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Synopsis

Optimising the delivery and impacts of interventions to improve hospital doctors' workplace wellbeing in the NHS: The Care Under Pressure 3 realist evaluation study

Daniele Carrieri,[1*] Alison Pearson,[2] Anna Melvin,[2] Charlotte Bramwell,[2] Jason Hancock,[3] Chrysanthi Papoutsi,[4] Mark Pearson,[5] Geoff Wong[4] and Karen Mattick[2]

[1]Department of Public Health and Sport Sciences, Faculty of Health and Life Sciences, University of Exeter, Exeter, UK
[2]Department of Health & Community Sciences, Faculty of Health and Life Sciences, University of Exeter, Exeter, UK
[3]Devon Partnership NHS Trust, Exeter, UK
[4]Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK
[5]Institute of Clinical & Applied Health Research, Hull York Medical School, University of Hull, Hull, UK

[*]**Corresponding author** d.carrieri@exeter.ac.uk

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Abstract

Background: The key role of medical workforce well-being in the delivery of excellent and equitable care is recognised internationally. However, doctors are known to experience significant mental ill health and erosion of their well-being due to challenging demands and pressurised work environments. Existing workplace support strategies often have limited effect and do not consider the multiple factors contributing to poor well-being in doctors (e.g. individual, organisational and social), nor whether interventions have been implemented effectively.

Aim: To work with, and learn from, diverse hospital settings to understand how to optimise strategies to improve doctors' workplace well-being and reduce negative impacts on the workforce and patient care.

Design and method: Three inter-related sequential phases of research activity:

- Phase 1: a typology of interventions and mapping tool to improve hospital doctors' workplace well-being based on iterative cycles of analysis of published and in-practice interventions and informed by relevant theories and frameworks and engagement with stakeholders.
- Phase 2: realist evaluation consistent with Realist And MEta-narrative Evidence Syntheses: Evolving Standards quality standards of existing strategies to improve hospital doctors' workplace well-being in eight purposively selected acute National Health Service trusts in England based on 124 interviews with doctors, well-being intervention implementers/practitioners and leaders.
- Phase 3: codeveloped implementation guidance for all National Health Service trusts to optimise their strategies to improve hospital doctors' workplace well-being – drawing on phases 1 and 2, and engagement with stakeholders in three online national workshops.

Results:

- Phase 1: although many sources did not clarify their underlying assumptions about causal pathways or the theoretical basis of interventions, we were able to develop a typology and mapping tool which can be used to conceptualise interventions by type (e.g. whether they are designed to be largely preventative or 'curative').
- Phase 2: key findings from our realist interviews were that: (1) solutions needed to align with problems to support doctor's well-being and avoid harm to doctors; (2) involving doctors in creating solutions was important to address their well-being problems; (3) doctors often do not know what well-being support is available and (4) there were physical and psychological barriers to accessing well-being support.
- Phase 3: our 'Workplace well-being MythBuster's guide' provides constructive evidence-based implementation guidance, while authentically representing the predominantly negative experiences reported in phase 2.

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Limitations: Although we sampled for diversity, the eight trusts we worked with may not be representative of all trusts in England.
Conclusions: Misaligned well-being solutions can cause harm. It is paramount to prioritise improvements in working environments, instead of well-being 'add-on's, and to involve doctors and other relevant staff in identifying problems and in planning how to address these.
Future work: Further research is required to tailor the findings to primary care, mental health and social care settings. Health economic studies of well-being interventions (ideally, at systems level) are urgently required, since small investments could have far-reaching positive impacts.
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Introduction

The aim of the Care Under Pressure 3 (CUP3) project was to work with and learn from eight purposively selected NHS trusts to develop an evidence-based implementation toolkit. This toolkit is intended for all NHS trusts to optimise existing strategies in hospital settings and improve doctors' workplace well-being. CUP3 builds on our previous evidence synthesis that aimed to optimise strategies to address mental ill health in doctors and medical students [Care Under Pressure 1 (CUP1[1,2])], our related work with nurses, midwives and paramedics [Care Under Pressure 2 (CUP2)][3,4] and other relevant research.[3,5–7] In this section, we provide some background on the problem of poor mental health and well-being in doctors and the research gap that this study aimed to address. Details of methods and findings are reported fully in our published and submitted papers (*Box 1*).

BOX 1 List of published papers to date from the CUP3 study

Bramwell C, Carrieri D, Melvin A, Pearson A, Scott J, Hancock J, *et al.* How can NHS trusts in England optimise strategies to improve the mental health and well-being of hospital doctors? The Care Under Pressure 3 (CUP3) realist evaluation study protocol. *BMJ Open* 2023;**13**:e073615. https://doi.org/10.1136/bmjopen-2023-073615

Pearson A, Carrieri D, Melvin A, Bramwell C, Scott J, Hancock J, *et al.* Developing a typology of interventions to support doctors' mental health and wellbeing. *BMC Health Serv Res* 2024;**24**:573. https://doi.org/10.1186/s12913-024-10884-6

Melvin A, Pearson A, Carrieri D, Bramwell C, Hancock J, Scott J, *et al.* Support for hospital doctors' workplace well-being in England: the Care Under Pressure 3 realist evaluation. *BMJ Qual Saf* 2025; Epub ahead of print. https://doi.org/10.1136/bmjqs-2024-017698

Background and rationale for research

The growing incidence of poor well-being in the workplace in doctors is a major issue in the UK and many other countries – even prior to the COVID-19 pandemic,[8,9] and this has been referred to as a 'global crisis'.[10] This is a complex problem with significant and far-reaching implications, both within and beyond health care, including: a threat to the sustainability of healthcare systems,[11] poor quality or inequitable patient care,[12,13] absenteeism (doctors taking short- or long-term sick leave), presenteeism (doctors working while unwell), poor workforce retention (doctors leaving the profession temporarily or permanently),[14] alcohol and other addictions and suicide.[15]

There is compelling evidence showing a link between doctors' workplace well-being, care provision, patient satisfaction and broader organisational performance.[15–20] The fourth aim of the 'quadruple aim'[12] – achieving the well-being of the healthcare workforce – is integral to the 'three aims' of improving the experience of care, improving populations' health and reducing the per capita cost of health care.

Review of evidence and gaps in current research

Since 2020, with the COVID-19 pandemic and additional pressure on healthcare services, along with the ongoing patient backlog,[21] doctors' work conditions have been deteriorating.[22,23] Within the context of this international challenge, the particular focus for our research is England and in particular the NHS. A 2022 report by the UK Health and Social Care Committee stated that 'The NHS and the social care sector are facing the greatest workforce crisis in their history'.[24] A cross-sectional analysis of 4916 healthcare workers' questionnaires from the third wave of the COVID-19 pandemic (October–December 2021) found that nearly half of the respondents reported intentions to change or leave their healthcare role.[25] Important factors associated with this intention to change or leave the profession were feeling undervalued and experiencing discrimination at work by colleagues or patients. The results of the 2023 NHS staff survey continue to present a grim outlook, with

30% of respondents reporting they felt burnt out by their work; 34% reporting they found work emotionally exhausting and only about half suggesting that their organisation took positive action on health and well-being, or that their organisation would listen to and act on their concerns.[22]

Care Under Pressure 3 is the third project within the National Institute for Health Research (NIHR) Health and Social Care Delivery Research (HSDR)-funded Care Under Pressure (CUP) research programme, which aims to understand the causes of poor well-being in health professionals, across specialties and career stages, and to make informed recommendations for policy and practice. Key to the CUP research programme is the awareness that (poor) well-being in the workplace is a complex issue influenced by multiple inter-related dimensions (e.g. not only individual but also organizational/work environment, professional, socio/cultural and policy) and that, without taking this complexity into account, we are unlikely to understand the problem and develop solutions that are effective.[26,27] This approach challenges a still pervasive tendency within medicine to emphasise individual 'resilience' (and, in the COVID-19 period, 'heroism'[28]) – and for well-being strategies to focus predominantly on the individual level – therefore, placing responsibility on individual doctors for their own well-being.[29]

The current project builds on our previous projects: CUP1 and 2. CUP1 was the first realist review of interventions to tackle doctors' and medical students' mental ill health and its impacts on the clinical workforce and patient care.[2] This evidence synthesis brought together diverse international literature sources and regular engagement with diverse stakeholders to produce recommendations that support the tailoring, implementation, monitoring and evaluation of contextually sensitive strategies to address mental ill health in doctors.[2] CUP2[3] was a realist review focused on nurses, midwives and paramedics. Together, CUP1 and CUP2 identified more similarities than differences between professions; with structures of work (e.g. working in isolation) being more important than features of specific professions in determining risks of poor well-being. Through this research, we found that interventions are often implemented in ad hoc and/or top-down ways. Rather than develop and implement new interventions, which is costly and time-intensive, CUP1 recommended the optimisation of the many existing interventions. Building on this recommendation, we designed CUP3 to work with different hospital trusts in England to understand what is working well and less well in terms of mental health and well-being interventions currently offered and to propose strategies and approaches to better support doctor's well-being in the future.

Terminological clarification

Our complex/system level approach, and engagement with stakeholders (see *Methodology*), informed our conceptualisation of key terms. The term 'workplace well-being' in this study refers to a broad array of experiences, from promoting psychological well-being (while recognising that psychological and physical health are closely inter-related) and good work experiences across all doctors, to supporting those with specific mental health problems.[30] This is in line not only with our systems approach but also with recent workplace research by Waddell *et al.*[30] Although Waddell *et al.*[30] refer to 'workplace mental health and well-being', we are using 'workplace well-being' as a shorter term for simplicity. Waddell *et al.* draw on the World Health Organization definition that emphasises that mental health is more than the absence of disorder and also includes well-being and thriving.

We use the term 'intervention' to refer to a wide range of potential support offerings, including those that aim for improvements in the workplace (e.g. monitoring well-being, rotas, culture change, physical spaces, hydration, parking, team working and mentoring schemes), those that improve staff personal resources (e.g. mindfulness, stress management training, skills training and physical health improvement) and those that resolve problems after they have arisen (e.g. counselling, physiotherapy, debt advice and domestic abuse helplines). This is reflected in our typology of interventions[31] (*Results summary, Phase 1*).

Aim

Our aim was to work with and learn from eight purposively selected acute NHS trusts, building on evidence-based principles previously published,[1] to develop an implementation toolkit to improve hospital doctors' workplace well-being.

Research questions

1. How can workplace well-being interventions for doctors be conceptualised in a way that enables the application of a consistent typology?
2. What works, for whom, in what circumstances, how and why (not) to support doctors' workplace well-being within acute NHS trusts?
3. What are the optimal components of a toolkit that would facilitate NHS trusts' implementation of evidence-based strategies to improve doctors' workplace well-being?

This synopsis should be referenced as follows:
Carrieri D, Pearson A, Melvin A, Bramwell C, Hancock J, Papoutsi C, *et al*. Optimising the delivery and impacts of interventions to improve hospital doctors' workplace wellbeing in the NHS: The Care Under Pressure 3 realist evaluation study. *Health Soc Care Deliv Res* 2025;**13**(30). https://doi.org/10.3310/PASQ1155

Methodology

Our detailed protocol which outlines the full methodology has been published elsewhere.[32] To achieve the research aim, we undertook three sequential phases of research activity, mapping to the three research questions above, with each phase informing the next.

> *Phase 1: development of a typology of interventions to improve hospital doctors' workplace well-being.*
> *Phase 2: realist evaluation of the existing combinations of strategies to improve hospital doctors' workplace well-being in eight purposively selected UK acute NHS trusts in England.*
> *Phase 3: codevelopment of an implementation toolkit that all NHS trusts can use to optimise their strategies to improve hospital doctors' workplace well-being.*

We worked with acute NHS trusts, which are hospital trusts that provide secondary care services (and may encompass more than one hospital site), and focused on hospital doctors. This focus reflects: the fact that NHS trusts (i.e. secondary care) are the largest employers of doctors; the significant potential for sick doctors to cause harm to patients and the financial implications of doctors' poor well-being.[33] Focusing on one staff group in one setting allowed us to conduct more in-depth research into specific sociological, structural and organisational elements, which we know to be important, and ensure that we can be confident of the findings. Given our systems' approach, we recognise the interdependencies with other professional groups in multidisciplinary environments and have undertaken further research with other professions (e.g. CUP2 focused on nurses, midwives and paramedics) and included primary care representation in our advisory group (AG). In July 2024, we started a new NIHR project which aims to map the provision of staff well-being strategies and interventions for the primary care workforce in England (see *Impact and learning*).

Research pathway diagram

Figure 1 provides a flow diagram of our research pathway. In the subsections below, we describe our stakeholder groups and outline each of the three project phases.

Stakeholder engagement

Our engagement with stakeholders began before the study started. Stakeholders from the pre-existing CUP research programme and other channels (e.g. NIHR Research Support Service) informed the development and refinement of the CUP3 grant. Throughout the three project phases of CUP3, we consulted regularly with various groups of stakeholders, and membership of our governance groups evolved over time (see *Results summary* and *Patient and public involvement*).

As our project investigated doctors' well-being in hospital settings, our stakeholders included: experts by experience (doctors with a range of roles and specialties), members of the public [patient and public involvement (PPI)], other key stakeholders (e.g. supervisors, training programmes' directors, postgraduate deans, NHS managers, medical educators and other academics) and other healthcare professionals.

Stakeholders were involved in all stages of this research through different channels: AG (six meetings), local stakeholder groups in recruited trusts (five meetings), national stakeholder workshops as part of phase 3 activity (three meetings) and steering group (four meetings). In this section, we report our engagement with AGs and steering groups, which spanned all three phases of the study. We report our engagement with local stakeholder groups in recruited trusts (in phase 2) and national stakeholder workshops (in phase 3) in more depth in the Methodology subsections, since these were phase-specific. *Table 1* summarises stakeholders' engagement in different phases of the project.

Advisory group

Our project AG included representatives from all the stakeholder groups listed above and from organisations with a range of roles that span acute trusts [e.g. deaneries, General Medical Council (GMC)] and represented different doctor groups {e.g. specialty doctors and specialist grade doctors [Specialty and Associate Specialist (SAS)], international medical graduates (IMGs)}, located in different parts of the UK and beyond (e.g. Australia). The aim of the AG was to support the project throughout by providing content expertise and advice on development, impact and dissemination of our outputs.

We held six 2-hour-long online meetings with our AG at critical points throughout the project. The meetings started with a brief slide presentation by the project team to introduce the group to the topics we intended to discuss and to provide an update on progress with our research. We then chaired focused breakout groups, and plenary discussions to maximise AG engagement, providing opportunities for the AG to interact with each other (as well as with us). We planned and facilitated the meetings with a view to encourage everyone to contribute and voice their opinion, whether in agreement or disagreement.

