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## 'Care Under Pressure': a realist review of interventions to tackle doctors' mental ill-health and its impacts on the clinical workforce and patient care

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# 'Care Under Pressure': a realist review of interventions to tackle doctors' mental ill-health and its impacts on the clinical workforce and patient care

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## Abstract

**Introduction:** Mental ill-health is prevalent across all groups of health professionals and this is of great concern in many countries. In the UK, the mental health of the National Health Service (NHS) workforce is a major healthcare issue, leading to presenteeism, absenteeism and loss of staff from the workforce. Most interventions targeting doctors aim to increase their 'productivity' and 'resilience', placing responsibility for good mental health with doctors themselves – and neglecting the organisational and structural contexts that may have a detrimental effect on doctors' wellbeing. There is a need for approaches that are sensitive to the contextual complexities of mental ill-health in doctors, and that do not treat doctors as a uniform body, but allow distinctions to account for particular characteristics, such as specialty, career stage, and different working environments.

**Methods and analysis:** Our project aims to understand how, why and in what contexts support interventions can be designed to minimise the incidence of doctors' mental ill-health. We will conduct a realist review – a form of theory-driven interpretative systematic review – of interventions, drawing on diverse literature sources. The review will iteratively progress through 5 steps: 1) locate existing theories; 2) search for evidence; 3) select articles; 4) extract and organise data; 5) synthesise evidence and draw conclusions. The analysis will summarise how, why and in what circumstances doctors' mental ill-health is likely to develop and what can remediate the situation. Throughout the project, we will also engage iteratively with diverse stakeholders in order to produce actionable theory.

**Ethics and dissemination:** Ethical approval is not required for our review. Our dissemination strategy will be participatory. Tailored outputs will be targeted to: policy makers; NHS employers and healthcare leaders; team leaders; support organisations; doctors experiencing mental ill-health, their families and colleagues.

## Strengths and limitations of this study

- This is the first realist review of interventions to tackle the pressing problem of mental ill-health in doctors.
- Most published literature to date has tended to focus on workplace interventions aimed at increasing doctors' 'resilience', placing responsibility for good mental health with doctors themselves, and neglecting the organisational and structural contexts that may have a detrimental effect on doctors' wellbeing.
- A realist review approach accounts for the complexity and many dimensions (e.g. individual, organisational, socio-cultural) of the problem of mental ill-health in doctors, and for particular characteristics, such as specialty, career stage, different working environments.
- The engagement of different audiences (e.g. policy makers, doctors, healthcare leaders) in refining the programme theory will support the development of contextually-sensitive strategies to tackle mental ill-health in doctors.
- Only studies published in the English language will be included.

## Introduction

*'The most tragic thing in the world is a sick doctor'*

G. B. Shaw 'The Doctor's Dilemma' (1).

### **A universal truth: no health without a *healthy* workforce**

'A universal truth: no health without a workforce' is the compelling title of a 2013 World Health Organisation's (WHO) report on how the availability of healthcare staff underpins efforts to implement universal health coverage (2). For the purposes of our research, we wish to expand this 'universal truth' to argue that there can be no health without a *healthy* workforce.

Because of its centrality to the delivery of excellent, equitable, and increasingly complex healthcare (due also to biomedical innovation, ageing populations and the increase in multi-morbidity), the clinical workforce is a focus of interest both globally, and at the level of individual countries (3-5). However, like the abovementioned WHO report, most of this research is driven by quantitative measures such as supply and demand projections based on demographics, disease incidence, and the anticipated need for clinical workforce – but does not pay sufficient attention to an equally important factor: the clinical workforce's wellbeing (6).

Nevertheless, the wellbeing of the clinical workforce is becoming a major healthcare issue – and this is shown by the growing incidence of mental ill-health (e.g. stress, burnout, depression, drug and alcohol dependence, and suicide) across all groups of health professionals, and in many countries (7-11). A 2014 study conducted by the American Medical Association and Mayo Clinic researchers reported that 54% of physicians in the US

1  
2  
3 are experiencing professional burnout – a higher rate than other professions (12). Suicide  
4  
5 rates are also high: a review of four decades of studies on physician’s suicide estimated that  
6  
7 the chances of dying by suicide are 70% higher than the general population for male  
8  
9 physicians and 250-400% for female physicians (13).

