

# Interventions to minimise doctors' mental ill-health and its impacts on the workforce and patient care: the Care Under Pressure realist review

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## Scientific summary

### Care Under Pressure realist review

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# Scientific summary

## Background

The growing incidence of mental ill-health in health professionals, including doctors, across specialties and throughout careers is a major issue in many countries. For example, in the UK, 39.8% of respondents to the 2018 NHS staff survey indicated that they had been unwell in the past 12 months because of work-related stress. Key outcomes associated with mental ill-health in doctors include presenteeism (doctors working despite being unwell); absenteeism (doctors taking sickness leave frequently, which could result in gaps in the service); and workforce retention issues (doctors leaving the NHS either temporarily or permanently). It is increasingly clear that presenteeism can lead to negative outcomes for patients and the impact of absenteeism and workforce retention problems is evident in the rota gaps and vacant positions reported by health-care organisations. There is a growing and increasingly urgent interest among health-care organisations in understanding and addressing the issue of mental ill-health in doctors. Although there is a large literature on interventions that offer support, advice and/or treatment to sick doctors, this evidence base has not been synthesised in a way that takes into account the complexity and heterogeneity of these interventions, and the many dimensions (e.g. individual, organisational, sociocultural) of the problem. Our research addressed this gap.

## Aim and objectives

This research aimed to improve understanding of how, why and in what contexts mental health services and support interventions can be designed to minimise the incidence of doctors' mental ill-health. The main objectives were to:

- conduct a realist review of interventions to tackle doctors' mental ill-health and its impact on the clinical workforce and patient care, drawing on diverse literature sources and engaging iteratively with diverse stakeholder perspectives to produce actionable theory
- produce recommendations that support the tailoring, implementation, monitoring and evaluation of contextually sensitive strategies to tackle mental ill-health and the impact that it has.

## Review questions

- What are the processes by which mental ill-health in doctors develops and leads to its negative impacts, and where are the gaps that interventions do not address currently?
- What are the mechanisms, acting at individual, group, profession and organisational levels, by which interventions to reduce doctors' mental ill-health at the different stages are believed to result in their intended outcomes?
- What are the important contexts which determine whether or not the different mechanisms produce the intended outcomes?
- What changes are needed to existing and/or future interventions to make them more effective?

## Methods

A realist review can synthesise relevant data found in qualitative, quantitative and mixed-methods research. By using an interpretive, theory-driven approach to analysing data from diverse literature sources, realist reviews move beyond description to provide findings that coherently and transferably

explain how and why contexts can influence outcomes. This is particularly relevant to complex programmes characterised by significant levels of heterogeneity, such as those intended to reduce mental ill-health in doctors. The plan of investigation followed a detailed protocol based on Pawson *et al.*'s five iterative stages for realist reviews: (1) locating existing theories, (2) searching for evidence, (3) selecting articles, (4) extracting and organising data and (5) synthesising the evidence and drawing conclusions (Pawson R, Greenhalgh T, Harvey G, Walshe K. *Realist Synthesis: An Introduction*. ESRC Research Methods Programme. Manchester: University of Manchester; 2004). We also engaged iteratively with a stakeholder group to provide content expertise, for feedback on and refinement of our programme theory and to coproduce non-academic outputs.

## Data sources

The search strategy was run on a selection of bibliographic databases that index medical and psychology literature, including MEDLINE, MEDLINE In-Process and Other Non-indexed Citations and PsycINFO (all via Ovid), and Applied Social Sciences Index and Abstracts (ASSIA) (via ProQuest). These searches were performed in December 2017. As our review was particularly focused on the UK context, we supplemented bibliographic database searches with targeted searches that aimed to retrieve UK-based studies. Forwards and author citation searches were conducted on UK studies identified by the bibliographic database searches using Scopus and Web of Science. Backwards citation searching was conducted manually by inspecting the reference lists of UK studies identified by the bibliographic database searches. Journals were also hand-searched, with a UK focus, via the relevant journal websites, including the *British Medical Journal* and *BMC Medicine*.

## Study selection

We applied the following inclusion criteria:

- topic – all studies that focused on one or more of mental ill-health, presenteeism, absenteeism or workforce retention
- study design – all study designs
- types of settings – all health-care settings
- types of participants – all studies that included medical doctors or medical students
- types of intervention – interventions or resources that focus on improving mental ill-health and minimising its impact
- outcome measures – all mental health outcomes and measures relevant to its impacts (e.g. absenteeism, presenteeism and workforce retention).