Meeting conversations were captured in notes and through entries into the 'chat' function and via an online platform we adopted (https://padlet.com/), which enables

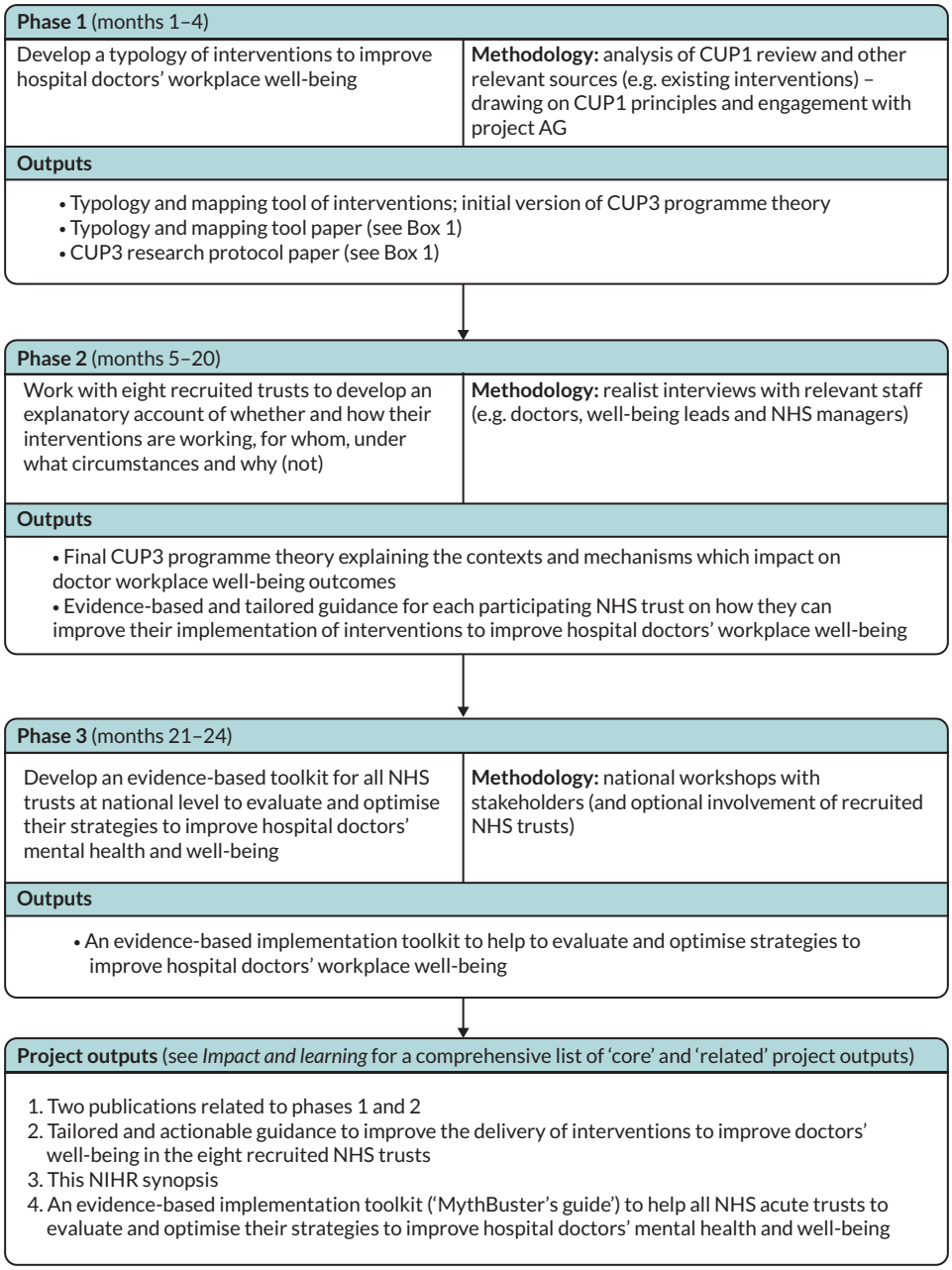

FIGURE 1 Research pathway diagram.

TABLE 1 Stakeholders' engagement in the three phases of the project

Group	Phase(s) supported
AG	All
Steering group	All
Local stakeholder groups	Phase 2
National stakeholder workshops	Phase 3

anonymous contribution. These were reviewed by the team to inform each stage of the project, for example recruitment, analysis and dissemination strategies. Notes and contributions from these meetings were not transcribed verbatim nor used as primary data for analysis, and this synopsis and the published papers do not include any verbatim data excerpts from these meetings.

Table 2 provides a summary of the online meetings, including the number and roles of participants, key topics discussed and action taken to provide tangible examples of how the engagement with AG informed our research.

Steering group

We established a steering group which comprised seven individuals, with close interests in the topic area, and relevant methodological expertise, representing patients and public, university and NHS settings. We recruited individuals with key strategic national roles – which span NHS acute hospital trusts – to support our sampling and

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TABLE 2 Advisory group online meetings summary

Date	AG members	Key topic discussed	Example of AG contribution	Example of action taken
24 August 2022	Four healthcare/public health practitioners	The team's 'system' approach to the development of typology of interventions (phase 1)	'Well-being' and 'mental ill health' are different and have different interventions. Well-being is generally less stigmatised and therefore more accessible; it also incorporates a broader range of experiences at work than the term mental ill health	Informed our change of terminology from 'mental ill health' to 'workplace well-being', aligning with Waddell *et al.*[30]
	Four academics	Terminology	The typology should incorporate a range of experiences, from general well-being of the workforce to serious mental ill-health problems, and endorsement of the use of a framework or continuum for the typology should be included	Incorporated this feedback in development of typology
	Two patient representatives		We should consider the impact of COVID-19 on doctors and NHS staff and related well-being interventions	
29 November 2022	Eight healthcare/public health practitioners	Update on phase 1 typology of interventions	Consider including mental health trusts and multisite trusts (as there may be variations at different sites)	Multisite trusts included. Decision that the focus of the project is on acute hospital trusts because of the scale. Plan to follow up mental health trusts and primary care as separate projects
	Three patient representatives	Phase 2 sampling strategy of trusts and of doctors/participants within each trust, particularly any barriers	Consider the timing of interviews (e.g. avoid August/February/April if possible due to changeover months)	Recruited specialty trainees/doctors to AG
	Three academics		The diversity of the AG members is limited – we need to include ethnically minoritised doctors, hospital doctors, junior doctors and IMGs/overseas doctors	Steering group membership includes lead for SAS doctors
				Planning inclusive recruitment in phase 2 and collecting demographic data to support this
15 May 2023	Five academics	Update on phase 1 typology work and paper	Whether interventions are cocreated with doctors and the potential negative effects of interventions are seldom explored in the literature	These reflections are incorporated in our typology and phase 2 papers
	Four healthcare/public health practitioners	Update on phase 2 recruitment and discussion of strategies	Consider pros and cons of online interviewing	Recording whether the interview is taking place during working hours and where it takes place
	Three patient representatives			
	One NHS senior manager			

TABLE 2 Advisory group online meetings summary (*continued*)

Date	AG members	Key topic discussed	Example of AG contribution	Example of action taken
4 December 2023	Five healthcare/public health practitioners	Update on phase 2 recruitment	Trust reports might be better being released with/close to toolkit launch – or may lose momentum	We followed this 'outputs dissemination' plan
	Two academics	Sharing of initial findings from interviews (phase 2)	We need to seek trusts' inputs to the development of the toolkit – trusts will need to feel ownership of the toolkit to maximise its impact	We invited recruited trusts stakeholders to toolkit development workshops in phase 3
	Three patient representatives	Development and timing of toolkit and trust/site reports (phase 3)		
27 March 2024	Three patient representatives	Feedback on ongoing analysis of interviews (phase 2)	Challenges of reaching and getting endorsement from different audiences (e.g. BMA/social media may work with clinicians and patients, but senior leaders may need a different approach)	We developed a multipronged outputs dissemination strategy, including posters and national webinar to disseminate findings
	Two healthcare/public health practitioners	Feedback from phase 3 first two workshops (including change of output name from 'toolkit' to 'MythBuster's guide' and input on dissemination strategy)	Adopt multiple communication channels for dissemination: university press office, national press like BBC, posters on trusts, webinars with strategic audience, e.g. BMA	We participated in Doctors in Distress #5KInMay fundraising to support doctors and raise awareness about our research (see: www.justgiving.com/page/alison-pearson-1716149968072)
	Two academics			
20 May 2024	Three patient representatives	Further feedback on development of MythBuster's guide and how to optimise impact of the project	Our move away from a 'toolkit', which conveys an idea that something is broken and needs to be fixed, and that this will be simple to do in a mechanistic way – were positively received	Adopted the concept of 'critical allyship'[34] in our manuscript reporting the findings from phase 2 to inform our data analysis
	Four academics		Concept of 'critical allyship' may inform our language and recommendations about who can help to improve doctors' workplace well-being	The MythBuster's guide includes a variety of positive examples and case studies
	Four healthcare/public health practitioners		Translate/link myths into trusts' values to maximise impact	
			Case studies: include ambitious ideas that require significant resources as well as the less expensive ones	

BBC, British Broadcasting Corporation; BMA, British Medical Association.

recruitment in phase 2 and maximise the transferability and impact of our project. Such roles included a Regional Postgraduate Dean, Assistant Director of Policy and Business Transformation at the GMC, Lead for staff, SAS doctors at the Royal College of Physicians, a former Director of South West Academic Health Science Network, the Deputy Chief Operating Officer at the NIHR Clinical Research Network (CRN), a Professor of Health Services Research and Nursing and a patient representative with experience working in high-pressure jobs outside health care. The steering group monitored the progress against milestones and spend against budget and provided advice on the conceptual and dissemination aspects of the project. We held four online meetings lasting between 60 and 90 minutes. Key insights from the steering group included: challenging us (alongside the AG) to think about terminology – particularly informing our decision to use 'workplace well-being' (as opposed to our initial term 'mental ill health' (see also *Introduction* and *Glossary*) and encouraging us to consider not only the 'positive or neutral effect' of many hospital initiatives, which do not address the real causes of problem, but also their detrimental effect, for example, leading doctors to feel frustrated, unheard, insulted and not cared about.

Team reflexivity

The multidisciplinary and multiprofessional team of experienced researchers and clinicians, with topic area and methodological expertise, brought diverse perspectives (e.g. organisational psychology, medical sociology, education, clinical and implementation science) to the research. This was key given the complexity of the problem of well-being in doctors (see also *Impact and learning*).

Phase 1: typology development

The typology and its development are described in full elsewhere.[31] The main aim of this phase was to develop a conceptual typology of workplace mental health and well-being interventions and a mapping tool to apply the typology within research and practice. The rationale was that there are many interventions to address the problem, but there was currently no systematic way to categorise them, which makes it difficult to describe and compare interventions. As a result, implementation tends to be unfocused and does not meet the standards developed for implementing complex healthcare interventions.[35] The typology development involved iterative cycles of analysis of published[1] and in-practice interventions, incorporation of relevant theories and frameworks and team and stakeholder group discussions.

Phase 1 output

This includes conceptual typology of workplace mental health and well-being interventions and a mapping tool to apply the typology within research and practice. The published typology paper also includes examples of how the mapping tool might be used, using selected examples of published interventions.

Phase 2: realist evaluation

The realist evaluation paper has been published by Melvin *et al*. in *BMJ Quality and Safety*.[36] The main aim of this phase was to work with and learn from eight purposively selected hospital settings to develop an explanatory account of whether/how their well-being interventions have been working. The research question was: What works, for whom, in what circumstances, how and why (not) to support hospital doctors' well-being?

This study involved realist evaluation of well-being support for doctors, which is a form of theory-driven research that is well suited to complex interventions. The realist evaluation was conducted in line with the Realist And MEta-narrative Evidence Syntheses: Evolving Standards quality standards.[37] Realist evaluation recognises that what works in one situation may not work in another and provides deeper insights into the nature of programmes and implementation contexts.[38] In line with the common realist research practice, we started with an initial programme theory (IPT). The IPT for this research was developed based on previous research[1–4] and iterative discussions within the research team and AG to explain how different aspects of the system might affect hospital doctors' well-being.

Recruitment

We recruited acute NHS trusts, which are hospital trusts that provide secondary care services (and may encompass more than one hospital site). Eight diverse trusts were recruited and three groups of individuals within those settings participated in realist interviews: doctors, well-being intervention implementers/practitioners and leaders.

We purposively sampled these trusts to capture a diverse and representative range using several sources of data[39] (*Table 3*). Because of our overarching aim to develop a toolkit for all trusts in England, we made all possible efforts to have a nationally representative sample of trusts (not 'gold standards/high performing' trusts only). Alongside developing criteria for trusts' selection (which we also discussed with our AG), we worked closely with the CRN (meeting biweekly during most of phases 1 and 2) to recruit the trusts, support the setting up of the project and recruit participants (see also *Impact and learning*).

TABLE 3 Criteria used for selection of NHS trusts

Domain	Data source	Particular focus
Quality of care	Care Quality Commission inspection ratings	'Well-led' and 'overall' ratings
Staff satisfaction	NHS Staff Survey 2021	Q11a – 'My organisation takes positive action on health and well-being' (% agreeing)
		Q22a – 'I often think about leaving this organisation' (% agreeing)
Supportive environment	GMC National Training Survey 2022	Overall satisfaction
		Supportive environment
		Workload
Socioeconomic status of population served	English Indices of Deprivation 2019 Research report	Deprivation ratings of the areas in which trusts were located
Other characteristics	Trust websites	Size (number of beds/sites/staff)
	Office for National Statistics	Location for example rurality
		Demographics of population served

Within each trust, we recruited participants inclusively (*Box 2*). The data were collected in 2023–4, around 3 years after the beginning of the COVID-19 pandemic, when the aftermath of the pandemic was still evident (e.g. waiting lists, impact on well-being) - and still ongoing at the time of writing this report – and during a period of industrial action by doctors about pay and conditions.[40,41]

BOX 2 Recruitment of interview participants

Based on the IPT, three groups of participants were purposively sampled within each trust. Some individuals fitted more than one category.