10  
11 The wellbeing of clinical workforce is not only an important issue in itself, but can  
12  
13 significantly impact workforce projections, the cost of healthcare, and the quality of the care  
14  
15 received by patients (6). The ‘Triple Aim’ of improving the health of the population,  
16  
17 improving patient experience, and reducing cost, is a widely adopted guidance to optimise  
18  
19 healthcare services’ performance with rising patient needs, financial constraints, and  
20  
21 workforce projections (14). Bodenheimer and Sinsky argued for the importance of adding to  
22  
23 this triad the ‘Fourth Aim’ of *improving the work life of healthcare professionals* – noting  
24  
25 how the positive engagement of the clinical workforce is key to achieve the health of the  
26  
27 population (i.e. the ‘First Aim’) (15). Similar arguments underpin recent calls for  
28  
29 internationally coordinated research efforts to develop evidence based strategies to tackle  
30  
31 the high incidence of mental ill-health among healthcare professionals at a global level (16,  
32  
33  
34  
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36  
37 17).

38  
39  
40  
41  
42 In the UK the mental health of the National Health Service (NHS) workforce is of particular  
43  
44 concern (18-22). In 2015 the Head of Thought Leadership at the King’s Fund declared that  
45  
46 stress levels among NHS staff are “astonishingly high ” and require to be treated as a “public  
47  
48 health problem” (23). In a similar vein to the international literature sketched above, the  
49  
50 recent 2017 Lord Select Committee’s report on the sustainability of the NHS and Adult  
51  
52 Social care (24) states that “the absence of any comprehensive national long-term strategy  
53  
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60

1  
2  
3 to secure the appropriately skilled, well-trained and committed workforce [...] represents  
4  
5 the biggest internal threat to the sustainability of the NHS" (p.35).  
6

7 When faced with mental ill-health, healthcare professionals may feel they have to continue  
8  
9 caring for patients despite their own difficulties (presenteeism)(25-27), or they may have to  
10  
11 take sickness leave, which could result in gaps in the service (absenteeism)(28), or leave the  
12  
13 NHS either temporarily or permanently (workforce retention)(29-32). Although mental ill-  
14  
15 health is prevalent amongst all groups of healthcare professionals working in the NHS, our  
16  
17 research focuses on doctors across specialties and career stages. This focus reflects the  
18  
19 current recruitment and workforce retention issues (e.g. doctors-in-training, general  
20  
21 practice, emergency medicine), the significant potential for sick doctors to inadvertently  
22  
23 cause harm to patients, and the financial implications of doctors' mental ill-health (8, 21).  
24  
25  
26  
27

### 28 **Why are doctors particularly at risk of mental ill-health?**

29  
30 Peer-reviewed and grey literature highlights a large number of individual, occupational, and  
31  
32 broader causative risk factors leading to mental ill-health which operate at a socio-cultural  
33  
34 level (29, 33, 34).  
35  
36

37 Overall, such factors include: the emotionally demanding nature of the profession (28, 35);  
38  
39 the increasing workload resulting from attempting to provide more, and higher quality, care  
40  
41 on shrinking budgets (36); systems of clinical governance which are leading to loss of  
42  
43 autonomy and erosion of professional values (37); rigid organisational structures and  
44  
45 inflexible working hours (38) and; highly bureaucratic professional regulatory systems (e.g.  
46  
47 appraisals, revalidation, quality inspection visits etc.) (39). Doctors are also at higher risk  
48  
49 than the general population to develop addiction and substance misuses because of their  
50  
51 knowledge of and access to drugs, and potential to self-medicate (18). All these factors may  
52  
53 be intensified by a doctors' tendency to avoid seeking help and support when unwell or  
54  
55  
56  
57

1  
2  
3 under pressure (40, 41), and by a perceived stigma amongst doctors around mental illness  
4  
5 (10, 42).