## Data extraction

The analysis was driven by a realist logic. We sought to interpret and explain mechanisms causing mental ill-health in doctors and medical students (with a particular focus on presenteeism, absenteeism and workforce retention), and to identify relevant contexts or circumstances when these mechanisms were likely to be 'triggered'. We simultaneously sought to identify 'guiding principles', features underpinning the interventions and recommendations discussed mostly in policy documents, reviews and commentaries.

## Data synthesis

We used abductive and/or retroductive reasoning, particularly to infer and elaborate on mechanisms (which often remained hidden or were not articulated adequately). This means that we followed a

process of constantly moving from data to theory, in order to refine explanations about why certain behaviours are occurring and tried to frame these explanations at a level of abstraction that could cover a range of phenomena or patterns of behaviour.

We sought relationships between contexts, mechanisms and outcomes, not only within the same included study, but across different sources (e.g. mechanisms inferred from one study could help explain the way contexts influenced outcomes in a different one). Synthesising data from different sources was often necessary to compile context–mechanism–outcome configurations, as not all parts of the configurations were always articulated in the same source.

## Results

Of the 3069 records identified by the main searches, 179 articles met the inclusion criteria and were included in the study. The country most represented in the included studies was the USA (45%), and 74% of included studies had been published in 2009 or more recently. Most of the included articles were research studies, but there were also some expert opinion and policy documents. More included articles focused on structural (33%) than individual interventions (21%), but a large number of articles (46%) considered both levels together. Most interventional studies were preventative, rather than considering treatment or screening. Less than one-quarter of included sources (19%) provided cost information. Of these, costs in 5 of 179 (3%) sources were quantified, 24 of 179 (13%) sources contained unquantified narrative claims and 6 of 179 (3%) sources contained a mix of quantified costs and unquantified narrative claims. No included sources reported a health economic analysis. Finally, most studies referred to doctors or physicians in general, rather than focusing on specific specialties or career stages.

Our realist analysis developed and refined 19 context-mechanism-outcome configurations in the data set. This analysis demonstrated that doctors are more likely to experience mental ill-health when they feel isolated, when they feel unable to do the job they were trained for and when they fear the repercussions of seeking help and support (this was demonstrated in context–mechanism–outcome configurations 1–6). Interventions that emphasised relationships and belonging (e.g. to a health-care team or to the profession of medicine) were more likely to promote well-being and improve workplace cultures (this was demonstrated in context–mechanism–outcome configurations 7–11). It was also clear that the health and well-being of staff was important in itself, and was a necessary precondition to excellent patient care. Interventions that created a people-focused working culture that recognised this important link between doctors' and patients' health and well-being, balanced positive and negative performance and promoted doctors' learning from both. In addition, acknowledging the positive and negative aspects of a medical career helped doctors to thrive at work and deal with work pressures (this was demonstrated in context–mechanism–outcome configurations 12–15). Finally, we found that the way that interventions were implemented was critically important. Doctors needed to have confidence in an intervention, and those delivering it, for the intervention to be effective, but this trust was easily lost (this was demonstrated in context–mechanism–outcome configurations 16–19).

## Conclusions

We conclude that evaluating and improving existing interventions is likely to be more effective than developing new ones. Our evidence synthesis provides a basis on which to do this. Supportive working cultures at all stages of training are needed in order to emphasise the importance of looking after one's own health, to normalise discussions of struggle in the context of challenging work, to recognise the positive and negative aspects of medical careers, and to understand how and when to seek help.

It is also clear that complex problems require complex solutions; thus, successful interventions to tackle doctors' mental ill-health are likely to be multidimensional and multilevel and to involve multiple stakeholders. Involvement of stakeholders and end-users in the design and implementation of interventions is likely to help ensure that they fit with local priorities and working routines. Endorsement from leadership and/or other relevant levels of the organisation will probably increase the success rate of an intervention. Given the likely range and complexity of strategies available to doctors at different stages of mental ill-health, which may be tailored to different contexts, doctors may also need to be guided through the system.

## Future research

- To build on the work presented here to evaluate and refine interventional strategies that have been already implemented, or design, implement and evaluate new interventional strategies. This might use a realist evaluation approach or a complex intervention trial approach.
- To develop more sophisticated outcome measures, to reflect the complexity of this multifaceted, multilevel problem and demonstrate change over time.
- To undertake formal health economic analyses of the problem of doctors' mental ill-health, and of the associated interventions.

## Study registration

This study is registered as PROSPERO CRD42017069870.

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