1. Doctors, as the recipients of interventions and experiencing the organisation's working environment, covering all career stages and all types of employment (e.g. consultants, doctors in training, trust grade/locally employed doctors and SAS doctors, including UK trained and IMGs).
2. Staff with roles supporting doctors, as those responsible for putting the trust's well-being strategy into action, either through making decisions about the types of interventions offered, or directly delivering interventions (e.g. medical education managers, human resources staff, occupational health staff, counsellors, psychologists and chaplains).
3. Leaders with strategic roles in relation to well-being, as those who determine trust policies and therefore influence the trust's culture and well-being strategy through their perspectives and approaches (e.g. Head of Organisational Development, Group Directors of Medical Education, Chief Executive Officer, Human Resources Directors and Wellbeing Freedom to Speak Up Guardians).

Local stakeholders for recruited trusts

We identified and met online with key stakeholders at each trust. These stakeholders (comprising a wide range of individuals including doctors, service managers and well-being leads) helped to champion our research and support recruitment for the interviews as well as helped us to understand the context of the trust and provided us with information on their current well-being and mental health interventions. These stakeholders also helped to provide feedback on our initial findings, including early insights into the most effective ways to develop our outputs.

We invited these local stakeholders to the national workshops in phase 3. Five of the eight trusts were also able to accommodate site visits, which enabled us to further contextualise the findings and facilitate recruitment. The visits were undertaken by two of the Research Fellows (RFs) (AP and CB). They involved guided tours of the trusts, including any relevant sites therein (e.g. well-being hub, doctors' mess and canteens), conversations with stakeholders and additional staff at the trust and some time for AP and CB to explore the site independently. During these visits, the RFs collected observational notes and took photos, for example, of significant workplace facilities such as water refill points; relevant staff communication items, such as toilet door posters to signpost to well-being support; vending machines; hospital restaurants; doctors' mess (including kitchen facilities and notice boards therein); outside spaces (e.g. gardens for staff and patients) and hospital accommodation for staff and students. These visits, related notes and photos brought to life some issues discussed during the interviews and informed our analysis and our development of our implementation guidance for phase 3 of the project. Photos are not included in this report to protect the anonymity of the trusts.

Data collection

Realist interviews[42] were undertaken to understand: how different interventions within and across trusts have been working, for whom, under what circumstances and why (not); and to understand participants' insights about the different contexts, mechanisms and outcomes that may be important to promote well-being. The topic guide (see *Appendix 1*) explored topics such as perceptions of well-being, organisational culture and well-being interventions. One hundred and twenty-four online interviews were conducted between 9 May 2023 and 4 January 2024 via Microsoft Teams (Microsoft Corporation, Redmond, WA, USA) (12–23 interviews per trust). Participants received a £20 Amazon voucher. Interviews were recorded and transcribed verbatim by professional transcribers. The data set comprised 5763 audio hours, with interviews lasting on average of 47 minutes. We also analysed relevant documents trusts shared with us (e.g. staff well-being strategy, newsletters) to contextualise findings. *Table 4* provides key characteristics of participants.

Analysis

Interview transcripts were uploaded to NVivo (QSR International, Warrington, UK), and data analysis was concurrent with data collection. We used a realist logic of analysis, building causal explanations in the form of context–mechanism–outcome configurations (CMOcs) for the programme theory. Coding was both inductive (data-driven) and deductive (informed by the IPT). To achieve this, the data were interpreted to establish if they pertained to context (C), mechanism (M), outcome (O), the relationships between C, M and O and/or the relationships between CMOcs. This was an iterative process involving the analysis of particular examples from the data, refinement of programme theory and further data analysis to test particular subsections of the programme theory.

We developed tailored reports for each participating NHS trust based on the key findings within their trust, linked to the national findings and including recommendations as to how they might improve their implementation of interventions to optimise doctors' well-being (see *Results summary* and *Report Supplementary Material 1*).

Phase 2 outputs: (a) a refined CUP3 programme theory of how different interventions within and across trusts are working, for whom, under what circumstances, how and why (not) and an understanding of the different contexts, mechanisms and outcomes that may be important to promote well-being; (b) an evidence-based and tailored report for each participating NHS trust on how they can improve their implementation of interventions to optimise doctors' mental health and well-being and (c) a journal article[36] summarising the findings from this phase.

Phase 3: codevelopment of implementation guidance

The aim of this phase was to codevelop implementation guidance for all NHS trusts. We drew on: (a) our refined

TABLE 4 Key characteristics of the 124 interview participants

Characteristic	Diversity achieved
Doctor interviewees (n = 92)	
Medical career stages	11 Foundation training, 11 locally employed, 3 clinical fellows, 6 core training, 19 specialty training, 7 specialty and specialist, 35 consultants
Medical specialties	Anaesthetics, Clinical genetics, Emergency medicine, General medicine, Genitourinary medicine, Geriatric medicine, Haematology, Intensive care, Neurology, Obstetrics and gynaecology, Occupational medicine, Oncology, Ophthalmology, Paediatrics, Pathology, Psychiatry, Radiology, Rehabilitation medicine, Renal medicine, Respiratory medicine and Surgery
Other staff interviewees	Educators, senior leaders, managers, human resource and occupational health specialists, chaplains, psychologists, Freedom to Speak up Guardians, Guardians of Safe Working, well-being and EDI leads
Age range	23–68 years (mean = 41 years)
Gender	71% female
	29% male
Ethnicity	73% White British and white other
	19% Asian
	8% Black, mixed ethnic or other

EDI, equality, diversity and inclusion.

CUP3 programme theory; (b) the evidence-based tailored guidance for each of the eight participating trusts; (c) our experience gained through phases 1 and 2 and (d) focused engagement with key stakeholders. We held three national online workshops to which we invited participants to reflect the complexity of hospital environments, policies and processes. Workshop participants included people with key local and/or national roles (e.g. trust Well-being leads, Organisational Development and HR leads, Associate Directors of Inclusion and Employee Experience and Directors of Medical Service Development), doctors and other clinicians – some of these were members of the local stakeholders from our eight recruited trusts, or members of our AG. We had an average of 10 participants per workshop, with different participants attending different workshops. The format of these workshops was similar to the AG meeting in that it they were 90 minutes long, online, combined plenary and breakout group discussions, and meeting conversations, entries into the 'chat' function and the online platform Padlet were captured in notes. Each workshop had a different focus:

> *Workshop 1: sharing our findings and gaining feedback on target audience and general format/design of our 'toolkit'.*
> *Workshop 2: seeking feedback on our initial thoughts/design principles about the 'toolkit' and on dissemination pathways.*
> *Workshop 3: seeking feedback on content options for the 'toolkit' developed from our findings and further advice on dissemination.*

Key insights from these workshops related to our phase 3 output are reported below, grouped around the following three inter-related categories:

> **Terminology:** *The term 'toolkit' was felt to be unattractive to potential users. There was felt to be 'toolkit fatigue' in the NHS as there are a plethora of existing toolkits (and not all of them are 'user-friendly' or have been used successfully). Therefore, using a different word to denote our guidance was preferable and likely to improve access, adoption and overall engagement.*
> **Content and design:** *In terms of content – we were encouraged to retain the clarity of, and remain faithful to, our findings – which resonated strongly with our participants. In terms of design – short guides, with few key principles and multiple examples/case studies/stories would be preferred, as more accessible and user-friendly. Our guide should be easy to view on small devices, for example phone/tablet. We were also reminded about the importance of language – for example, we need to be inclusive of all doctor contract types in the case study examples.*
> **Audience(s)/and distributed responsibility:** *Alongside doctors and staff from a range of roles (clinical but also human resources/occupational health/well-being leads), we need to target different levels (within trusts and beyond), including senior leadership. Whoever would use our guidance to implement change would need time allocated to do so.*

The three workshops (and the engagement with AG and steering group occurring during phase 3) informed our decision to replace the term 'toolkit' for our phase 3 output with 'Workplace Well-being MythBuster's guide'. The workshops also gave us the opportunity to seek feedback on the term 'MythBuster' and test our myth-busting statements, resulting in the merging and reformulation of several statements (see *Results summary, Phase 3*).

Phase 3 output

This includes implementation guidance to help all NHS trusts evaluate, codevelop and implement strategies to improve hospital doctors' mental health and well-being.

Results summary

Phase 1

Our typology of interventions to support doctors' well-being and related mapping tool can be used to conceptualise interventions and/or to map them into different categories, for example, whether they are designed to be largely preventative (by either improving the workplace or increasing personal resources) or to resolve problems after they have arisen.[31] Interventions may be mapped across more than one category to reflect the nuance and complexity of many well-being interventions (see our published typology[31]). The mapping of interventions undertaken to develop the typology indicated that most publications do not clearly report their underlying assumptions about the main causes and outcomes the intervention is addressing, or the theoretical basis for the intervention. We report the conceptual typology diagram (*Figure 2*) (for the mapping tool and full publication, please see Pearson *et al.*[31]).

Phase 2

We developed four key findings which reflect four areas of our final programme theory (see *Appendix 2*), underpinned by 21 CMOcs (see *Appendix 3*). The four key findings are: (1) solutions needed to align with problems to support doctor's well-being and avoid harm to doctors; (2) involving doctors in creating solutions was important to address

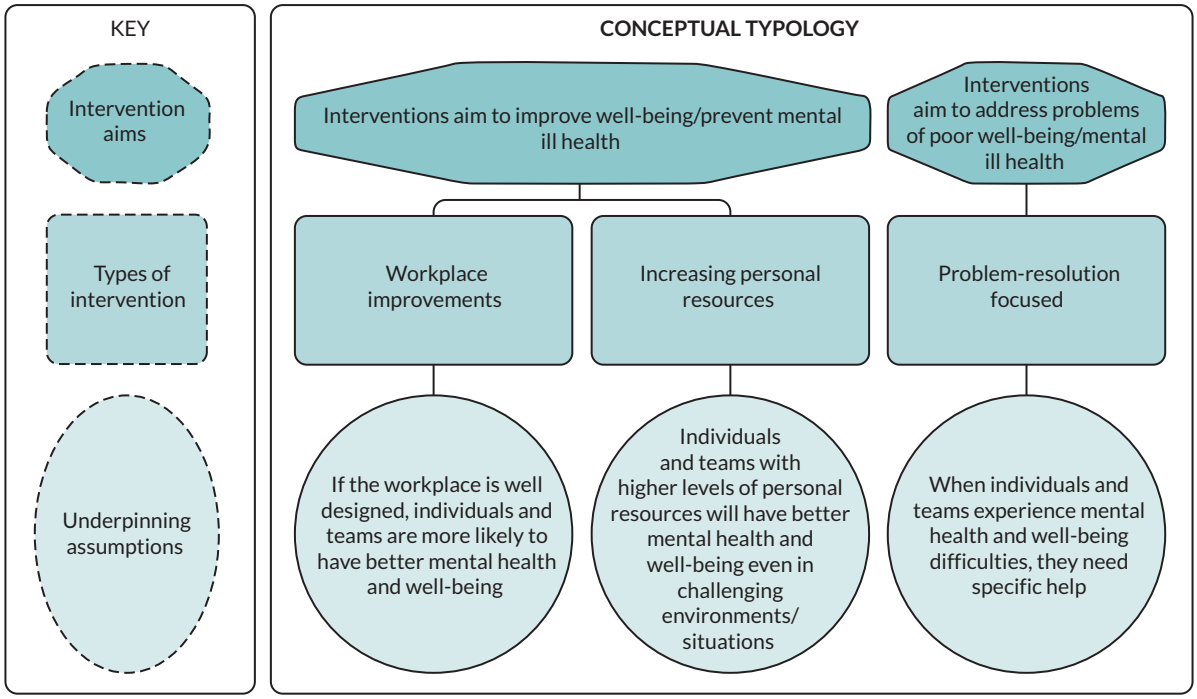

FIGURE 2 Conceptual typology of mental health and well-being interventions – reproduced with permission from Pearson *et al.*[31] This is an Open Access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY 4.0) licence, which permits others to distribute, remix, adapt and build upon this work, for commercial use, provided the original work is properly cited. See: https://creativecommons.org/licenses/by/4.0/. The figure includes minor additions and formatting changes to the original text.

their well-being problems; (3) doctors often do not know what support is available to help them when experiencing well-being problems and (4) there were physical and psychological barriers to accessing well-being support. Exemplar quotations from the interviews to illustrate key findings are reported in *Appendix 3*. The paper reporting the detailed results of the realist evaluation in phase 2 has been published.[36]

Based on our realist evaluation, we also produced evidence-based and tailored reports for each participating NHS trust on how they can improve their implementation of interventions to optimise doctors' mental health and well-being (we provide an anonymised template of this guidance in *Report Supplementary Material 1*). All eight reports had the same structure and started with essential background information about the CU3 project, followed by a summary of the four key findings from our realist evaluation of all eight trusts (the national picture), showing how each national finding related to the specific trust (the trust-specific picture). This was followed by recommendations for all trusts and anonymised examples of positive experiences across trusts. The report included anonymised demographic information on the trust's sample (e.g. region and size) and on the overall participant sample (e.g. profession and career stages, mean age, gender and ethnicity).

Phase 3

In this last phase, we developed the 'Workplace well-being MythBuster's guide' – the implementation guidance to help all NHS trusts to optimise their strategies to improve hospital doctors' mental health and well-being. This work was informed by the three national workshops, our engagement with the AG and the work undertaken during phases 1 and 2. We spent a long time considering how to provide positive and hopeful messages while also authentically representing the predominantly negative experiences reported in the interviews.

The feedback from the phase 3 workshops about the existence of 'toolkit fatigue' in the NHS – which is arguably an additional 'finding' – informed our decision to change our initial 'implementation toolkit' terminology and the scope of our approach. Our findings from phase 2, shared with the AG during the phase 3 co-design workshops, strongly indicated that developing a wide-ranging implementation toolkit would be premature. Therefore, we did not use the Extended Reach, Effectiveness, Adoption, Implementation and Maintenance (RE-AIM) framework[43] to structure the discussion and development of our output as we stated in our protocol.[32] RE-AIM is an evaluation framework[44] which covers important implementation issues (e.g. adaptation, equity, cost and multilevel determinants of sustainability) that would have been ahead of time to

introduce to the co-design workshop – especially, in view of the complexity and sensitivity of developing the 'Workplace well-being MythBuster's guide'. The further step to adopt the alternative terminology 'Workplace well-being MythBuster's guide' stemmed from our reflections on phase 1 and 2 findings – particularly, the key findings of the misalignment between the solutions often offered by hospital trusts and the problems doctors perceive as affecting well-being and the related point that there is a tendency among employers/organisations/leaders to see well-being as 'extra'/desirable 'add on', rather than an indispensable and essential condition to the delivery of care. These considerations led us to think that there are common and potentially harmful assumptions – or 'myths' – that needed to be challenged/busted.

