion (e.g., adaptable communication styles, participatory and visual methods). As a team, we will consider barriers to engagement and participation, such as unsocial working hours, when planning consultation events.

6.6 Data protection and patient confidentiality

For each co-designed study within the partnership, the Care Work team will comply with the requirements of the Data Protection Act 2018 with regards to the collection, storage, processing and disclosure of personal information and will uphold the Act's core principles.

All participant data will be treated as confidential. The only limit to confidentiality pertains to the circumstances in which the participant discloses information which raises safety concerns (see Section 6.1). Personal data (e.g. name, contact details, demographic information) will be pseudo-anonymised with a number to protect personal information. A key will be kept in a separate document to allow the research team to identify the participant's details when the need to contact them arises (i.e. to arrange interviews and share the summary of findings). These details will be kept separate from any data collected and securely destroyed upon completion of each co-designed study. Personal data will never be stored on a laptop computer: a laptop computer may be used to access the University's secure network.

Any interviews being conducted as part of this partnership will be recorded on a secure call platform or an encrypted device. All audio recordings (e.g. interviews and consultations), documents and consent forms will be stored and accessed through a secure area of King's College London's secure server. The research team will not collect any physical data. Consent forms will be stored for 10 years. Audio recordings will be transcribed. Audio recordings of interviews and consultations will be kept for the duration of data analysis, after which they will be deleted. All data will be stored in-line with King's College London's Research Data Management Policy. The CIs will act as the data custodians for this partnership.

6.7 Indemnity

This partnership is sponsored by King's College London (KCL). The sponsor will, at all times, maintain adequate insurance in relation to the partnership through its professional indemnity and no fault

compensation in respect of any claims arising as a result of negligence by its employees, brought by or on behalf of a study participant *(with certain restrictions)*.

6.8 Access to the final study dataset

The partnership is being co-led by King's College London (Sponsor) and the University of Leeds. All information collected during the course of the Partnership will be kept strictly confidential. Information will be held securely at a dedicated King's College London SharePoint site. We will comply with all legal aspects of data protection and operationally this might include:

- Consent from any participants to record their personal data including name, date of birth, place of work, email address and where required a telephone number.
- Appropriate storage, restricted access and disposal arrangements for all data.
- We will limit access to identifiable data to the research team working on each co-designed study within the partnership.
- Personal information will be stored separately to anonymous data – linked by an ID.
- Anonymised transcripts from the interviews will be securely archived. Participants will be given a unique identifier for dissemination purposes, and researchers will be aware to prevent identification of participants.

Access to personal data will be restricted to named members of the research team, such as the CIs (Towers and Spilsbury) and the lead researcher/research fellow for the individual studies.

Explicit consent will be sought to share data (if requested) with the Sponsor and Funder for audit purposes. In these cases, this will be explained in the relevant participant information sheet and in the informed consent form for each co-designed study within the partnership.

7 DISSEMINIATION POLICY

7.1 Dissemination policy

Our approach to impact is framed by the Knowledge to Action framework's (https://hhscebi.ca/resources/knowledgetranslationframework/) multifaceted, multi-dimensional and targeted approach: with the right messages, delivered to and by the right people, meeting needs at the right time and in the right place. Impact on policy and practice is integral to achieving our vision of addressing high-priority uncertainties in social care. We will work closely with collaborators and partners to co-produce evidence-informed solutions and resources to improve wellbeing, care and work. We are committed to informing and influencing social care nationally and locally, but also to generate global impacts.

As part of our dissemination and communications strategy we aim to:

- Develop and maintain positive relationships with care providers, local authorities, the care workforce, social care users and carers, commissioners and practitioners.

- Establish innovative ways of translating our research into positive solutions for social care through community involvement and engagement.

- Help stakeholder groups and users of our research interpret our research through easy- to-understand formats, e.g. plain language summaries, infographics, podcasts.

We will ensure team members are supported to translate research findings to societal impact. Engagement with external stakeholders will take into account the diverse and context-sensitive ways in which research can make a difference.

- Push: we will plan and implement approaches to push (disseminate) knowledge towards social care based on their needs
- Pull: we will work with knowledge users to plan and implement strategies to "pull" knowledge from the models and modelling in ways that are useful for their decision making
- Exchange: we will bring the research team and knowledge users together through an interactive (but systematic) process as part of an integrated knowledge translation

Plans for communication and public engagement with academic and non-academic beneficiaries include the following:

1) Social care researchers and wider academic community

Research findings will be disseminated by presentations at multidisciplinary national and international meetings and conferences (e.g. NIHR SSCR annual conference, International Long-Term Care Policy Network). Publication in relevant high-impact academic, open access, policy and professional journals (e.g. Age and Ageing, Implementation Science, Public Administration, Human Resource Management, Labour Economics).