6  
7 The factors associated with mental ill-health and decisions to leave the medical profession  
8  
9 have been described as heavy workload, long working hours, high levels of regulation and  
10  
11 scrutiny, perceived reduced autonomy and fear of complaints and negligence claims (29,  
12  
13 30). Presenteeism in doctors may be underpinned by a fear of career repercussions, a fear  
14  
15 of letting down colleagues and patients, the difficulties of arranging cover, a failure to  
16  
17 prioritise their own health needs and a failure to recognise their own vulnerability to illness  
18  
19 (22, 43). It seems that doctors may feel pressurised by collective norms to be present but it  
20  
21 is currently unclear whether this varies at different career stages or in different specialties.  
22  
23  
24

### 25 26 **Current interventions and gaps**

27  
28 There is a large literature on interventions that offer support, advice and/or treatment to  
29  
30 doctors living with mental health difficulties, and that addresses the associated impacts such  
31  
32 as presenteeism, absenteeism and workforce retention (31, 34). Most of this literature  
33  
34 tends to focus on workplace interventions aimed at increasing doctors' 'productivity' and  
35  
36 'resilience', placing responsibility for good mental health with doctors themselves (21, 44,  
37  
38 45). Such a tendency – which mirrors broader socio-political strategies and discourses (46,  
39  
40 47) – neglects the organisational and structural contexts that may have a detrimental effect  
41  
42 on doctors' wellbeing. This can potentially aggravate work-related pressure, leading to  
43  
44 mental-ill-health.  
45  
46

47  
48 Some scholars suggest that interventions should focus on organisational support and  
49  
50 systemic factors contributing to mental ill-health, rather than on individual doctors (22) –  
51  
52 highlighting the need to think in terms of 'organisational resilience' (45).  
53  
54

55  
56 From a systems level, Wallace et al. (11) categorise interventions into workplace and  
57



1  
2  
3 profession awareness, management, and prevention; physician self-care and prevention;  
4  
5 physician treatment and recovery; and improved patient care and system outcomes.  
6  
7 As the 'culture of medicine' starts early in undergraduate medical programmes, doctors-in-  
8  
9 training are affected both directly (e.g. by becoming ill themselves) and indirectly (e.g.  
10  
11 through their colleagues being ill) by mental ill-health. Therefore strategies should also start  
12  
13 early in a doctor's career, with medical training emphasising pathways for help and  
14  
15 increasing awareness – and de-stigmatisation – of mental illness in doctors (48).  
16  
17 This knowledge of interventions that offer support, advice and/or treatment to doctors  
18  
19 experiencing mental ill-health has not been synthesised in a way that takes account of their  
20  
21 complexity and heterogeneity. Currently, it is not clear which components within these  
22  
23 interventions matter more (or less) than others, for whom they matter and in what  
24  
25 contexts. For example, a given intervention might work well for some doctors and not  
26  
27 others (which might be influenced by personal factors such as age, gender, seniority); and in  
28  
29 some contexts and not others (as it might be influenced by organisational factors such as  
30  
31 the degree of organisational change or societal factors such as recent media portrayal).  
32  
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37  
38 Therefore there is a need for research approaches that are sensitive to the contextual  
39  
40 complexities of the problem of mental ill-health in doctors. These methodologies should not  
41  
42 treat doctors as a uniform body, but they should allow distinctions to account for particular  
43  
44 characteristics, such as specialty and career stage, and different working environments.  
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## 48 Methods and Analysis

### 49 Project Aim

50  
51  
52  
53 This research aims to improve understanding of how, why and in what contexts mental  
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2  
3 health services and support interventions can be designed in order to minimise the  
4  
5 incidence of doctors' mental ill-health.  
6

### 7 **Project Objectives**

- 9
- 10 1. To conduct a realist review on interventions to tackle doctors' mental ill-health and  
11 its impacts on the clinical workforce and patient care, drawing on diverse literature  
12 sources and engaging iteratively with diverse stakeholder perspectives to produce  
13 actionable theory.  
14
  - 15 2. To produce recommendations that support the tailoring, implementation,  
16 monitoring and evaluation of contextually-sensitive strategies to tackle mental ill-  
17 health and its impacts.  
18  
19  
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21  
22  
23  
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27

### 28 **Review questions**

- 29
- 30 1. What are the processes by which mental ill-health in doctors develops and leads to  
31 its negative impacts, and where are the gaps that interventions do not address  
32 currently?  
33  
34
  - 35 2. What are the mechanisms, acting at individual, group, profession, and organisational  
36 levels, by which interventions to reduce doctors' mental ill-health at the different  
37 stages are believed to result in their intended outcomes?  
38  
39
  - 40 3. What are the important contexts which determine whether the different  
41 mechanisms produce the intended outcomes?  
42  
43
  - 44 4. What changes are needed to existing and/or future interventions to make them  
45 more effective?  
46  
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## Research Plans