Some stakeholders – while agreeing with our argument that there is a need to challenge false widespread and potentially harmful assumptions – wondered whether the term 'MythBuster' might risk simplifying the serious issue of doctors' well-being and whether it may be received as oppositional/negative in tone. However, overall stakeholders supported the MythBuster term, based on a strong consensus that there is an urgent need to challenge the status quo, and felt that the potential risks would be negated via careful implementation.

Our aim was to adopt a provocative/'eye catching' style. Our myth statements are reported in *Box 3*.

BOX 3 Myth statements

Myth 1 – doctors' working conditions do not matter.
Myth 2 – trusts need to decide whether doctor's well-being or patient care are the highest priority.
Myth 3 – the well-being lead can solve workplace well-being.
Myth 4 – doctors want more yoga and mindfulness.
Myth 5 – doctors can easily get help when they are struggling.

The development of the specific myth statements and the formulation of the case studies and 'how to' examples were underpinned by: our phase 2 analysis and feedback from stakeholders, particularly during the phase 3 national workshops and in AG meetings. We started with 10 myth statements, but stakeholder feedback strongly indicated that they would prefer fewer myths.

There was also a strong consensus that, for our MythBuster guide to work (and be constructive), we needed to provide multiple case studies and examples of how to improve existing intervention strategies in NHS trusts (drawn from our phase 2 analysis). The aim was to have a small number of memorable principles, presented as myths, with a much larger range of examples of ways to make positive changes even in resource-stretched environments. We shared several iterations of the MythBuster guide with our stakeholders. The example of the current version of Myth 1 (in *Figure 3*) illustrates the format of the MythBuster guide: that is, formulation of myth statement, myth busting, explanation/justification warranting the busting, suggestion of alternative approaches that might work and multiple illustrative case study examples. This will be the basis of a resource that is currently under development (see *Impact and learning*).

Substantive theory

In developing a conceptual typology (in phase 1), we drew on several theoretical perspectives to determine how best to categorise workplace well-being interventions. These included perspectives from stress management theory (such as the categorisation of stress reduction strategies into primary, secondary or tertiary[45,46]) and from positive psychology, including the idea of 'red cape/green cape' interventions,[47] whether the primary intention was to reduce negative features of work or increase positive ones. We also drew on theoretical perspectives from systems resilience[48] and learning and training.[49] These theoretical perspectives enabled us to develop a typology of well-being interventions,[31] which we used as a basis for our IPT and interview guide. In our data analysis (in phase 2), our thinking was also informed by self-determination theory,[50] Maslow's hierarchy of needs[51] and the job demands–resources model.[52]

Discussion

The aim of this project was to work with, and learn from, eight diverse hospital settings to understand how to optimise strategies to improve doctors' well-being and reduce their negative impacts on the workforce and patient care. This was achieved through three inter-related phases. Phase 1 developed a typology of workplace well-being interventions and a mapping tool (based on categorisation and analysis of relevant literature and existing interventions and input from the project AG and steering group). Phase 2 involved a realist evaluation of the existing combinations of strategies being used by NHS trusts to support hospital doctors' well-being. Phase 3 synthesised the insights gained through phases 1 and 2 to create guidance that all NHS trusts nationally can use to optimise their strategies to support hospital doctors' well-being.

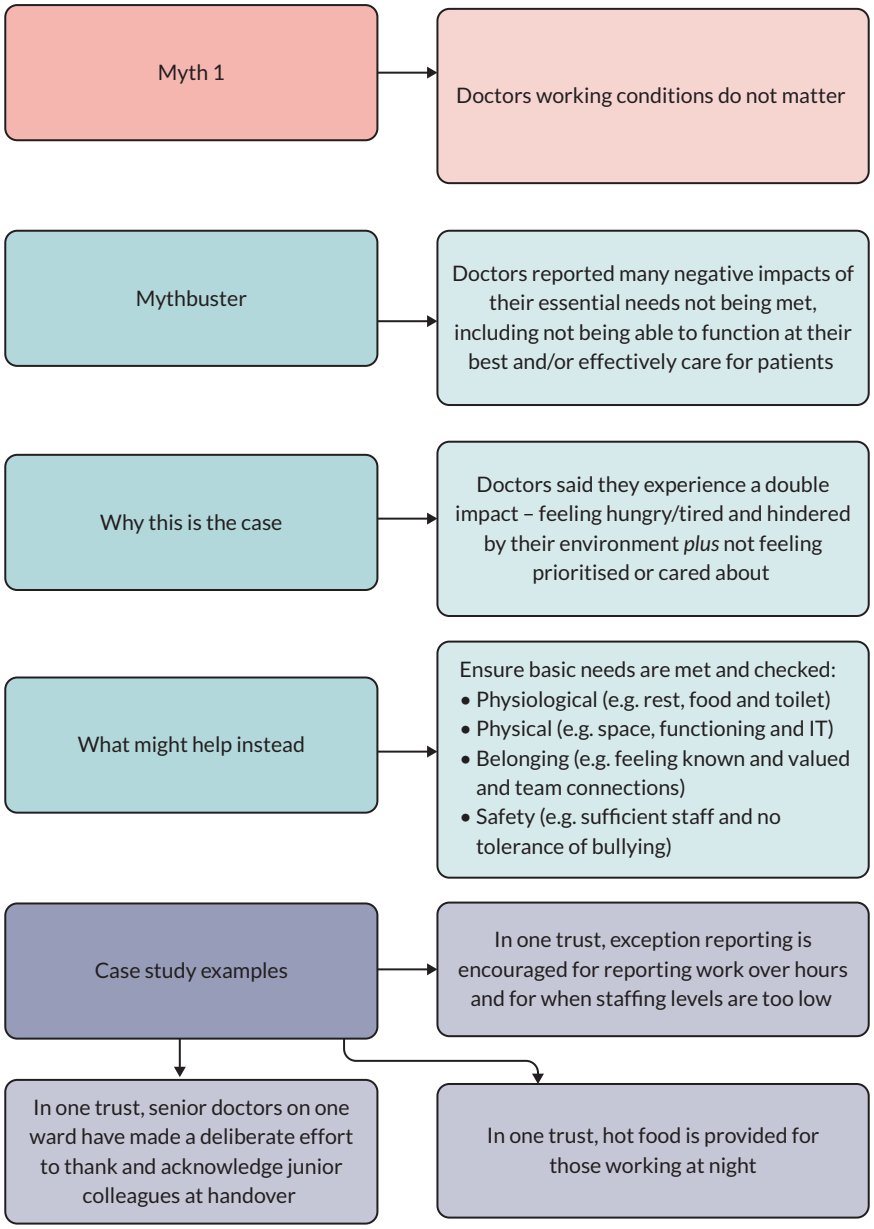

FIGURE 3 Myth 1 draft version.

This project addressed timely gaps in research. First, on a conceptual level, it promoted a multidisciplinary system approach to understand and address the complex problem of doctors' workplace well-being (phase 1). Most interventions and research on doctors (and healthcare practitioners more broadly) are undertaken within disciplinary silos and do not consider the many dimensions (individual, organisational, professional, etc.) that may negatively affect doctors' well-being. In particular, the current emphasis on resilience (and in the COVID-19 period on heroism[28]) tends to place responsibility for well-being with the individual. However, individual-level resilience interventions alone are unlikely to solve such a complex and multidimensional issue.[27,53,54] This project developed a systematic approach to conceptualise, map into different categories and report workplace well-being interventions.[31]

Second, this project applied a multidisciplinary system approach to develop practical evidence-based guidance to support doctors' well-being at work (phases 2 and 3). This addresses the lack of reliable guidance on how to implement recommendations in organisational settings,[2] a problem raised also by recent evidence syntheses covering workplace well-being beyond the healthcare setting, for example,[30] which highlighted a knowledge-to-practice gap.[2,30]

Principal findings per project phase and contribution to existing knowledge

Phase 1

The typology and mapping tool[31] allowed the conceptualisation and/or mapping of interventions into different categories. This promotes much needed rigorous thinking about the nature and purpose(s) of interventions (e.g. whether they are designed to be largely preventative or resolve problems after they have arisen). This is in line with research on causative factors leading to poor well-being in doctors and other healthcare professionals, which shows that there are not only individual but also many organisational and sociocultural factors.[5,15,27] The mapping of interventions to develop this typology and tool also indicated that most publications have not clarified their underlying assumptions about causes and outcomes, or the theoretical basis for the intervention. Overall, the conceptual typology and mapping tool has the potential to raise the quality of future research and of processes to improve or design interventions.

Phase 2

The key findings from our realist interviews were that: workplace well-being solutions need to align meaningfully with problems; doctors need to be involved in creating the solutions; doctors often did not know what support was available and, even when they did, there were physical and psychological barriers to accessing it.

These findings contribute to a growing body of evidence – which includes our previous CUP1 evidence synthesis[1] – recognising that the most common risk and intensification factors to poor well-being and mental health are organisational problems (e.g. high work demands, long working hours, low job control, top-down pressure and unrealistic expectations[30,55]). An important implication is that the still predominant individual-level well-being interventions/strategies (such as resilience training) are ineffective/misaligned – and that organisational interventions are more likely to prevent and reduce poor well-being and to promote well-being at work.[5] Our findings support this research and add an important novel insight, namely that interventions/strategies that are misaligned to the problems they are trying to address are not only ineffective but may also be harmful – contributing to doctors' feeling of physical and emotional isolation, frustration or stress.

Phases 1 and 2 also highlight a number of contrasts between the nature of doctor's well-being interventions reported in existing research and our findings. In particular, our mapping of existing literature in phase 1 identified very few research studies investigating changes in the working environment as a well-being intervention.[31] In addition, we observed that very few of these studies involved doctors in the design of the intervention, while our phase 2 findings identified the importance of doctor involvement in identification of problems and in the creation of solutions.

Phase 3

Building on phases 1 and 2, the 'Workplace well-being MythBuster's guide' challenges widespread misconceptions that act as significant barriers to the improvement of doctors' well-being at work. A key one is that workforce well-being has often been seen by organisational leaders as an optional extra rather than being critically interlinked with organisational performance. This may partially explain the challenges experienced in recruiting leaders with strategic roles in relation to well-being to the phase 2 interviews (see *Results summary*). In other words, the limited engagement of the trust's chief executive officers, Chief Finance Officers and other senior leaders (despite having been invited by the gatekeepers from our trust-specific stakeholder groups) may suggest that they do not see doctor's well-being as central to their role. To promote a different and more systemic view of well-being, our MythBuster's guide draws on and signposts to our empirical work in phase 2, providing examples where small changes, if properly developed and implemented, can create positive results; and it also provides examples of literature that positions staff well-being as critical for tackling workforce issues (e.g. recruitment and retention), improving patient care and reducing cost.[12] In our project protocol,[32] we anticipated that the output of phase 3 (originally envisaged as an 'implementation toolkit' – see also *Results summary*, *Phase 3*) would provide a framework for NHS trust leads, service managers, doctors and other stakeholders to evaluate and improve the effectiveness of their existing strategies. The 'Workplace well-being MythBuster's guide' could be seen instead as a very important part of a wider implementation strategy – such as the NHS Health and Wellbeing Framework.[56]

Strengths and weaknesses

This project has several strengths. Our multidisciplinary and multiprofessional team was a key to our system approach and ideally placed to research the complex issue of doctors' workplace well-being. This was enhanced by the wide and diverse networks of stakeholders engaged with throughout the project lifecycle. Stakeholder input was incredibly valuable and represented many different relevant perspectives, ranging from expert opinions of senior leaders to lived experience from people working in the NHS and end-users. Another key strength was

the three-phase approach, with each phase building on the previous one(s). The first phase enabled a deep-level consideration and development of our IPT for phase 2 based on a significant range of literature sources encompassing diverse research and intervention approaches. This supported the iterative development of our interview topic guide, which in turn led to the collection of rich, in-depth data. Phase 3 then enabled our focus to be also highly practice-based and to develop actionable evidence-based guidance. Combining these three phases within one project has meant that, within a 2-year period, high-quality research evidence has been generated and translated into implementation-ready and actionable guidance. Furthermore, each of the participating trusts has also benefited from tailored guidance, enabling them to recognise the specific features within their setting, which are either well-received or which could be improved to better support the doctor's well-being. The realist methodology was also uniquely suited to integrate the complexity of the topic and the multiple hospital settings we worked with. The realist approach combined with the relatively large sample size of our interviews enabled us to make stronger claims about the transferability of findings than we might otherwise have felt able to do.

As with all research studies, there were also some limitations. Although we sampled for diversity, we worked with eight trusts. Therefore, they may not be representative of all trusts in England. There are also limits to transferability. We suspect that further research would be required to tailor the findings to primary care, mental health or social care settings, for example. It is, however, important to highlight that our stakeholder groups included representatives from primary care and mental health trusts. Attendance of our final (phase 3) national workshops was lower than we anticipated. This may be indicative of the pressures of NHS work, which makes contribution to long meetings difficult even when online. Finally, there were some important perspectives that we were unable to engage meaningfully in the research, most notably, those from trusts' finance teams, so we see this as a priority for future research.

Changes to the project

There were some changes to the project compared to the original bid. All phase 2 interviews took place online. We originally budgeted for half of the interviews to be face to face, but our engagement with trusts during the early stages of phase 2 made us aware that online interviews were more flexible for our participants and more feasible, given the constraints of hospital room bookings and short-notice changes to rotas. This was also facilitated by the fact that online meetings and research interviews have become routine since the start of the COVID-19 pandemic in 2020. Online interviews were complemented by site visits in five trusts (see *Methodology*).

For similar reasons, all our stakeholder meetings were online. We originally budgeted for the AG meetings and the last two national workshops in phase 3 to be face to face – however, online meetings were the preferred options for our stakeholders.

We reduced the number of phase 2 interviews from 160 (i.e. 20 interviews per each of the eight recircuited trusts) to 124 interviews. This was because:

- Theoretical saturation was reached: that is, after circa 106 interviews, with concurrent analysis, we found that interviews were not generating novel insights but were bringing up the same underlying ideas, with variation in the specific details/situations/stories.
- We wanted to minimise burden on participants and trusts: some of the recruited trusts were experiencing additional pressures during winter periods and ongoing industrial action.
- We experienced challenges/delays with recruiting trusts for our study (see *Impact and learning*), so we needed to complete the phase 2 data analysis and start phase 3.

The combination of the above changes (which were approved by the NIHR research management team) generated an underspend, some of which we are planning to use to maximise impact and dissemination activities/outputs (see *Impact and learning*).

