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Strategies to address unprofessional behaviours among staff in acute healthcare settings: a realist review

1. Background and Rationale

1.1.Introduction

Unprofessional behaviours of healthcare staff towards each other are problematic; affecting an individual's ability to work well, to feel psychologically safe (Edmondson, 2019 and to deliver safe care to patients (Cooper et al., 2019). In the proposed review we will identify the range of complex unprofessional behaviours and study the negative effects of these behaviours for healthcare staff. A central focus will be on identifying strategies that may be used to prevent, attenuate and mitigate such behaviours. The recent NHS People Plan seeks to make the NHS an excellent place to work, highlighting the importance of reducing bullying and harassment between staff and improving culture so that staff feel they have fulfilment; voice and belonging (NHS England, 2020a). Our review is both timely and connects directly to policy and previous research.

Those in positions capable of implementing change (e.g. managers, commissioners and clinical leads) will benefit from a review which provides clear direction as to definitions and specific strategies which can be used to address specific types of behaviours. This review builds on previous research. For example, co-applicants Westbrook and Mannion provide evidence from Australia and the UK that unprofessional behaviours influence the effective functioning of teams, staff wellbeing, patient experience, safety and organisational performance (Westbrook, 2018; Westbrook et al., 2018), as well as the wider system and culture (Mannion and Davies 2019). This is particularly pertinent in acute care settings where hierarchies and multi-disciplinary interactions are most prevalent (Katz et al., 2019; Tricco et al., 2018) and where most strategies have been implemented (e.g. Westbrook 2020). For these reasons we focus this review on acute care settings.

Our recent study, evaluating the implementation of Speak Up Guardians in England (Jones, Mannion and Maben – Co-applicants and PI on this bid) found that almost half (45%) of concerns reported are classed as bullying and harassment (Jones et al., 2020; National Guardians Office, 2018). Indeed, much research, policy and media attention focusses on more extreme unprofessional behaviours in health care including bullying (e.g. Illing et al., 2016; 2013; Carter et al., 2013). However, milder forms of unprofessional behaviours e.g. incivility (Keller et al., 2020) also have negative impacts on clinical team performance and staff well-being (Westbrook, 2018). Such behaviours include subtle (poor communication, lack of responsiveness, criticism of team members) and overt (verbal and physical abuse, sexual harassment and bullying) behaviours which interact in complex ways (Keller et al., 2020). Westbrook et al, (2018) are currently undertaking empirical work exploring 26 unprofessional behaviours they have identified in health care settings in NSW, Australia. Table 1 provides examples from their anonymised data.

Table 1: Examples of reported unprofessional behaviours in Healthcare settings in Australia

Unprofessional behaviour	**Anonymised open responses data (Westbrook et al., 2018)**
Verbal aggression and incivility	*"I regularly experience aggressive 'over-ruling' and 'eye-rolling' type behaviour when expressing clinical concerns about patients in ICU, (which) is very detrimental to reporting concerns"*
	"surgeons yelling at nurse in theatre, using inappropriate words and swearing in theatre makes you feel scared and threatened"
	"A doctor called me a dickhead for putting a sticker on a line in the patient, which I am required to do. I have been called an idiot multiple times for not knowing information"
Sexual harassment	*"I have seen a woman have the back of her dress half unzipped by the male staff members in front of other staff"*

	"*A young influential "gun" surgeon who believes it is alright to make sexist and sexual advances/comments to female staff*";
Racism	*"I was told to my face by a current staff member "We don't want you here, go back to where you came from";*
	"*racism and bullying is rife within the ward I work in".*

Reporting and speaking up about unprofessional behaviours is influenced by a wide range of factors. For example, it requires individuals having the skills and being in an organisation that is receptive to any reporting, thus staff won't feel they will be punished for speaking up. It is thus both the breadth of unprofessional behaviours and the complex interplay of these behaviours at individual and organisational levels that make addressing these issues so challenging. This complexity and lack of conceptual clarity hinders specification of what strategies should be used, in which situations and for whom.

1.2 The problem of unprofessional behaviours: scoping the evidence

We have undertaken an initial rapid scoping review to identify potential literature and outline here the scope of our realist review, noting salient concepts and relevant theories that will inform our analysis.