### Objective 1. To conduct a synthesis of the literature using a realist review approach

Any evidence synthesis that seeks to make sense of interventions aiming to improve doctors' mental ill-health must take into account the contexts in which these interventions are situated. This will generate an in-depth understanding of which components within these interventions matter more (or less) than others, for whom they matter and in what ways. A realist review can synthesize relevant data found within qualitative, quantitative and mixed-methods research. By following an interpretive, theory-driven approach to analysing data from such diverse literature sources, realist reviews move beyond description, to provide findings that coherently and transferably explain *how* and *why* contexts can influence outcomes.

The plan of investigation will follow a detailed realist review protocol informed by Pawson's five iterative stages in realist reviews (49) and the RAMESES quality and publication standards for realist reviews (50, 51).

The realist review protocol is registered with PROSPERO (52). The review process also incorporates iterative cycles of engagement with the literature and with our Stakeholder Group (comprising clinicians, service users, senior NHS managers, therapists working with 'sick doctors', policy makers and charities), who will provide their own perspectives on the positive and negative interactions between healthcare contexts, the development of mental ill-health in doctors, and the subsequent impacts such as presenteeism, absenteeism and workforce retention. These cycles of engagement will enable the production of action-oriented middle-range theory which can inform change at individual, group, profession, and organisational levels (see also Objective 2 below).

### Step 1: Locate existing theories

The goal of this step is to identify theories that explain how interventions aiming to support doctors challenged by mental ill-health are supposed to work (and for whom), when they do work, when they do not achieve the desired change in practice, why they are not effective, and why they are not being used. The rationale for this step is that interventions are “theories incarnate” – that is, such interventions are underpinned by assumptions about why certain components are required. In other words, the designers of interventions have put them together in a certain way based on their theories about what needs to be done to get one or more desired outcomes (53).

To locate these theories, in the first instance we will iteratively: a) draw on ongoing qualitative interviews (already conducted by DC) with the clinical team of therapists working at the NHS Practitioner Health Programme<sup>1</sup>; b) consult with key content experts representing multidisciplinary perspectives in our Stakeholder Group and; c) draw on an exploratory search of relevant literature.

Building the programme theory will require iterative discussions within the project team to make sense of and synthesise the different theories into an initial programme theory. The project team will also organise stakeholder and ‘sense-making’ meetings to discuss and refine the programme theory.

### Step 2: Search for evidence

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<sup>1</sup> A national centre that provides support to doctors and other healthcare professionals experiencing mental ill-health (for more information visit <http://php.nhs.uk/>)

### **Formal search**

The purpose of this Step is to find a relevant 'body of literature' that might contain data with which to further develop and refine the programme theory from Step 1. Searching will be designed, piloted and conducted by an information specialist (SB).

We anticipate that we may need to search the following databases: MEDLINE, MEDLINE-in-Process, PsycINFO, ASSIA and any other relevant databases identified by the information specialist. We will also undertake forward citation searches and search the citations contained in the reference lists of relevant documents. We anticipate that we will search the databases using search terms for "doctors", "mental ill-health", "absenteeism", "presenteeism" and "workforce retention", although the exact terminology, syntax and search structure will be determined by the results of Step 1. Subject headings relevant to each database will also be used, for example, MeSH for MEDLINE.

### **Screening**

We will include literature relating to all doctors from the outset. We believe greater explanatory insight might be attained by looking across stages of training and across specialties, particularly since our preliminary work suggests common mechanisms may be at play in different settings (e.g. inflexible working patterns, wider NHS culture).

The following initial inclusion criteria will be applied:

- Mental ill-health and its impacts (e.g. presenteeism, absenteeism, workforce retention) –all studies that focused on one or more of these aspects. Note, generic occupational health services targeting whole populations of doctors, rather than doctors experiencing mental ill-health for doctors, would not be included.
- Study design – all study designs.
- Types of settings – all healthcare settings.

- Types of participants – all studies that included medical doctors.
- Types of intervention – interventions or resources that focus on improving mental ill-health and minimizing its impacts.
- Outcome measures – all mental health outcomes and measures relevant to its impacts (e.g. absenteeism, presenteeism, workforce retention).