Finally, we made some changes of terminology and approach in response to the developing literature and stakeholder engagement, that is, moving from 'mental ill health' to 'workplace well-being' (as described in *Introduction*) and from 'toolkit' to 'Workplace well-being MythBuster's guidance' (as described in *Results summary*).

Patient and public involvement

Our reporting of PPI is informed by the Guidance for Reporting Involvement of Patients and the Public 2 reporting PPI in research checklist.[57] Patient representatives (n = 4), who we see as the secondary beneficiaries of this project (with the first beneficiaries being doctors), were involved in this project as part of the AG (n = 3) and steering group (n = 1). All of them were involved in CUP1 and one of them also in CUP2. In running stakeholder group meetings, we took care to express realist terms and findings in everyday

language to avoid methodological jargon – which is not always accessible to patient representatives and other stakeholders – while still adequately conveying the nuances of our findings. This helped to create the conditions for engaged and inclusive discussions.

Given their previous involvement with the CUP research programme which involved engagement with groups of stakeholders of similar composition to CUP3 – some patient representatives were already familiar with ground rules and the terms of their involvement. The RFs and Daniele Carrieri kept in touch with patient representatives throughout the project – beyond the AG and steering group meetings – to make sure they had opportunities to raise any key issues (e.g. potential power imbalances[58]), or access to online meetings, that needed to be addressed to facilitate meaningful participation. In all the stakeholder meetings, patient representatives provided significant input, often highlighting the importance of doctors' well-being from the point of view of patients receiving care – including the impact of waiting times for medical appointments. They also expressed concern about the challenging working conditions, workplace cultures (e.g. doctors experiencing bullying) and workplaces in which doctors operate – particularly, the importance of safe spaces in the work environment.

The PPI representative's insights contributed to challenging the pervasive idea/'myth' that trusts need to prioritise patient care over doctor's (or staff's) well-being. Not only is this idea predicated on a false dichotomy (doctor's well-being vs. patient care), but PPI repeatedly asserted that patients care about the health of (their) doctors. This is also in line with a CUP1 output, a short video (available at: www.youtube.com/watch?v=pNY9u4CcxwQ&t=1s), in which we asked patients why the health of their doctors is important to them. Responses included: 'I want to get an appointment quickly'; 'A tired, overworked doctor can make errors'; 'Doctors have a right to good health too'.

The plain language summary for this synopsis has been coproduced with patients from our AG.

Critical perspective: What went well and not? What others can learn?

The online modality of the stakeholder meetings increased their accessibility and made it easier for patient representatives (and other stakeholders), who were predominantly not based in Exeter, to attend more meetings and/or with more ease. Several factors contributed to the creation of an engaged and inclusive environment, which facilitated high participation and fruitful discussions. Two key factors were:

- Our use of chat functions and platforms like Padlet (which allowed users to post anonymous comments).
- Our rigorous project team planned ahead of each meeting comprising a clear allocation of roles and responsibilities; for example, facilitation, creation of breakout groups, chairing and note takers for each breakout, separate team member outside breakout to support whoever may experience problems entering breakout rooms, person in charge of chairing the chat function and creating a team WhatsApp group as a separate channel of communication during meetings.

Having largely the same patient representatives involved in CUP1 and CUP3 is a sign of a mutually beneficial partnership and of their interest in and enthusiasm towards this research area. At the end of the last CUP3 AG meeting, one of the patient representatives wrote in the chat 'Always being involved as a patient it's been invaluable to see the result of our ideas and insights'. However, we also recognise that there is a benefit in including more/diverse (patient) voices, including of those who are less familiar with the CUP research programme. In follow-up projects, as well as renewing our invitation to the same PPI representatives, we will endeavour to expand the patient representative membership and ensure that different patient voices are represented. We will seek advice from the Peninsula Public Engagement Group at the University of Exeter about how best to do this.

Equality, diversity and inclusion

Equality, diversity and inclusion underpins our research at both a conceptual and methodological level, as it inter-relates with our complexity/system approach, the nature of the problem we are investigating and our recruitment strategy.

On a conceptual level, EDI can significantly influence staff well-being and mental health. Workplace cultures that promote EDI enhance staff's sense of belonging and well-being, lead to better performance and act as a buffer to work stressors. This is linked to a significant body of evidence, spanning from team/individual psychological safety[59] to a compassionate leadership,[60] and our own previous CUP research.[2] Conversely, workplaces with poor EDI policies and cultures perpetrate 'mental health inequalities'[61] and can lead to/intensify staff's feeling of isolation and work dissatisfaction, which are significant causative factors for the experience, or intensification, of poor mental health.[2]

One of our findings was that the initiatives that involved doctors in creating solutions could better address well-being problems (see *Results summary*, *Phase 2*). From both an EDI and system-level perspective, it is important to highlight that this does not mean that solving well-being issues at work should be doctors' responsibility, but instead, that their views need to be included in shaping solutions. In line with the concept of 'critical allyship'[34] – which has been used in relation to promoting system-level approaches to address health inequalities – if the issue of doctors' well-being (like any structural/complex health issue) is seen exclusively as a problem faced by doctors (i.e. the groups in a disadvantaged position), then response strategies will not be effective as they will not redress the structural aspects causing the issue – and may even risk to be harmful (see *Phase 2* in *Results summary*). A real commitment to improvement entails the development of a shared vision across the organisation and the breaking of organisational silos.[62] Therefore managers, leaders and other 'critical allies' must take responsibility for this, including prioritising doctor's well-being and providing time and resources to implement solutions.

The language and terminology we adopted, for example, 'workplace well-being' and our broad definition of 'intervention', are also an important element of the structural EDI approach we are proposing. Our language and terminology reflect our aim to include a wide array of experiences and strategies, from promoting well-being to addressing mental health problems – going beyond individual-level only and potentially stigmatising approaches, recognising that mental health is more than the absence of disorder and that structural elements, such as the workplace, play a strategic role in promoting staff well-being (see also CMOcs about psychological barriers to access support – *Appendix 3*). In the original CUP3 grant and, at an early stage into the project, we used 'mental ill health' (in line with literature in the area[15]). We think that the term 'workplace well-being' is more in line with our approach and broad understanding of what 'interventions' entail. The decision to move to the more inclusive 'workplace well-being' term was also informed by discussions among the team and with our advisory and steering groups (see *Methodology*), and it was corroborated by recent research in this area.[30]

The AG, stakeholder meetings and steering groups also alerted us about the importance of terms used to define different groups of doctors. For example, based on specific stakeholder feedback, instead of using 'consultants', we have referred to 'senior doctors' to be more encompassing of the range of senior roles held, including SAS doctors. We are also ensuring that our 'MythBuster guide' includes examples that apply to doctors outside of training as well as to those on a formally defined training pathway. These considerations informed the language used to communicate our findings and recommendations, in our outputs, and it also informed our inclusive recruitment strategy for phase 2 interviews (see also *Methodology*, *Phase 2*). We worked closely with the CRN and with the local stakeholder groups at the recruited trusts to ensure we were recruiting participants to represent a variety of roles, backgrounds and genders. Given that our project was designed to support the improvement of well-being, it was particularly important to us that we minimised any burden on those supporting us with recruitment. For example, our decision to undertake interviews online was influenced by our aim to minimise the burden on the participants and trusts, allowing interviews to occur outside working hours if more convenient to our participants. It also quickly became apparent in our early conversations with trust stakeholders that they would struggle to find and organise a room or suitable interview space. While we achieved some success in recruiting doctors inclusively, we found it more difficult to recruit trusts leaders with strategic roles in relation to well-being (e.g. finance departments). To involve this group of stakeholders, we are planning a CUP3 output dissemination webinar with invitations to leaders, and a tailored summary will be written specifically for senior leaders.

Members of our AG noted, in one of the early meetings, the lack of ethnic diversity of the AG and that many of them had a senior role/general practitioner (GP) background. This prompted us to invite more trainee doctors to the AG and to collecting demographic data to support inclusive interview recruitment in phase 2 (*Table 4*). Our AG had little representation from trust managers – however, these roles were more represented in the stakeholder groups in the recruited trusts and in the national workshops during phase 3 of the study. The involvement of two academic clinical fellows (ACFs) in our project (see *Impact and learning*) allowed us to be more connected with current experiences of doctor trainees working in the NHS.

Our multidisciplinary, multiorganisation team also reflects our complexity/system approach. The team includes researchers from different relevant disciplines/backgrounds, including medical education, social sciences, occupational psychology, education, realist methods and implementation science, and medical doctors from different specialities and career stages also beyond secondary care (e.g. primary care and psychiatry), and different geographical areas. Having these multiple perspectives significantly enriched the rigour and quality of our analysis, and the formulation of our findings/recommendation using a language that is more likely to resonate with our diverse target audiences, and

their priorities – thus increasing the overall impact. For example, having representatives of doctors from different career stages/specialties/backgrounds – in our team and stakeholder groups – gave us the opportunity to appreciate more fully the frustrations around working conditions around the pandemic and NHS industrial action.

Within phase 2 of our study, we collected demographic data from participants through self-reported surveys (see *Table 3*) in order to check that our recruitment was broadly as reflective as possible of the diversity within the NHS workforce. This identified that the proportion of those interviewed who identified as White was at very similar levels to those within the NHS (73% in our study vs. 74.3% nationally).[63] The gender mix of interviewees showed a slightly lower proportion of female interviewees compared with the NHS workforce overall (71% female in our study vs. 77% NHS).[64] While these figures indicate broad comparability with the overall workforce, it should be noted that comparisons are challenging, given that our participants represented specific elements of the workforce (hospital doctors plus a range of those in support and leadership roles).

Impact and learning

Short-term impacts of this project

Our academic outputs, to date, include two publications (and a third under review – see *Box 1*) in high-impact peer-reviewed journals, several presentations at national and international conferences and in NHS/hospital settings (see *Additional information*). Although it is difficult to predict the impact of academic publications, our publications have achieved online attention and engagement due to our promotion on social media and via our research groups/networks. For example, at the time of writing this synopsis, the typology paper was in the top 10% of outputs ever tracked by Altmetric, and the protocol paper was in the top 25% and had been downloaded over 2900 times.

Our continued engagement with stakeholders throughout the project has facilitated an ongoing two-way knowledge exchange with a wide range of NHS postholders as well as those with an academic interest in doctor's well-being, both regionally and nationally. Besides stakeholders contributing to our project, we have provided tailored communications of our project findings to several influencers and key decision-makers, locally and nationally. While this difference can be hard to quantify, we are already aware that the typology paper has been adopted by University of Exeter Medical School and Organisational Psychology educators as part of the course material for their 2023–4 teaching activities. We have shared our CUP3 research and publications in different settings, including academic and clinical/NHS, topic-specific conferences, for example the International Practitioner Health Summit, and events with a different remit, for example an educational session on healthcare professionals' well-being at the European Human Genetics Conference, The Royal Society of Medicine. This allowed us to contribute to our specific research field and to raise general awareness about the importance of healthcare professionals' well-being.

Medium-/longer-term impact

We hope that our publications will also achieve impact over the longer term (3–5 years) through informing the agenda for debate and action in health services and in public policy more widely. For example, the typology paper may contribute to the improvement of quality and reporting of workplace intervention research. Apart from the 'core project work' (the key publications related to the funded research components – see *Box 1* and this synopsis), we are developing additional project-related outputs. This is because, we are committed to helping the NHS improve doctors' well-being in the workplace. Throughout the lifecycle of the project, we have been thinking about and started developing different types of related outputs and a multipronged dissemination strategy – with input from our various stakeholders (see *Methodology*). These related outputs translate our findings into actionable guidance/materials that can contribute to the improvement of doctors' well-being.

In the following text, we share our plan for related outputs, starting from those we outlined in the project grant. We then mention additional ideas to maximise dissemination and impact (drawing on project underspend), which were not mentioned in the grant as they have been informed by the progression of the project. Our dissemination funds will be used in the 2 years from the end of the project (June 2024), and we continue to refine our plan based on our resources and ongoing consultation with stakeholders. These ideas have been discussed and agreed with the HSDR programme manager.

Related outputs and dissemination plan outlined in the project grant

Workplace Well-being MythBuster's guide for NHS leaders, service managers and doctors (see *Results summary*). This evidence-based guidance to improve doctors' mental health and well-being is aimed at NHS trusts in England. In the grant, we used the term 'implementation toolkit', but we have changed this in light of stakeholder feedback (see *Results summary*). This guide will achieve impact over the medium term to longer term (1–5 years), once policy-makers, NHS managers/leaders and organisations

supporting doctors are able to implement changes and evaluate the impact of those changes. We plan to host this guide on a *website*, making it freely available and accessible to those seeking to improve doctor's well-being both nationally within the NHS and beyond. While the guide was developed with the NHS in mind, we anticipate that many of the recommendations will be useful for those seeking to support doctors and other healthcare staff in a range of settings and locations, given the ubiquitous problem of healthcare workforce well-being.

We will organise a *national webinar* for the launch of our website and the MythBusters's guide (see below), which will be a further opportunity to share our findings.

NHS trusts site reports, providing tailored and actionable guidance to improve the delivery of interventions to improve doctors' mental health and well-being in the eight recruited NHS trusts. Alongside circulating electronic copies to our trusts, we are also planning to print these reports and send them to strategic contacts at each trust (e.g. the trust board). As a result of teams' discussions and consultation with stakeholders, we are planning to share this report when the MythBusting guide is completed – so that the recruited trusts receive their report alongside practical guidance to support them in implementing any changes.

Innovative outputs

Following the positive feedback received on the use of cartoons as an innovative form of dissemination in CUP1, we are working again with the same graphic artist (Ian Williams), who is both a GP and a comics artist to translate some of our findings into *cartoons*. This will help to disseminate our MythBusting guide more widely and increase engagement with and maximise the visibility of our findings.

To help promote our findings, we are also planning to develop a short (3 minutes, max) *video reel* about the CUP3 project.

We will be developing *plain English summaries and other tailored summaries* to convey the research findings tailored to different audiences (e.g. patients, NHS trusts' Chief People Officers, NHS trusts' finance leads, health service managers, medical educators and policy-makers). This will achieve impact in the short term to medium term (1 month–2 years) by providing a meaningful summary of findings that will increase stakeholders' recognition and understanding of the issue and how evidence can inform the actions they can take.