Unprofessional behaviours are reported using different terms such as transgressive or disruptive behaviours to describe conduct in the workplace including, 'misconduct, incivility, unreasonableness, bullying, harassment, and disrespect' (Dixon-Woods et al., 2019, p.579). Andersson and Pearson (1999) define workplace incivility as, 'low intensity deviant behaviour with 'ambiguous intent' to harm the target, in violation of workplace norms for mutual respect'. Micro-aggressions are also ambiguous behaviours, brief and subtle, that are directed specifically towards groups based on race, gender or sexual orientation (Cruz et al., 2019). Incivility, with its ambiguous intention to harm the target is distinct from bullying, which exhibits a more direct and chronic intent to cause harm where specific power dynamics are at play (Felblinger, 2009).

Incivility and micro-aggressions tend to undermine more considerate ways of working, creating a culture in which professional behaviours are ostracized as being outside the norm (Felblinger, 2009; Keller et al., 2020). These low-level behaviours such as rudeness or discourteousness create a toxic culture where more serious unprofessional behaviours such as bullying may become permissible and even thrive (Andersson and Pearson, 1999). A recent systematic review (2002-20) by Keller et al, (2020) explores the predictors and triggers of incivilities among healthcare hospital teams. The majority of the 53 papers characterised incivility as an individual character trait/ flaw (i.e. difficult personalities) with incivility reported intra-professionally (i.e. nurse to nurse) rather than inter-professionally. Other predictors and triggers of incivility included communication issues, patient safety concerns, poor leadership, surgical environments and lack of support (Keller et al., 2020). In the UK, rates of bullying and harassment continue to increase (NHS England, 2020b; 2019a) with significant impact on patient safety (Cooper et al., 2019; Andersson and Pearson, 1999); staff well-being (BMA, 2017; Dixon-Woods et al., 2019) and the wider healthcare system (Doran et al., 2016).

The term unprofessional behaviours serves as a generic term incorporating uncivil, transgressive or disruptive, physical and verbal aggression (Felblinger, 2009), and bullying based on race, gender and sexual orientation (Cruz et al., 2019) (Table 2 below). The plethora of terms and understandings of unprofessional behaviours are unhelpful when designing and understanding strategies that may help to reduce their negative impact by mitigating, managing, and preventing such behaviours. Indeed managers, policy makers and team leaders need to select varying strategies to address different types of unprofessional behaviours. Having unclear or multiple definitions of these unprofessional behaviours is

more than academically problematic, it may result in ineffective and/or inaccurate strategies and interventions. Yet there is a lack of knowledge about (1) what approaches exist and (2) which solutions should be used, in which situations and for whom. In highly pressurised systems such as the Covid-19 pandemic, unprofessional behaviours can easily flourish and multiply (Oeppen et al., 2020).

Table 2. Summary of concepts

Concept	Impact	Description	References
Unprofessional behaviour (generic term)	Team function Patient safety Threat	Any behaviour that either subtly or overtly disrupts team function, patient safety or foster threat such as bullying, abuse or harassment.	Westbrook (2018) Westbrook et al (2018) Hickson et al (2007)
Bullying and Harassment	Turnover intent Absenteeism	Repetitive and intentional targeting (psychologically/ physically) to cause harm Long-term/ chronic and regular Involves real or perceived power dynamics	Wild et al (2015); Carter et al (2013); Ariza-Montes et al (2013); Pisklakov et al (2013); Lutgen-Sandvik et al (2007); Salin (2003)
Transgressive/ disruptive behaviour	Performance Culture	Misconduct, incivility, unreasonableness, bullying, harassment, and disrespect.	Dixon-Woods et al (2019)
Micro-aggressions	Mental health	Targeted verbal/ non-verbal behaviours (often at specific groups e.g. BAME, women, LGBTQ) that are perceived as an assault, insult or invalidate a POC's experience in the workplace	Cruz et al (2019) Sue (2010)
Incivility	Workplace norms	Low intensity deviant/ inconsiderate (e.g. rude, discourteous insulting) behaviour Ambiguous intent to harm the target Psychological	Keller et al (2020); Schilpzand et al (2016); Felblinger (2009); Pearson et al (2001); Andersson & Pearson (1999)