Screening will be undertaken by DC. A 10% random sub-sample of the citations retrieved from searching will be reviewed independently for consistency by CP. Any disagreements will be resolved by discussion between the DC and CP (the second reviewer). If disagreements remain then the matter will be presented to the whole project team for discussion and resolved by majority vote.

### ***Additional searching***

An important process in realist reviews is finding additional data to confirm, refine or refute aspects of developing programme theory. More searches will be undertaken if we find that we require more data to develop and confirm, refute or refine certain sub-sections of the programme theory. To learn more about the influence of wider contexts on mental ill-health and its impacts, we may also look at literature about doctors working in other countries, other groups of healthcare professionals working in the UK and professions outside healthcare who experience the same broader societal changes but in a different industry. Searches may also seek to identify 'good practice' examples in healthcare, where mental ill-health of some institutions is particularly low (e.g.(54)). For each additional search the project team will meet to discuss and set inclusion and exclusion criteria. Different search terms and databases are likely to be needed for these purposive searches which will be developed, piloted and conducted in conjunction with our information specialist (SB). The

1  
2  
3 screening processes will be as described above. Where applicable, we will follow the search  
4  
5 strategies proposed by Booth et al. which have been developed for such data (55).  
6  
7

### 8 9 **Step 3: Article selection**

10 Documents will be selected based on relevance (whether data can contribute to theory  
11  
12 building and/or testing) and rigour (whether the methods used to generate the relevant  
13  
14 data are credible and trustworthy)(53). Even when a document from the initial search has  
15  
16 been screened and has met inclusion criteria, it may still not contain any data that is  
17  
18 relevant for programme theory development and refinement.  
19  
20

21 Included papers would be divided into those which can make 'major' or 'minor'  
22  
23 contributions to our research question. For example, we may classify as 'major' those  
24  
25 studies conducted in countries where doctors predominantly work in universal, publicly-  
26  
27 funded health care systems with similarities to the NHS; or those where the mechanisms  
28  
29 (which cause doctors' mental ill-health to develop) are similar, even if they are operating in  
30  
31 different contexts. This will enable us to focus effort on the studies which make a major  
32  
33 contribution, whilst ensuring that we do not miss any important relevant data from the  
34  
35 wider literature. In this way we will inevitably prioritise studies from the UK but also include  
36  
37 studies from other countries that provide useful insights for the UK. This strategy will enable  
38  
39 us to be rigorous while keeping the project manageable. Our *provisional* criteria for  
40  
41 classifying studies as 'major' or 'minor' are:  
42  
43  
44  
45  
46  
47

48 Major:

- 49  
50  
51 • Studies which contribute to the research questions and are conducted in an NHS  
52  
53 context.  
54  
55  
56  
57

- Studies which contribute to the research questions and are conducted in contexts (e.g. universal, publicly-funded health-care systems) with similarities to the NHS.
- Studies which contribute to the research questions and can clearly help to identify mechanisms which could plausibly operate in the context of the NHS.

Minor:

- Studies conducted in health-care systems that are markedly different to the NHS (e.g. fee-for service, private insurance scheme systems) but where the mechanisms could plausibly operate in the context of doctors working in the NHS.

Classification decisions will be checked between two reviewers (DC and CP) and discussed with the rest of the team. A random sample of 10% of documents will be selected, assessed and discussed between the DC and CP to ensure that decisions for final inclusion have been made consistently. The remaining 90% of decisions will be made by DC. We will employ the same decision making process as outlined above in Step 2. Article selection for any additional searches will follow the process described above.