Throughout the project, we have been adopting a *media engagement strategy* to raise awareness on the topic area and promote visibility of and engagement with the project and our outputs. Our strategy combines several components, which include:

- planned and regular posts on the project Twitter (Twitter, Inc., San Francisco, CA, USA)/X page (reposted by personal team members, university and other strategic profiles, e.g. our stakeholders) to engage with relevant audience and signpost to our project and outputs (e.g. the project website and Twitter/X profiles are linked)
- participation in relevant podcasts
  - 'Wellbeing in Medical Education' TASME Time Talks in Medical Education (2022) Podcast available here: https://open.spotify.com/episode/3hqD9Qy7A27rq1XPvSYvWX (accessed 3 June 2025).
  - NHS Practitioner Health Wellbeing Podcast on uncertainty in health care and the mental health of the workforce. Podcast available here: www.justgiving.com/page/alison-pearson-1716149968072 (accessed 3 June 2025).
- writing opinion pieces in high profile relevant outlets:
  - Melvin A. How can we make life better for doctors in postgraduate training? *BMJ Careers* 2023. https://doi.org/10.1136/bmj.p1783 (accessed 3 June 2025).
- participation in relevant charity initiatives
  - Doctors in Distress #5KInMay fundraising to support doctors and raise awareness about our research [see here: www.justgiving.com/page/alison-pearson-1716149968072 (accessed 3 June 2025)].

We sought input from our stakeholders and communications officers at the University of Exeter to refine this strategy. This is achieving impact in both the short term and long term by raising awareness, informing public and professional understanding and stimulating debate on a large scale, changing how the issue is understood at a policy level, mobilising public opinion and professional action informed by the findings. For example, as a result of our media engagement strategy, we were contacted by the Chief Executive of the Society of Occupational Medicine in the UK, who asked permission to use the CUP1 cartoons in the July 2023 The Society of Occupational Medicine (SOM) guide 'Burnout in healthcare: risk factors and solutions'.[65]

Additional plans to maximise dissemination and impact include

Create a *healthcare and public facing website* to host our *Workplace Well-being MythBuster's guide* and other clinical/public-facing outputs produced as part of CUP3 and the wider CUP research programme. We already have a CUP3 and general CUP research programme website, https://sites.exeter.ac.uk/careunderpressure/, which is targeted to an academic audience and archives our outputs, news, social media feeds and provides information about project team members. Engagement with our stakeholders (see *Results summary*, *Phase 3*) made us acutely aware of the importance of developing easily accessible/user-friendly guidance and informed our decision to create a separate healthcare/public-facing website to host our outputs, which are more relevant for these groups, in a user-friendly way. This will maximise access and adoption of the Workplace Well-being MythBuster's guide and any future project outputs. Our CUP research programme and public-facing websites will be interconnected, so NHS users who are interested in seeking more information on the CUP research programme (e.g. a full list of conference presentations and publications) can easily access the academic website.

A *national webinar* to launch our *public-facing website* and *MythBuster's guide*. We plan to promote the webinar across our wide networks to reach all groups of beneficiaries (see *Methodology*) and to invite strategic national stakeholders (from our advisory and steering groups, and from our growing networks, e.g. trusts' Chief People Officers) to endorse our guidance. This format was adopted very successfully in the CUP2 project. This webinar will achieve impact in both the short term and long term by raising awareness, informing public and professional understanding and stimulating debate on a large-scale, changing how the issue of doctors' well-being in the workplace is understood at a policy level, mobilising public opinion and professional action to take action informed by the findings.

Lessons learnt

It was challenging to recruit the eight trusts, and subsequently, there was a lengthy process to set up the study waiting for research and development (R&D) approvals and further challenges in recruiting participants. This was due to several factors, including the heavy research ethics R&D approval processes operating in trusts (with a lack of proportionate approaches for qualitative studies that may not require the same procedures as a clinical trial), the continued pressures faced by trusts in the 4 years immediately following the pandemic and the ongoing industrial action.

Having a senior member of the CRN as part of our steering group was helpful as we were navigating the Health Research Authority (HRA) research ethics approval process and crucially setting up studies and recruitment in trusts. We had regular (fortnightly/monthly – depending on need) meetings with the CRN for some of phase 1 – when finalising the HRA Research Ethics application, and for most of Phase 2, to support sampling and recruitment of trusts and recruitments of participants. Having costed two full-time research fellows allowed us to hire one full-time and two part-time research fellows. Having three RFs who had exceptional management skills helped enormously to undertake a significant number of interviews and site visits in a way that was flexible to our participants.

Overall, our multidisciplinary and multiprofessional team played a key role to the success of this project as already mentioned in *Methodology*. Involving ACFs in the project (e.g. attending regular team meeting and collaborating to specific work packages and testing interview guides) provided 'everyday' exposure to clinical relevance/different medical specialties – which was an invaluable 'sense check' throughout the project. This collaboration was mutually beneficial, as it strengthened our project and outputs and also offered valuable research experience/training (including coauthoring publications) to the ACFs.

Related work

- How do shared social spaces impact the wellness and learning of junior doctors? A realist evaluation (ASME board award 2022 – ongoing).
- Multidisciplinary collaboration for impact project working with school teachers and leaders to coproduce a teacher well-being toolkit.
- The use of appreciative inquiry in transformational leadership.
- Developing medical education interventions to support doctors-in-training to develop more positive responses to clinical uncertainty.
- Menopause at work scoping review.
- The impact of rotational learning.

Future funded work

- NIHR School for Primary Care Research Funded project 'Primary Care Under Pressure to map the provision of staff well-being strategies and interventions for the primary care workforce in England' (from July 2024).
- NIHR HSDR-funded project 'Understanding why junior doctors leave the NHS and what can be done to retain them: a realist synthesis' (from February 2025).

NIHR HSDR programme workforce research partnerships

- 'Staff Well-being: Innovative partnerships to enable staff to care well under pressure and thrive at work' (from March 2025).

Future grants under review

- NIHR application 166409 Improving workplace learning of junior doctors in the National Health Service: realist analysis of existing national data and co-design of implementation tools with Acute Trusts [Call: New research on skills, training, development and support for the health and social care workforce (research for patient benefit programme – under review)].

Implications for decision-makers

Our research evidence suggests that trusts should be encouraged to follow the points discussed below.

Prioritise doctors' well-being as an essential prerequisite for patient care

Our research has highlighted that doctor's well-being is not an indulgence or optional extra, but an essential prerequisite to patient care. Prioritising doctors' well-being is therefore not only an important part of good employment practices and staff safety but also a critical element of high-quality service delivery. This is in line with the idea of quadruple aim[12,66] (see also *Introduction*). National-level decision-makers can influence trust behaviour, through both funding and regulatory and inspection frameworks, and need to recognise doctor's well-being as an embedded element of good working practices. Our evidence shows that some of the changes needed are inexpensive, but there are additionally system-level resourcing implications for policy-level decision-makers (e.g. having sufficient numbers of doctors to enable appropriate rest and time off work and having adequately resourced mental health support services to enable prompt referral).

Prioritise improvements in doctors' working environments as the primary way to improve well-being

Doctors in our research extensively reported that their working environment is adding additional stress through their essential needs not being met and due to systemic issues in the workplace [such as poor information technology (IT) and lack of a workspace] acting as a barrier to their work. This causes a double impact on well-being – the impact of the need itself not being met, and/or doctors experiencing additional work, *plus* doctors feeling frustrated, uncared about and not valued, and this in turn impacts on their ability to care for patients.

Evidence from our research shows that the essential needs that are often not being met include:

- physiological needs: including adequate rest, breaks within the working day, access to suitable and sufficient food and hydration, toilet breaks and sufficient sleep
- physical environment needs: such as space to work, functioning IT systems, space to put belongings and rest spaces
- social/belonging needs: team connection and belonging, being known by colleagues, feeling recognised and valued
- safety needs: physically and psychologically safe work environments and sufficient staffing levels.

In many cases, doctors reported multiple types of need that were regularly not being met within the working environment, which was negatively impacting on their well-being.

Therefore, in order to improve doctor's well-being, attention and priority needs to be given to ensuring that these needs are addressed as fully as possible. Examples of improvements reported to make a difference were often relatively simple and inexpensive.

Avoid offering specific well-being 'add-ons' (e.g. yoga and resilience training) without addressing the fundamental working conditions

Our research found that well-being 'add-ons', such as stress management and resilience training, are more likely to worsen, rather than improve, doctor's well-being if no steps are taken to address the underlying problems within doctors' working conditions. Our evidence shows that offering additional activities under the guise of well-being (such as yoga, resilience training or animal visits) did not solve the fundamental problems within their workplace. Instead, being offered these activities as a 'solution' to well-being resulted in doctors feeling frustrated, undervalued and that their problems were not being acknowledged, listened to or taken seriously.

Seek doctor input into interventions and initiatives that are intended to improve their well-being

Evidence from our research showed that where the doctor voice is listened to and taken into account, the resultant solutions are more likely to result in solutions which address

workplace problems. By contrast, where interventions had been initiated, designed and implemented by those distant from doctors' working conditions, these were more likely to create a mismatch between the problem and solution.

Our research indicates that the type of doctor input that is needed can be wide-ranging. It can include creating mechanisms to find out from doctors what the key problems are and to listen to their suggested solutions. It can also include enabling senior doctors to make decisions for their team which positively support well-being, provided they have the capacity and resources to do this. The key factor is that those experiencing or near to experiencing the problems are most likely to understand the underpinning issues and recognise the solutions needed.

Clearly communicate the specific support available to doctors experiencing poor well-being or mental ill health

Our research found that while hospitals often had support available for those experiencing difficulties with their mental health and well-being, doctors were often unsure about the support available, or how they might go about accessing it.

There needs to be a clear communication of the specific support available to doctors experiencing poor well-being or mental ill health, including practical information such as how doctors access this, how many sessions they might have and which types of support are available for which type of problem.

Make it much easier for doctors to access the help they need to improve their mental health

Our evidence shows that doctors experience physical and psychological barriers to accessing specific help to support their mental health, and we therefore recommend that hospital trusts seek to remove/reduce these barriers.

In order to reduce physical barriers, mental health support options need to be available in ways that are compatible with doctors' working hours and places of work. This includes a level of flexibility within the support offer, which can be tailored to different doctors' circumstances. These support options also need to be offered in a timely way so that it is more likely that problems can be solved before they become serious.

In our research, psychological barriers to accessing support were associated with both the perceived stigma and the potential for adverse consequences of accessing support, including the impact on progression for those doctors in the earlier stages of their careers. Steps to reduce this include more open discussion of the challenges that doctors face and encouragement from senior staff to access help when it is needed.

Research recommendations

Future research recommended from this study includes the following priority areas:

1. Testing our programme theory within other healthcare settings, such as primary care, mental health care and social care and in other countries.

Our data collection took place within acute hospital trust settings in England and identified 21 CMOcs within those settings. Research in other healthcare settings, both in England and internationally, would help to identify any common CMOcs across healthcare settings as well as any differences. This would be helpful in gaining a further understanding of the explanatory reasons for well-being interventions which might best support health and social care professionals. Given that poor well-being and burnout have been enduring, 'wicked' problems among those in caring professions, applying our research findings to new settings will help to add to knowledge about both theory and practice related to well-being.

2. Exploring specific implications for early career doctors to better understand how workforce well-being interacts with education.

Early career doctors (those who have not yet reached a permanent senior role such as GP or consultant) are relied on as a significant part of the workforce providing patient care. At the same time, they need to develop their skills and knowledge (whether or not on a formal training programme) through workplace-based learning. During our research, we noticed that elements of this training and competence development impact on doctors' well-being, and vice versa. Given this complex inter-relationship, this is an area which warrants further research investigation specifically addressing the intersection between education and training and workplace well-being.

3. Health economic studies of well-being interventions (ideally, at systems level).

This is an area of urgent need, as there is a paucity of research that examines the cost–benefit implications of well-being interventions. Given the financial pressures faced by healthcare settings, both in England and

internationally, healthcare leaders need to have the evidence they need to direct funding towards the most fruitful approaches. Our research indicates that some of the positively received interventions were low cost, and it is therefore likely that even low levels of investment targeted in the right way could have many positive impacts. Health economic studies would also help to identify the value of larger-scale investment to improve doctors' working conditions compared with the cost of recruiting and training new doctors (including the costs of undergraduate and postgraduate medical education) and the costs of doctor's absence through sickness.

4. Investigating mechanisms for involving doctors in coproduction of workforce improvements and well-being interventions.

Given that we identified a scarcity of studies that included doctors in the design of interventions, and also that seeking doctor input was seen as key to the success of interventions, this would be a fruitful area to explore within future research studies. There are different models and levels of involvement and engagement of end-users, and investigation of different mechanisms as they apply to doctors within busy healthcare settings would help to advance the understanding of the conditions and context needed. Such engagement needs to be part of a system approach. Therefore managers, leaders and other 'critical allies' must take responsibility for prioritising doctor's well-being and providing time and resources to implement solutions.

Conclusions

Since existing workplace support strategies for doctors often have a limited effect, this study aimed to work with, and learn from, diverse hospital settings to understand how to optimise strategies to improve doctors' workplace well-being and reduce negative impacts on the workforce and patient care. We undertook rigorous, applied research working closely with key stakeholders, generated important insights that help to understand the problem and solutions and created practical tools that will impact positively on research and practice.

Our key findings were that: (1) solutions needed to align with problems to support doctor's well-being and avoid harm to doctors; (2) involving doctors in creating solutions was important to address their well-being problems; (3) doctors often do not know what well-being support is available and (4) there were physical and psychological barriers to accessing well-being support.

We have created and published a typology of doctor's well-being interventions and a mapping tool for use by hospitals. We have presented the work in various fora and will continue to do so in the coming year. We are developing a 'Workplace well-being MythBuster's guide', eight tailored reports for participating trusts, cartoons, a video and tailored short summaries of the research.

We conclude by highlighting that misaligned well-being solutions are not just neutral but also cause significant harm to doctors. Improvements to working environments must be prioritised, instead of well-being 'add-on's, and doctors and other relevant staff must be involved in identifying and addressing problems.

Additional information

CRediT contribution statement

Daniele Carrieri (https://orcid.org/0000-0002-3143-8430): Conceptualisation (equal), Writing – original draft (lead), Writing – reviewing and editing (lead), Investigation (supporting), Formal analysis (supporting).

Alison Pearson (https://orcid.org/0000-0003-4341-1267): Investigation (lead), Data curation (lead), Formal analysis (lead), Writing – reviewing and editing (supporting).

Anna Melvin (https://orcid.org/0000-0002-9096-0923): Investigation (lead), Data curation (lead), Formal analysis (lead).

Charlotte Bramwell (https://orcid.org/0000-0001-8430-7867): Investigation (lead), Data curation (lead), Formal analysis (lead).