Although there has been some work in New South Wales, Australia and the USA (Westbrook et al., 2018; Askew et al., 2013; Jagsi and Griffith, 2016), there has been very little work exploring these issues in the NHS. Previous work undertaken has been profession specific and/or specialist, for example, behaviours among surgical staff or within academic medicine (Katz et al., 2019; Tricco et al., 2018). Contextual factors known to trigger unprofessional behaviours include high stress environments (e.g. those involving high workloads, understaffing or stressful situations such as a global pandemic), steep hierarchies (e.g. dynamics within and between doctors and nurses); poor teamwork, leadership and organisational culture (e.g. dysfunctional leadership), (Keller et al., 2020; Kaiser, 2017; BMA, 2017; Parizad et al., 2018; Walton, 2006). It is apparent that multidisciplinary teams exposed to unprofessional behaviours experience significant negative clinical outcomes (Katz et al., 2019; Riskin et al., 2017; 2015). This is significant given the NHS long term plan (NHS England, 2019b) calling for the expansion of the healthcare workforce to make better use of multidisciplinary team networking.

2. Rationale: Why this research is important

2.1. The problem

In the 2019 NHS staff survey, 40% of staff reported feeling unwell as a result of work-related stress in the last 12 months, (a steady increase since 2016 [37%]). Fifty-three percent said relationships at work were often strained, with 19% of staff personally having experienced harassment, bullying or abuse at work from other colleagues (a 1% increase from 2017). Twelve percent of staff report experiencing this from managers (NHS England, 2020b). Workplace bullying affects staff of all professional backgrounds throughout the healthcare system. However ambulance service trusts have above average rates for bullying and

harassment and certain groups e.g. BAME groups, report high incidence (NHS England, 2019a).

In the 2015 the General Medical Council (GMC) National Training Survey, 7% of doctors in training reported being bullied or harassed; 13% witnessed such behaviour; and 17% felt significantly undermined by a senior colleague. Bullying is commonly reported within nursing. Recent estimates suggest 30% of the nursing workforce experience bullying, particularly junior nurses and nursing students, which is often associated with the colloquialism that 'nurses eat their young' (Gillespie et al., 2017). Other healthcare professions, such as midwifery, report similar problems. Nationally, less than half of staff (48%) reported that they or a colleague reported their last incident of harassment, bullying or abuse at work. Reporting rates have declined since the 2017 NHS staff survey in all staff groups, except for those working in Acute Specialist, Ambulance and Community trusts, where reporting of such incidents increased (NHS England, 2020b).

2.2. Effects of unprofessional behaviours among staff on patient safety

There is growing recognition of the need to challenge the acceptance of unprofessional behaviour in the NHS. National campaigns such as Freedom to Speak Up, and Civility Saves Lives (https://www.civilitysaveslives.com/) are raising general awareness of such issues. Particular organisational environments influence the willingness and ability of staff to voice legitimate concerns (Mannion and Davies, 2019). Yet policy makers and managers seeking to create better organisations lack a firm evidence base to inform decisions about organisational strategies likely to be effective. The risk therefore is that individual cases may be addressed but the fundamental changes to organisational cultures and systems required are not achieved. To date much of the policy focus has been on 'bad apples' (unprofessional individuals or bullies) with more recent focus on the organisational environments in which they work (bad barrels) (Mannion et al., 2019). There is however, also a role for the healthcare professions regulators and the Royal Colleges in being seen to regulate themselves (bad cellars) as well as taking into account the shifting wider political and policy context (bad orchards) (Mannion et al., 2019). A further challenge is that unprofessional behaviours may be allowed to go unchecked because of powerful systematic biases in group decision making among health care professionals (e.g. Groupthink) (Mannion and Thompson, 2014). In the proposed review we will seek to provide a comprehensive understanding of these complexities that present at different levels of the health system (apples, barrels, cellars and orchards).