#### **Step 4: Extracting and organising data**

The full texts of the included papers will be uploaded in NVivo QRS International (a qualitative data management software). Relevant sections of texts interpreted as contexts, mechanisms and/or their relationships to outcomes will be coded in NVivo. At the initial stages the coding will be both inductive (codes created to categorise data reported in included studies) and deductive (codes created in advance of data extraction and analysis as informed by the initial programme theory)(56).The main analysis of the realist review will be retroductive. Each new element of relevant data will be used to refine



1  
2  
3 aspects of the programme theory, and as it is refined, included studies and documents will  
4  
5 (where necessary) be re-scrutinised to search for data relevant to the revised programme  
6  
7 theory that may have been missed initially. The characteristics of the studies and  
8  
9 interventions will be extracted separately into an Excel spreadsheet to provide a descriptive  
10  
11 overview.  
12

13  
14 We shall also extract (from included documents) all data on the cost of various interventions  
15  
16 to tackle doctors' mental ill-health, but we shall not undertake a formal health economic  
17  
18 assessment. Our goal is to identify what data exist on costs and also if any of these are  
19  
20 useful in helping us to suggest any implications for policy and practice. During the review  
21  
22 process, we will extract the following types of economic data or information (where  
23  
24 available):  
25  
26

- 27
- 28 • Direct costs of interventions;
- 29
- 30 • Indirect costs relating to the intended beneficial effects of interventions (accessing  
31  
32 mental health services, Occupational Health consultations, and so on)
- 33
- 34
- 35 • Unit costs and total costs
- 36
- 37 • Currency
- 38
- 39 • Time period to which economic data relates.
- 40
- 41

42 The way that economic evaluations are conducted and reported makes it unlikely to be  
43  
44 possible to link the data in any included economic evaluations directly to the context -  
45  
46 mechanism-outcome configurations identified in the realist review. We therefore anticipate  
47  
48 presenting the cost information, where it is available, separately from the CMO  
49  
50 configurations, which will make it easily accessible to readers interested in this particular  
51  
52 area.  
53  
54  
55  
56  
57

1  
2  
3 DC will undertake data extraction and organisation. A random sample of 10% of coded  
4  
5 documents will be independently checked by CP for consistency. Any disagreements will be  
6  
7 resolved by discussion between the DC and CP. If disagreements still remain then a third  
8  
9 member of the project team will be asked for their opinion and resolution will be by  
10  
11 majority vote. We will start the coding and analysis process by using the literature that has  
12  
13 been deemed to make a 'major' contribution to the research questions to continue building  
14  
15 and refining our programme theory, while progressively focusing the review. Articles  
16  
17 categorised as providing 'minor' contributions will be analysed to address particular aspects  
18  
19 of the programme theory where necessary. The aim of the analysis will be to reach  
20  
21 theoretical saturation in understanding the problem of mental ill-health, rather than to  
22  
23 aggregate every single study that exists in the area. Decisions about whether a study can  
24  
25 have a 'major' or 'minor' contribution may change over the course of the project, as the  
26  
27 analysis progresses. All changes will be documented and recorded as part of an audit trail to  
28  
29 increase transparency and ensure consistency.  
30  
31  
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36

### 37 **Step 5: Synthesising the evidence and drawing conclusions**

38  
39 In Step 5 we will continue to use a realist logic of analysis to build context-mechanism-  
40  
41 outcome configurations (CMOCs). These will aim to explain the outcomes resulting from the  
42  
43 intervention strategies discussed in the included documents. For example, we will use  
44  
45 interpretative cross-case comparison to explain how and why observed outcomes have  
46  
47 occurred, by comparing interventions where reducing mental ill-health has been 'successful'  
48  
49 against those which have not, to understand how context has influenced reported findings.  
50  
51 To achieve this, we will continue to interpret the data to ascertain if it pertains to contexts  
52  
53 (C), mechanisms (M), outcomes (O), the relationships between C, M, and O and/or the  
54  
55  
56  
57  
58  
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60

1  
2  
3 relationships between CMOCs (53). This type of analysis will enable us to understand the  
4  
5 behaviour of the most relevant and important mechanisms under different contexts, thus  
6  
7 allowing us to build more transferable CMOCs. We will be drawing on substantive and  
8  
9 formal theory to inform programme theory development.  
10

11 During the review, we move iteratively between the analysis of particular examples from  
12  
13 the literature, refinement of programme theory, and further iterative searching for data to  
14  
15 test particular subsections of the programme theory.  
16  
17

18 Finally, when making sense of our data during analysis we will use the following analytic  
19  
20 thinking processes (57):  
21  
22