Jason Hancock (https://orcid.org/0000-0002-6342-9555): Conceptualisation (supporting), Writing – reviewing and editing (supporting), Investigation (supporting), Formal analysis (supporting)

Chrysanthi Papoutsi (https://orcid.org/0000-0003-1189-7100): Conceptualisation (equal), Writing – reviewing and editing (supporting), Investigation (supporting), Formal analysis (supporting).

Mark Pearson (https://orcid.org/0000-0001-7628-7421): Conceptualisation (equal), Writing – reviewing and editing (supporting), Investigation (supporting), Formal analysis (supporting).

Geoff Wong (https://orcid.org/0000-0002-5384-4157): Conceptualisation (equal), Writing – reviewing and editing (supporting), Investigation (supporting), Formal analysis (supporting).

Karen Mattick (https://orcid.org/0000-0003-1800-773X): Conceptualisation (equal), Writing – reviewing and editing (supporting), Investigation (supporting), Formal analysis (supporting).

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Data-sharing statement

The data from this research are not available for sharing for ethical reasons. Due to the sensitive and confidential personal accounts given by participants, it was not possible to protect participants' identities while retaining the value of the data. Any queries should be addressed to the corresponding author.

Ethics statement

Ethical approval was obtained from the NHS Research Ethics Committee (REC reference number 22/WA/0352) on 22 December 2022. As part of the conditions for our ethics approval, the sites included in our study will remain anonymous. We have therefore been careful to amalgamate categories in our description of trust and participant characteristics within both our research paper and trust-specific guides. We have also selected examples and quotes which do not include any identifier information (either at a trust or doctor level) and have not included photographs in any of our outputs.

Information governance statement

The University of Exeter is committed to handling all personal information in line with the UK Data Protection Act (2018) and the General Data Protection Regulation (EU GDPR) 2016/679. Under the Data Protection legislation, the University of Exeter is the Data Controller, and you can find out more about how we handle personal data, including how to exercise your individual rights and the contact details for our Data Protection Officer here: www.exeter.ac.uk/departments/cgr/ig/. The university's Research Privacy Notice is available here: www.exeter.ac.uk/about/oursite/privacy/research/.

Disclosure of interests

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at https://doi.org/10.3310/PASQ1155.

Primary conflicts of interest: Daniele Carrieri is a member of the selection committee of the NIHR's Undergraduate Internship Programme. Mark Pearson has been member of the HSDR Funding Committee from 1 January 2019 to 31 January 2022 and HS&DR Funding Committee (Bevan) from 1 November 2020 to 31 January 2022. Geoff Wong has been Deputy Chair of the UK's National Institute of Health Research Health Technology Assessment Prioritisation Committee: Integrated Community Health and Social Care Panel (A) and a member of Methods Group (A). Karen Mattick is a member of the funding committee for the National Institute for Health and Care Research (NIHR)'s HSDR programme.

Department of Health and Social Care disclaimer

This publication presents independent research commissioned by the National Institute for Health and Care Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, MRC, NIHR Coordinating Centre, the Health and Social Care Delivery Research programme or the Department of Health and Social Care.

This synopsis was published based on current knowledge at the time and date of publication. NIHR is committed to being inclusive and will continually monitor best practice and guidance in relation to terminology and language to ensure that we remain relevant to our stakeholders.

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Award publications

This synopsis provided an overview of the research award *Care Under Pressure 3: optimising the delivery and impacts of interventions to reduce hospital doctors' mental ill-health in the NHS*. Other articles published as part of this thread are:

Pearson A, Carrieri D, Melvin A, Bramwell C, Scott J, Hancock J, *et al*. Developing a typology of interventions to support doctors' mental health and wellbeing. *BMC Health Serv Res* 2024;**24**:573. https://doi.org/10.1186/s12913-024-10884-6

Bramwell C, Carrieri D, Melvin A, Pearson A, Scott J, Hancock J, *et al*. How can NHS trusts in England optimise strategies to improve the mental health and well-being of hospital doctors? The Care Under Pressure 3 (CUP3) realist evaluation study protocol. *BMJ Open* 2023;**13**:e073615. https://doi.org/10.1136/bmjopen-2023-073615

For more information about this research please view the award page www.fundingawards.nihr.ac.uk/award/NIHR132931.

Additional outputs

Melvin A, Pearson A, Carrieri D, Bramwell C, Hancock J, Scott J, *et al*. Support for hospital doctors' workplace well-being in England: the care under pressure 3 realist evaluation. *BMJ Qual Saf* 2025 Apr 11. https://doi.org/10.1136/bmjqs-2024-017698

Thriving Together: Elevating Healthcare Wellbeing Summit 2024 (February 2025, England, rescheduled).

Care Under Pressure workshop, Regional Occupation Health Meeting (October 2024, England).

First, do no harm: the Care Under Pressure 3 realist evaluation of hospital doctors' wellbeing. Wellmed conference, October 2024, Greece.

How can NHS Trusts optimise strategies to improve the mental health and wellbeing of hospital doctors? The Care Under Pressure 3 study. International Practitioner Health Summit: The Wounded Healer, June 2024, England.

'The Care under Pressure experience' Educational Session on 'Mental Health in Academia and Healthcare', The European Human Genetics Conference, June 2024, Germany.

Resilience of health care professionals: lessons from care under pressure. The University of Queensland Australia and University of Exeter UK joint webinar, March 2024.

How can hospitals optimise strategies to improve the mental health and wellbeing of doctors? The Care Under Pressure 3 study. January 2024. Health professions education and wellbeing: global contemporary challenges. University of Exeter – University of Toronto Wilson Centre joint webinar.

Beyond mindfulness: taking a systems perspective on wellbeing interventions at work. University of Exeter, Graduate School of Education June 2023, England.

Care Under Pressure: optimising the delivery and impacts of interventions to reduce NHS professionals' mental ill-health. December 2023, England. Keele School of Medicine's Scholarship Conference. Video of the presentation and conference programme here: https://sway.cloud.microsoft/3p1pFv4LXVGHdO9m?ref=Link.

'Care Under Pressure 3: reduce hospital doctors' mental ill-health in the NHS'. This was delivered at the The South West Acute Physicians Organisation conference, November 2023, England.

Everything … about research training session. Devon Partnership NHS Trust, Webinar. November 2023.

'Fatigue and burnout in health care staff', Fatigue: a tiring problem. The Royal Society of Medicine, Webinar October 2022.

About this synopsis

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List of supplementary material

Report Supplementary Material 1 Care Under Pressure 3 Site specific Trust Report

Supplementary material can be found on the NIHR Journals Library report page (https://doi.org/10.3310/PASQ1155).

Supplementary material has been provided by the authors to support the report and any files provided at submission will have been seen by peer reviewers, but not extensively reviewed.

Any supplementary material provided at a later stage in the process may not have been peer reviewed.

Glossary

Workplace well-being We use this term to cover a broad array of experiences from promoting well-being across all doctors to supporting those with mental ill-health problems. This is in line with or system approach and recent workplace research drawing on World Health Organization definition which emphasises that mental health is more than the absence of disorder and also includes well-being and thriving.

Intervention This refers to a wide range of potential support offerings, including those that improve workplaces (e.g. monitoring well-being, rotas, culture change, physical spaces, hydration, parking, team working and mentoring schemes); those that improve staff resources (e.g. mindfulness, stress management training, skills training and physical health improvement) and those that resolve problems after they have arisen (e.g. counselling, physiotherapy, debt advice and domestic abuse helplines).

Acute National Health Service trusts Hospital trusts that provide secondary care services (and which may encompass more than one hospital site).

Initial programme theory Often used in realist investigations as an initial attempt to frame and understand for whom, how, why complex interventions work (less) well.

List of abbreviations

ACF	academic clinical fellow
AG	advisory group
CMOc	context–mechanism–outcome configuration
CRN	Clinical Research Network
CUP	Care Under Pressure
CUP1	Care Under Pressure 1
CUP2	Care Under Pressure 2
CUP3	Care Under Pressure 3
GMC	General Medical Council
GP	general practitioner
HRA	Health Research Authority
HSDR	Health and Social Care Delivery Research
IMG	international medical graduate
IPT	initial programme theory
NIHR	National Institute for Health Research
PPI	patient and public involvement
R&D	research and development
RE-AIM	Extended Reach, Effectiveness, Adoption, Implementation and Maintenance
SAS	Specialty and Associate Specialist

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Appendix 1

The realist interview topic guide is provided as supplementary data of our published protocol

Bramwell C, Carrieri D, Melvin A, Pearson A, Scott J, Hancock J, *et al*. How can NHS trusts in England optimise strategies to improve the mental health and well-being of hospital doctors? The Care Under Pressure 3 (CUP3) realist evaluation study protocol. *BMJ Open* 2023;**13**:e073615. https://bmjopen.bmj.com/content/bmjopen/suppl/2023/11/09/bmjopen-2023-073615.DC1/bmjopen-2023-073615supp001_data_supplement.pdf

Topic guide

Care Under Pressure 3.

Introduction to the interview

Thank you for taking part in this interview. The purpose of this research is to evaluate existing approaches to supporting doctors' well-being at work within the trust. When we talk about 'supporting doctors' well-being', we are referring to a wide range of potential interventions, approaches or initiatives, including individual, group, team, organisational and national changes, not just individual ones. For example, this might include policies, changes to working conditions, environments or practices, services for well-being, stress management training, counselling services, etc. Similarly, when we say 'well-being', we recognise that this can refer to a wide range of experiences, from serious mental ill-health problems to positive work experiences.

We will not be asking specifically about your personal experiences relating to mental health, so please do not feel that you have to share these, but also please feel free to draw upon them if you want to. We will be focusing on the trust's support for doctors, with the aim of understanding what is working well (or not) and why, including how this varies for different people or in different settings.

We will use our research findings to make practical and realist recommendations that will benefit doctors in the NHS. Ultimately, we are trying to understand how to optimise the approaches that are already being offered by the trust (and where needed) and suggest alternative options.

Notes for interviewers

- If participants are not familiar with their trust's activities, then ask about department/team/local initiatives.
- If 'Trust' is not meaningful to the participant, then phrase as trust/hospital/department/team, etc.

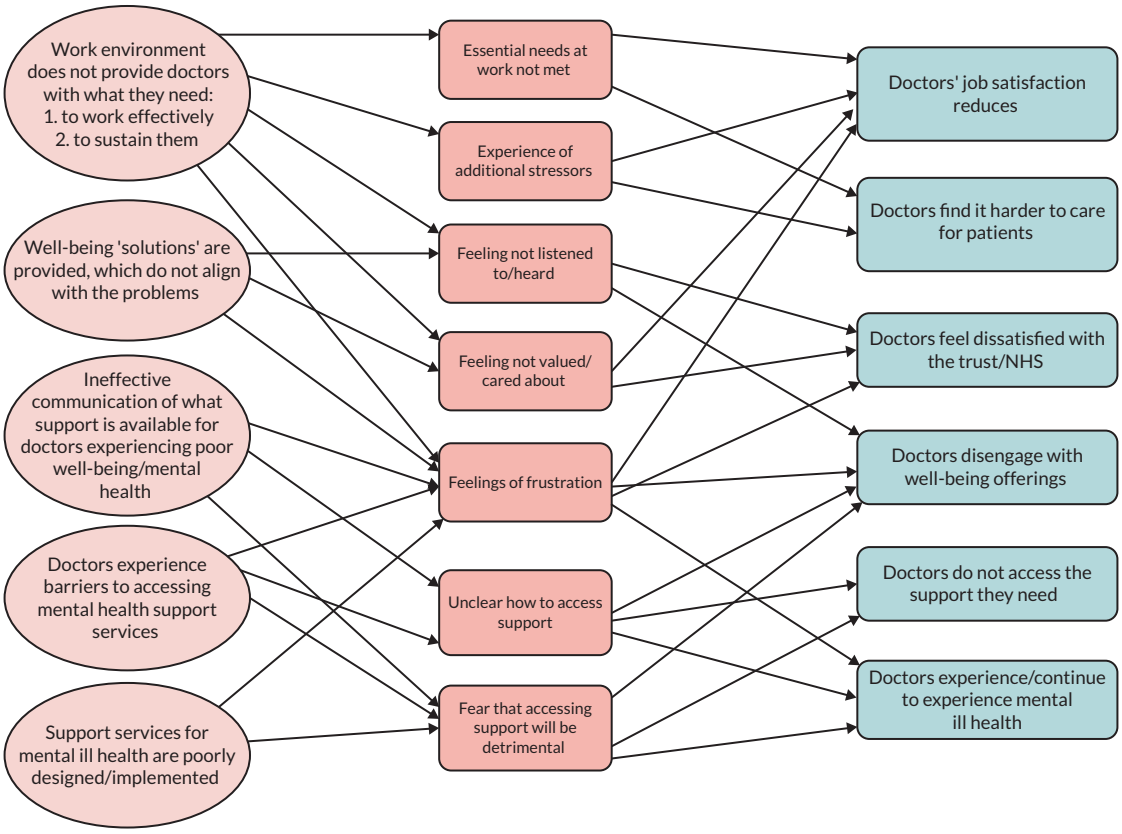
Opening	1. Are you doing this interview during your working hours?
	2. Which hospital(s) do you work at within the trust?
	3. What interested you in taking part in the study?
Perceptions of well-being	4. What does 'well-being' mean to you?
	a. E.g. for some people it might mean finding meaning and satisfaction in their work, while for others it might relate more to reducing mental ill health
	b. Why is doctors' well-being important?
	5. What kinds of things influence doctors'/your well-being at work? Why?
Organisational culture	6. What's it like working here? Why?