2) Social care providers and professionals

We will draw on sector partners' channels (NCF, SfC, HCA, the CPA), local authorities, ICSs and the networks listed in the Team section to have maximum reach into the sector, including both employers and the workforce as potential evidence users. The CoP and evidence repository will be useful tools for disseminating information directly. We will co-author (with sector partners) articles in professional/ practice journals and magazines, including Community Care Inform and Research in Practice for Adults.

3) People who draw on care and support

Members of the public drawing on care and support will be involved in findings dissemination and engaged through our CIE advisory group. Examples include: blog-post writing, lay summaries; contributions to video and other creative outputs; co-presenting at events.

4) Website and social media

We will develop a dedicated website that outlines our vision and details of individual research projects. It will include Partnership information, a Community of Practice page, a blog series, a project updates page, an evidence Repository, and video-based resources to be hosted on our project YouTube channel. We will have a strategic social media presence through LinkedIn.

5) Media

New insights from our research will be highly significant for policy and practice due to known challenges facing UK social care. When published, our results are likely to lead to extensive media coverage and dissemination to the wider community. Sector partners are well placed to raise the profile of the partnership and research through media interviews/press releases.

7.2 Authorship eligibility guidelines and any intended use of professional writers

All contributors to this each co-designed study within the partnership will be eligible for authorship of the final study report and outputs. Following the International Committee of Medical Journal Editors' criteria (44), authorship will be based on the following criteria:

1. Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND

2. Drafting the work or reviewing it critically for important intellectual content; AND

3. Final approval of the version to be published; AND

4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Contributors who meet fewer than all four of the above criteria for authorship will not be listed as authors but will be acknowledged. We will not use professional writers.

8 REFERENCES

1. Melin Emilsson U, Strid AL, Söderberg M. Lack of Coordination between Health Care and Social Care in Multi-Professional Teamwork - the Obstacle for Coherent Care of Older People Suffering from Multi-Morbidity. Journal of Population Ageing. 2022;15(2):319-35.
2. The King's Fund. Social care for older people - Home truths. 2016.
3. Cominetti N. Who cares? The experience of social care workers, and the enforcement of employment rights in the sector. 2023.
4. Skills for Care. The state of the adult social care sector and workforce in England 2023. 2023.
5. Grill C. Involving stakeholders in research priority setting: a scoping review. Research Involvement and Engagement: BioMed Central Ltd; 2021.
6. Lamont T, Chatfield C, Walshe K. Developing the future research agenda for the health and social care workforce in the United Kingdom: Findings from a national forum for policymakers and researchers. International Journal of Health Planning and Management. 2024;39(3):917-25.
7. Crozier SE, Atkinson C. 'You're only a care worker'. Exploring the status of adult social care work through the intersection of HRM innovation and job quality. International Journal of Human Resource Management. 2024;35(8):1486-511.
8. Vadean F, Saloniki EC. Job Quality and Job Separation of Direct Care Workers in England. Innovation in Aging. 2023;7(2).
9. Devi R, Goodman C, Dalkin S, Bate A, Wright J, Jones L, et al. Attracting, recruiting and retaining nurses and care workers working in care homes: The need for a nuanced understanding informed by evidence and theory. Age and Ageing: Oxford University Press; 2021. p. 65-7.
10. Atkinson C, Crozier S, Lucas R. Workforce Policy and Care Quality in English Long-term Elder Care. Public Performance and Management Review. 2018;41(4):859-84.
11. Allan S, Vadean F. The Association between Staff Retention and English Care Home Quality. Journal of Aging and Social Policy. 2021;33(6):708-24.
12. Allan S, Vadean F. The Impact of Wages on Care Home Quality in England. Gerontologist. 2023;63(9):1428-36.
13. Dutton J, McCaskill K, Alton S, Levesley M, Hemingway C, Farndon L. Changing roles in community health care: Delegation of insulin injections to health care support workers. 2018.
14. Care Quality Commission. State of health care and adult social care in England 2022/23. 2023. Report No.: 9781528644624.
15. Silarova B, Brookes N, Palmer S, Towers AM, Hussein S. Understanding and measuring the work-related quality of life among those working in adult social care: A scoping review. Health and Social Care in the Community: John Wiley and Sons Inc; 2022. p. 1637-64.
16. Hussein S. Employment Inequalities Among British Minority Ethnic Workers in Health and Social Care at the Time of Covid-19: A Rapid Review of the Literature. Social Policy and Society: Cambridge University Press; 2022. p. 316-30.
17. Department of Health and Social Care. People at the Heart of Care Adult Social Care Reform White Paper. 2021.
18. Department of Health and Social Care. Next steps to put People at the Heart of Care: a plan for adult social care system reform 2023 to 2024 and 2024 to 2025. 2023.
19. Netten A, Burge P, Malley J, Potoglou D, Towers AM, Brazier J, et al. Outcomes of social care for adults: Developing a preference-weighted measure. Health Technology Assessment. 2012;16(16):1-165.
20. Sen A. The Quality of Life: Oxford University Press; 1993.
21. Edwards D, Trigg L, Carrier J, Cooper A, Csontos J, Day J, et al. A rapid review of innovations for attraction, recruitment and retention of social care workers, and exploration of factors influencing turnover within the UK context. Journal of Long-Term Care. 2022;2022:205-11.