- 23 a) Juxtaposition of sources of evidence – for example, where evidence about behaviour  
24  
25 change in one source enables insights into evidence about outcomes in another  
26  
27 source.  
28  
29
- 30 b) Reconciling of sources of evidence – where results differ in apparently similar  
31  
32 circumstances, further investigation is appropriate in order to find explanations for  
33  
34 why these different results occurred.  
35  
36
- 37 c) Adjudication of sources of evidence – on the basis of methodological strengths or  
38  
39 weaknesses.  
40  
41
- 42 d) Consolidation of sources of evidence – where outcomes differ in particular contexts,  
43  
44 an explanation can be constructed of how and why these outcomes occur  
45  
46 differently.  
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3 Objective 2: Design contextually-sensitive strategies to tackle mental ill-health and its  
4  
5 impacts on doctors, their colleagues and their patients.  
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7

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10 We will use the 'Evidence Integration Triangle' (EIT) (58) as a framework for bringing  
11  
12 together stakeholders around evidence in a collaborative, action-oriented way. Using the  
13  
14 EIT will enable us to create a facilitative environment in which research can inform practical  
15  
16 decision-making, and for experiential knowledge from lived experiences and from  
17  
18 professional practice to inform interpretation of that research.  
19

20  
21 We will use the three components of the EIT (1. practical evidence-based interventions; 2.  
22  
23 pragmatic, longitudinal measures of progress; and 3. participatory implementation  
24  
25 processes) to structure and inform the facilitation of the Stakeholder Group meetings and a  
26  
27 workshop with policy makers. The timing of these meetings has been selected to maximise  
28  
29 input to the realist review process and enable local, regional and national dissemination at  
30  
31 the most appropriate stages of the project.  
32  
33  
34

## 35 36 Dissemination

37  
38  
39 We would like to engage different types of audiences and the key messages and  
40  
41 communication strategies will be tailored to respond to their needs. The Stakeholder Group  
42  
43 will be well placed to advise on the key audiences and how we should target messages to  
44  
45 that audience. We will also draw on existing networks and communication strategies, for  
46  
47 example existing links with clinicians and professional bodies, wherever possible to reach  
48  
49 the widest possible number of beneficiaries. So far we have identified 5 key audiences that  
50  
51 we would like to engage and reach with our dissemination strategy:  
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- Group 1: Policy makers who can influence change that will affect doctors at a national level.
- Group 2: Employers and healthcare leaders who can shape the structure of organisations in which doctors work.
- Group 3: Team leaders who can shape the immediate working environment for individual doctors.
- Group 4: National, regional and local groups and organisations that provide support to doctors experiencing mental ill-health.
- Group 5: Doctors who are experiencing mental ill-health, and their families and colleagues.

We want to ensure that this project's outputs will be useful to the NHS and will address this by producing outputs that are deemed appropriate and relevant by our different groups of stakeholders, and acknowledging likely implementation barriers. The project will produce five major types of output. We will consult with our Stakeholder Group and use their knowledge and experience to refine the development, presentation and dissemination of these outputs:

1. Conventional academic forms. A report for publication in the NIHR HS&DR Journal; a report for publication in a high-impact peer-reviewed journal; and conference presentations. This will inform the agenda for debate and action in health services and in public policy more widely (Groups 1-5).
2. More innovative forms. Depending on the results of the realist review, we propose to translate some of our outputs into comics, animations and/or information graphics that might be distributed more widely (e.g. for notice boards on wards,

1  
2  
3 inductions, teaching sessions) to raise awareness and normalise mental health  
4  
5 issues. As demonstrated previously, comics can provide an appropriate format for  
6  
7 tackling delicate issues such as mental ill-health (59) (Group 5).  
8

- 9  
10 3. Measures/indicators. This builds on our use of the Evidence Integration Triangle to  
11  
12 inform our interpretation/dissemination strategy and would be offered for use in  
13  
14 existing systems to monitor and evaluate the impact of changes made based on our  
15  
16 research findings. This will enable frontline staff and managers to implement and  
17  
18 monitor the impact of research-informed changes in practice (Groups 1-4).  
19  
20  
21 4. Plain English summaries. The research findings would be tailored to different  
22  
23 audiences (e.g. doctors, patients, health service managers, medical educators, policy  
24  
25 makers). This will provide a meaningful summary of findings which increase  
26  
27 stakeholders' recognition and understanding of the issue and how evidence can  
28  
29 inform actions they can take (Groups 1-5).  
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44

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46

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51  
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54

55  
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57

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