Where a culture of psychological safety is encouraged, employees are more likely to speak up about errors in patient care (Barzallo et al., 2014). When teams feel psychologically safe, they share information of significance, collectively make decisions and perform better together; improving patient safety (Riskin et al., 2017; 2015; Cooper et al., 2019). In a healthcare setting, psychological safety enables learning, experimentation and the production of new practice (Edmondson, 1999), factors which have been shown to reduce patient mortality rates (Nembhard and Tucker, 2011; Tucker et al., 2007). We also know there are links between staff well-being at work and patient experience; patient dissatisfaction and a reduction in care quality are common where unprofessional behaviours are accepted as the norm (Maben et al., 2012a; Rosenstein and O'Daniel, 2005).

2.3. Effects of unprofessional behaviours on staff experience and well-being

Supporting and improving staff well-being at work is increasingly recognised as an essential aspect of good workplace practice and crucial to good quality care and patient experience (Maben et al., 2012a; 2012b). Unprofessional behaviours are associated with higher staff turnover and other significant financial costs such as litigation, lower staff productivity and

sickness (BMA, 2017; Doran et al., 2016; Hogh et al., 2011; Woodrow and Guest, 2011). A vicious circle can be created where unprofessional behaviours result in staff feeling unsafe at work and an absence of psychological safety may encourage a climate of unprofessional behaviours. Psychological safety at work is absent in teams where incivility; transgressive behaviours and bullying and harassment are experienced; reducing staff psychological well-being at work and job satisfaction, engagement and motivation (Edmonson, 2019).

Unprofessional behaviours also negatively impact on the mental health, career development and job satisfaction of healthcare staff. For example, Lever et al's (2019) systematic review of 45 studies to explore the mental and physical health consequences of bullying amongst healthcare employees concluded that bullying is frequent amongst healthcare staff, resulting in depression, burnout, psychological distress, insomnia and headaches. Trainee doctors experiencing bullying exhibit a loss of confidence, motivation and higher levels of psychological distress such as anxiety and self-doubt (BMA, 2017). A recent review suggests links between workplace bullying and suicidal thoughts, particularly amongst male paramedics and female doctors (Leach et al., 2017). A systematic review by Yu et al (2019) reviewed 38 articles to explore the associations between personal and work-related factors relating to nurse resilience. Bullying was identified as one factor that negatively impacted nurses' resilience.

2.4. Effects of unprofessional behaviours on wider system and culture

Organisational culture influences the willingness of staff to raise concerns and also whether managers are both willing to hear and respond appropriately to such concerns when they are raised. Thus, the cultural context is an important aspect to consider when designing strategies to reduce bullying and unprofessional behaviours (Mannion and Davies 2019) (see Figure 1). Better understanding and interventions to reduce unprofessional behaviours are likely to have substantial system effects. The People Plan (NHS England, 2020a) recognises this by identifying the importance of reducing bullying and harassment between staff to create a healthy, inclusive and compassionate culture and address retention issues. Not dealing with unprofessional behaviours is a clear threat to the future workforce of NHS as it undermines confidence and increases intention to leave and attrition (Nielsen et al., 2016; Ortega et al., 2011; Rosenstein, 2002).

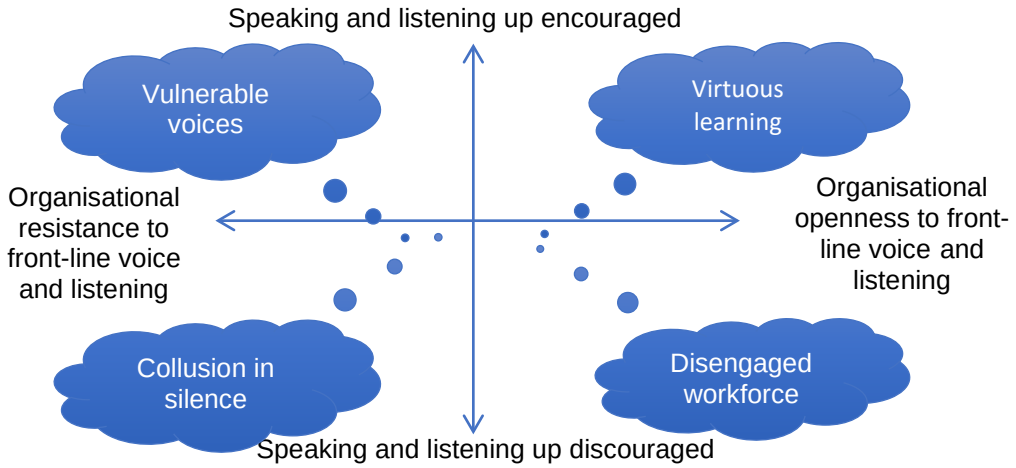


Figure 1 adapted from Mannion and Davies 2019.