	7. How much of a priority is doctor's well-being within the trust? a. Could you give me an example to illustrate that? b. Do you think other people in the trust would agree? Why/not? c. How does your trust monitor if doctor's well-being is improving/declining?
Well-being strategy	8. Who are the people responsible for well-being in your organisation? *For those with well-being roles:* a. How did you come to be the well-being lead/take on this well-being role? b. What interests you about well-being and why? c. What is included within your well-being role? d. What support and resources (including budget, what committees they sit on, senior buy-in and back up) do you receive for your role? e. Please tell me about any protected time you receive for the role *For those not in well-being roles:* f. How do those in well-being roles find out about what you need? g. How could they find out about your needs? h. How do you get to find out about what changes they make? *Filter question to see if applicable:* ***What knowledge do you have of the trust's strategy to supporting doctors' well-being at work?*** 9. How would you describe the trust's approach to supporting doctors' well-being at work? a. Can you give any examples? b. e.g. it might include policies, changes to working conditions/environments/practices, services for well-being, stress management training, counselling services, etc. c. Do you know how any of these interventions are funded? d. To what extent were staff involved in designing or deciding the approach? e. Please give me an example of informal things happening in the workplace to support well-being
Well-being interventions	10. What kinds of things have worked well to promote better experiences at work for doctors? a. Can you give any examples? b. What it is about it that helps doctors' well-being? c. Which doctors might benefit from this do you think? d. Can you tell me about any combinations of interventions that (might) work well together in supporting doctors' well-being? 11. What would happen here if a doctor was experiencing difficulties with their mental health? a. Can you give any examples? b. What would happen if a doctor was having difficulties with their physical health? c. If a doctor was experiencing problems in their personal life, would there be any kind of help for that? d. What approaches have worked well to help doctors who are struggling with their mental health/well-being? 12. Please tell me about any approaches that you do not think were helpful in supporting well-being? a. Can you give any examples? b. What was it about it that was not helpful? 13. Please tell me about anywhere else that doctors might go to get support outside of the trust?
Closing	14. If you had a magic wand, what would you do to ensure workplace well-being? Why? a. What barriers are there to making the changes that you have suggested? (e.g. financial or time costs) 15. Is there anything else you would like to add?

Appendix 2

Programme theory

Graphical representation of final programme theory, focusing on the negative aspects of outcomes since these were more prevalent in the data.



Appendix 3

Phase 2: context–mechanism–outcome–configurations with exemplar quotation

The CMOcs with supporting evidence derived from the realist interviews with eight trusts. In presenting the findings, we sometimes reworded the examples of interventions and strategies from trusts and removed or paraphrased identifying aspects of quotes from interview participants (shown in square brackets [...]) to preserve anonymity. Where a single quote can cover the complete CMOc well, only one quote is provided. After the quote, the participant identifier is given, which comprises a unique number plus a suffix (D – doctor; S – support role; DS – joint doctor/support role; L – leadership role).

Number	CMOc	Supporting evidence (exemplar quote(s) in italics)
1	When doctors' essential needs are not met at work (C), they may feel that their needs are not prioritised or cared about by the hospital trust (M) worsening their well-being (O)	'*You have to get the basics right first before you start your well-being because otherwise you undermine the well-being. [But] they're invisible to anyone in any sort of management position because people assume the basics are covered. Having paper in the printer, or paper that is accessible out of hours when we do lots of our printing, having hand towels to dry your hands, having somewhere to store your lunch, somewhere to change if you cycle to work, somewhere you can sit and have a coffee with a colleague [or] a room you can meet your trainees in if there's a problem*'. Participant 707. D
2	When doctors' essential needs are not met at work (C), or the working environment hinders their work (C), additional stresses may be experienced (M), making it harder for doctors to care for their patients (O), leading to reduced job satisfaction (O) and worsening their well-being (O)	'*Our doctors' office on the ward at present is a little cupboard. It has no windows, it has two computers, so you literally sit like next to each other, like, shoulder to shoulder [. . .] we don't have a workspace that's conducive to good work. [And] that feels really frustrating, because it feels like that should just be a given. Like if you need to pick up the phone, you're not [thinking] 'Which phone can I use?'. Given so much of our job is being on the computer or being on the phone, it feels like there should be plenty of resources available for you to be able to do that. [It] feels completely broken [and] actually trying to support doctors with the job they have to do would go such a long way, way more than any support [and] resources for well-being*'. Participant 211. D
3	When doctors are offered well-being solutions that are misaligned with the causes of problems (C), they perceive these offerings as tokenistic and superficial (M), causing them to disengage with well-being initiatives (O)	'*I feel it's quite half-hearted. They're going, "Oh, look, there's these things you can do. Aren't we nice?". But they're not addressing the real issues of [the] workforce crisis, the hours [and] pressures being unsustainable, the rota gaps, all of those things that actually cause us strain and stress. And the attitudes of certain doctors who are bullies, it's just done as a "Oh look, we've gone cold water swimming"*'. Participant 804.D '*I don't think petting a dog, or a donkey, or a parrot, is going to help with my problems, and I think to try and suggest that it does is embarrassing. I don't want to go to a cake sale, I don't want to have my feet massaged, I just want somebody to make my day-to-day job as efficient and easy as it can be. So, fix the IT, that would help with my wellbeing*'. Participant 314.D
4	When doctors are offered misaligned solutions (C), they feel they are not being listened to or understood by leaders (M), resulting in feeling unvalued, frustrated and dissatisfied (O) and/or worsened well-being (O)	'*So often they've got their rather expensive but useless idea. So, I think every department will send a box, the little goodie bag for like wellbeing. Basically what was in the goodie bag was a teabag and a biscuit and some card or whatever. [It's] really insulting [and] if they did that for every single person in the hospital, that must have cost quite [a lot of] money and just . . . annoyed people. You know, honestly, they got it all wrong, you don't need that. You're not preschool children. The other thing was that someone actually thought it was a good idea*'. Participant 214.D
5	Doctors' well-being is improved (O) when the work environment supports them (C) and allows them to carry out their role effectively (C) because their psychological needs for autonomy, relatedness and competence are satisfied (M)	'*In the department I'm in, we have enough juniors that you don't feel like your entire job is service. You get opportunities to learn. And because of that [it means] that one day where you're not going to be in, it's not going to cause a department to collapse*'. Participant 413 '*For junior wellbeing, the consultant team wellbeing is really important, I think, because you learn from them, you take your cues from them, and they set up this culture*'. Participant 803.D
6	When the working patterns and environment enable doctors to rest, eat and drink and sleep appropriately (C), their physiological needs are met (M) and their well-being is improved (O)	'*There is an appropriate staff room [which] gives a place for you to relax, with mugs, with hot water supply, with tea supply. There are vending machines so you can get food if you need a snack. There's a bed, with an actual mattress and easy access to sheets that you are allowed to sleep in, and there's a computer, easily accessible. Which just means that I can have efficient, high output work without having to spend half an hour looking for a computer to log into to start working on*'. Participant 509.D
7	When well-being solutions are linked to and tackle identified workforce issues (C) they are more likely to align with problems (O), have a preventative/proactive focus (O) and be considered favourably by doctors (O), because they are more likely to focus on addressing the underlying causes that impact on well-being (M)	'*[Having] the ability to talk through what you need and making reasonable adjustments makes an enormous difference to people and can potentially stop them from becoming totally overwhelmed. And that's really powerful in terms of [. . .] feeling connected to the people you work with and feeling held by your organisation. And then that kind of buy in and loyalty helps with staff retention and, you know, all those other challenges as an organisation*'. Participant 203. S

Number	CMOc	Supporting evidence (exemplar quote(s) in italics)
8	When those responsible for doctors' well-being improvement engage with doctors to understand the issues that they experience (C) and are supported by senior leadership to find solutions to well-being problems (C), they are able to make meaningful changes based on doctor input (M), so solutions are better aligned to the problems (O)	'*We went through a bit of a phase of slightly gimmicky wellbeing interventions which thankfully seem to have disappeared now. [. . .] We've introduced some new systems. We've introduced some new people that have significantly reduced the amount of work that the junior doctors have to do, so they're no longer being over-whelmed. And we've taken away the bleep [because] they were being pulled in 101 different directions. We've got someone who triages the bleeps and then just gives them the jobs [which has] had a huge impact and a lot of that has come from the junior doctors. They told us what the problem was and we've got a brilliant chief registrar who is leading that piece of work and is continuing to make improvements to the functioning of the hospital out of hours*'. Participant 204.L
9	When senior doctors are supported to identify and make local changes to improve well-being (C) and have sufficient resources and authority to make changes (C), they may perceive that they have greater agency to make change (M) and develop local solutions that improve well-being (O) and create a positive local culture (O)	'*[At] the beginning of Covid, I arranged for a psychologist who does some [deanery] work so people could self-refer through to them because our colleague support line wasn't very well set up. And at that stage, doctors were really hesitant to use the colleague support line. And then I [/we did] a lot of promotion around the colleague support line, and we have noticed the numbers of senior doctors referring themselves has increased*'. Participant 202.D.S
10	When doctors are not enabled to make local changes (C), they can feel frustrated and demoralised (M), worsening their well-being (O)	'*I think over the years, when you come up with ideas, if they get shot down, you reach a point where you think "It's not worth it, can't be bothered. It's just a waste of breath". So eventually you just think "Well, what's the point?" [and] you think "Well, I'll put my energy and focus into other things where, actually, I know I'm going to get good, positive results"*. Participant 414.D '*I think it's very control and command and hierarchical, and it doesn't give people to space to work independently, and be creative, because of this multilayered thing you've got to go through to get things signed off and . . . yeah, it's frustrating, I find it frustrating*'. Participant 703.S
11	Solutions are likely to be better aligned to the problems that influence well-being (O) when those initiating changes/interventions have time allocated to engage with feedback and design interventions (C) because they are able to think through the problem and identify appropriate solutions (M)	'*You know, we hear pockets of team activities, that somebody has an interest so they take the lead, certainly in areas such as critical care, ED, where you'll get an individual who has a passion, so they try and do that team level support. [But] from what I'm hearing, everybody is just too busy just trying to survive their day, and that ability, to do some blue sky thinking, or to take time out to put some mechanisms in place, I don't believe there's much opportunity to do that*'. Participant 711.S
12	When people do not have sufficient time allocated to engage with and address feedback (C), then they are less able to think through the design interventions and potential implications (M), so solutions are more likely to have unintended consequences (O)	'*We spend two minutes talking about the problem, then jump to a solution, and then work out how we're going to implement the solution. And what I think increasingly I'm finding is that if you can fit in there [and as a group, say] "Let's stop thinking of solutions, let's really define the problem" and again, that's something for leadership support, then you're much more likely to find the right solution*'. Participant 202.D.S
13	When there are clear and confidential processes for raising and resolving concerns and problems (C), doctors feel heard and valued (M), supporting their well-being (O) and/*or* positive perceptions of the organisation (O)	'*I mean, our department has [these] support forums that will happen every now and then, and we can anonymously raise our concerns and frequently we have (a) workplace championship meeting, so we can discuss [. . .] any concerns. Fortunately, I never had a very bad encounter, [but] I know that when something is being raised, that is being addressed. I know a few occasions where that has been addressed and it has been resolved*'. Participant 516.D
14	When processes for raising issues have repercussions for doctors (C), they feel frustrated, unsafe and/or victimised and also not listened to (M), so well-being is worsened (O) and/or doctors disengage from processes for raising issues (O)	'*Before starting, I heard from people "Don't exception report because then they kind of you know, they just write a response basically saying that you're incompetent, and it's your own fault that you're having to stay overtime". [And] my supervisor gets a report when I exception report as well (so) I'm not getting anything out of doing this, you know, it's just that I'm painting a target on my back [as] either troublemaker or lazy doctor who can't, you know, do [their] job properly*'. Participant 610.D

Number	CMOc	Supporting evidence (exemplar quote(s) in italics)
15	When there is no clear communication about the support available to doctors who experience poor mental health or well-being (C), doctors feel unclear about where to go/how they might be supported (M), so they are less able and willing to seek support when needed (O)	'*And then there is kind of like a [directory] of available things. But I find it quite difficult to navigate in terms of it's like all resources for all staff within [the trust and] that doesn't just cover [my area], and it doesn't just cover doctors, and it can be hard sometimes to figure out is that [a resource] that's actually useful to me. And then if it is does it work in times that I'm not [working and] how do I access it? Do I have to make a phone call and it's going to be a half an hour hold time or, you know, things like that. It feels like there are a lot of steps to actually finding the support you need*'. Participant 211.D
16	When doctors have a clear sense of who or where to go to for support (C), they feel secure knowing support is available if needed (M) and are more likely to seek support if needed (O)	'*When we have our meetings with our educational supervisors, or clinical supervisors, there's a checkbox they have on our form which asks "Are you aware of the wellbeing services" or 'Who you should speak to if there are any issues?" So I think there's a wellbeing service within the hospital, and if there were any issues I could contact my educational supervisor, and he's also said that to me before as well, so yeah*'. Participant 513.D
17	When doctors have supportive relationships with their colleagues (C), others can recognise when the doctor is not themselves (M) and offer support to them (O)	'*I've found my experience with my educational supervisor has been fantastic. He's very attentive, and he actually realised I was struggling before I even realised I was struggling, because he's got that experience of working with new doctors. I don't know how that goes as you work your way up the ranks but I think at the beginning they want you to adopt a good work-life balance and good wellbeing from the start*'. Participant 811.D
18	When solutions are not designed with doctors' working patterns and environments in mind (C), doctors are less likely to engage with offers (O), because they perceive these to be inconvenient and inaccessible (M)	'*[The well-being weeks run by the well-being team are] probably not positive for doctors and nurses, and that's because a lot of the stuff [. . .] would be on at 10 o'clock in the morning. There's an opportunity to do yoga (but) the nurses absolutely can't leave the ward and the doctors are all stuck on a ward round, so that's fab [said ironically]. So it actually felt like there was this offer [. . .] that we then couldn't go to, which almost felt like "You're not important. What we actually care about is the people in offices who are able to do that"*'. Participant 302. D.S
19	Doctors feel safe to engage with support solutions (O), when there are no perceived negative repercussions from accessing them (C), because this minimises the potential risk of accessing support (M)	'*[The well-being] support thing's really good, and it's quite nice that it's not directly linked with the hospital as well, because there's still a stigma around it, so you don't want to be like, you know, walking around and seeing someone that has helped you around the hospital, because it probably feels like they're coming into your space*'. Participant 811.D
20	When support offerings are designed to protect confidentiality (C), doctors feel are more willing to access them (O) because they feel safe to do so (M)	'*I have in the past accessed PHP [an external NHS Practitioner Health Programme], and a mindfulness programme. All of which I thought were very useful, and which, as far as I'm aware, remained confidential, and didn't get discussed with anybody in my department, or training leads or anything like that*'. Participant 110.D
21	When doctors receive incomplete and/or insufficient well-being support (C), they may feel frustrated with the service provided (M) and/or regret engaging with well-being services/solutions (O) and/or may experience worsened well-being (O)	'*He was like "We can only offer four sessions" [of psychotherapy] because they have a waiting list. And I thought "Gosh, like, just as I'm getting to the peak of what I'm, you know, feeling, and it just ends". He himself said "A lot of people find it more beneficial when they have a few months of this". And so four sessions just wasn't really going to cut it, so I kind of just left it, really. I don't know who thought that was a good idea, to be honest*'. Participant 415.D