22. Weiss CH. Which links in which theories shall we evaluate? New Directions for Evaluation. 2000;2000(87):35-45.
23. Chen H-T. Theory-driven evaluations: Newbury Park, CA: Sage Publications; 1990.
24. Mayne J. Addressing Attribution through Contribution Analysis: Using Performance Measures Sensibly. Canadian Journal of Program Evaluation. 2001;16(1):1-24.
25. Bergschöld JM, Gunnes M, Eide AH, Lassemo E. Characteristics and Range of Reviews About Technologies for Aging in Place: Scoping Review of Reviews. JMIR Aging. 2024;7.
26. NHS Digital. Social Care Programme. 2024. https://digital.nhs.uk/services/social-care-programme.
27. Ipsos MORI, Institute of Public Care, Skills for Care. NHSX Adult Social Care Technology and Digital Skills Review. 2021. Report No.: 2009855701.
28. Eccles A. Remote care technologies, older people and the social care crisis in the United Kingdom: A Multiple Streams Approach to understanding the 'silver bullet' of telecare policy. Ageing and Society. 2021;41(8):1726-47.
29. Greenhalgh T, Wherton J, Papoutsi C, Lynch J, Hughes G, A'Court C, et al. Beyond adoption: A new framework for theorizing and evaluating nonadoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies. Journal of Medical Internet Research. 2017;19(11).
30. Davidoff F, Dixon-Woods M, Leviton L, Michie S. Demystifying theory and its use in improvement. BMJ Quality and Safety. 2015;24(3):228-38.
31. Buckle P, Micocci M, Tulloch J, Kierkegaard P, Parvulescu P, Thompson C, et al. COVID-19 point-of-care testing in care homes: What are the lessons for policy and practice? Age and Ageing: Oxford University Press; 2021. p. 1442-4.
32. Marshall F, Gordon A, Gladman JRF, Bishop S. Care homes, their communities, and resilience in the face of the COVID-19 pandemic: interim findings from a qualitative study. BMC Geriatrics. 2021;21(1).
33. Thompson CA, Daffu-O'Reilly A, Willis T, Gordon A, Noakes C, Khaliq K, et al. 'Smart' BLE wearables for digital contact tracing in care homes during the COVID-19 pandemic—a process evaluation of the CONTACT feasibility study. Implementation Science Communications. 2023;4(1).
34. May CR, Finch T, Ballini L, MacFarlane A, Mair F, Murray E, et al. Evaluating complex interventions and health technologies using normalization process theory: Development of a simplified approach and web-enabled toolkit. BMC Health Services Research. 2011;11.
35. Penuel WR, Hill HC. Building a Knowledge Base on Research-Practice Partnerships: Introduction to the Special Topic Collection. AERA Open. 2019;5.
36. Boaz A, Fitzsimons B, Meakin B, Muirhead S, Williams C, Weatherley M, et al. Do Research–Practice Partnerships Offer a Promising Approach to Producing Research that Improves Social Care Practice and Outcomes? Journal of Long-Term Care. 2023;2023:241-8.
37. Henrick EC, Cobb P, Penuel WR, Jackson K, Clark T. Assessing Research-Practice Partnerships Five Dimensions of Effectiveness. 2017.
38. Bradley EH, Curry LA, Ramanadhan S, Rowe L, Nembhard IM, Krumholz HM. Research in action: Using positive deviance to improve quality of health care. Implementation Science. 2009;4(1).
39. Rose AJ, McCullough MB. A Practical Guide to Using the Positive Deviance Method in Health Services Research. Health Services Research. 2017;52(3):1207-22.
40. Blickem C, Dawson S, Kirk S, Vassilev I, Mathieson A, Harrison R, et al. What is Asset-Based Community Development and How Might It Improve the Health of People With Long-Term Conditions? A Realist Synthesis. SAGE Open. 2018;8(3).
41. Klee D, Mordey M, Phuare S, Russell C. Asset based community development – enriching the lives of older citizens. Working with Older People. 2014;18(3):111-9.
42. Marsh DR, Schroeder DG, Dearden KA, Sternin J, Sternin M. The power of positive deviance How does positive deviance work? Experience and evidence from the field. BMJ. 2004.

43. Thomann E, Maggetti M. Designing Research With Qualitative Comparative Analysis (QCA): Approaches, Challenges, and Tools. Sociological Methods and Research. 2020;49(2):356-86.
44. International Committee of Medical Journal Editors. Defining the role of authors and contributors. 2025.

9 APPENDICIES

9.1 Appendix 1 – Amendment History

Amendment No.	Protocol version no.	Date issued	Author(s) of changes	Details of changes made