Speaking up about unprofessional behaviours in a healthcare setting appears to be particularly challenging for staff (Jones and Kelly, 2014; Rauwolf and Jones, 2019). Staff appear less likely to voice concerns about unprofessional behaviour than more traditional threats to patient's safety (Schwappach and Richard, 2018). For example, in a survey of 800

American junior doctors (residents), whilst 75% reported witnessing unprofessional behaviour more frequently than patient safety breaches they reported speaking up less frequently about these unprofessional behaviours (46% reported) than about traditional patient safety threats (71% reported) despite the view that such behaviours are important to patient safety (Martinez et al., 2017). Respondents more commonly reported fear of conflict as a barrier to speaking up about unprofessional behaviour, having concerns about alienation from the team and possible retaliation (Martinez et al., 2017). Professionalism-related safety threats appeared more difficult to speak up about because of their perceived deliberate nature.

Our ongoing evaluation of Speak up Guardian's in England (NIHR HS&DR Jones, Maben, Mannion-PI and co-applicants on this proposal) suggests a larger proportion of cases (3189 of 7087 cases [45%] in 2017-18) raised by staff to Freedom to Speak Up Guardians (Guardians) relate to bullying and harassment issues compared to patient safety cases (32%) (National Guardian's Office, 2018). Since the 2015 Freedom to Speak Up Review (Francis, 2015) over 800 Guardians have been appointed across the NHS to support staff to speak up about concerns at work without fear of detriment and to support organisational cultures where staff speaking up is normalised. Guardians' report spending much more time on bullying and harassment than on the direct patient safety issues originally anticipated (Jones et al., 2020), yet few have the skills to manage or intervene. Furthermore, the blanket term 'bullying and harassment', is often used by Guardians to categorise and record these cases. This makes it harder to clearly understand the specific nature of concerns and decide how to support and intervene.

3. Strategies to reduce and prevent unprofessional behaviours

Unprofessional behaviours such as bullying constitute a complex problem that require a broad-ranging, strategic approach that targets individual, team-dyad and organisational, levels (Westbrook et al., 2018). Organisational strategies are more likely to be successful if leaders are supportive and committed to change (Illing et al., 2013). There is some evidence that strategies that: (1) increase self-reflection and insight into the perspectives of others; (2) develop conflict management and communication skills, and (3) instil personal responsibility to challenge negative behaviours (e.g. through training) can contribute to an anti-bullying culture (Illing et al., 2013; Hickson et al., 2007). These strategies may help to develop skills that enable managers and employees to avoid conflict escalation.

A recent Cochrane review which focussed specifically on individual and organisational level strategies to prevent bullying in the workplace identified only five studies and noted the low quality of evidence available. These studies predominantly described small-scale approaches with few attempts to implement multi-organisational change (Gillen et al., 2017). This review included only interventional studies that used at a minimum before and after study designs (published up to January 2016) and the selection criteria was narrow; only focussing on bullying.

Rogers-Clark, Pearce and Cameron (2009) explore the consequences of disruptive clinician behavior (including bullying, physical violence to subtle behaviours such as gossiping) and how to manage these behaviours by reviewing evidence from interventions intended to target or manage disruptive behavior. This review mainly explored the nursing context and of the 24 papers included, none explored interventions at managerial levels, and those looking at a personal or educational level did not produce generalizable findings. Thus, recommendations were rarely based on rigorous evaluation.

Quinlan et al, (2014) synthesised the evidence regarding the uptake and application of workplace interventions intended to address bullying amongst healthcare coworkers. Articles included in this scoping review consider the effectiveness of bullying champions, zero-tolerance policies and educational programmes, with interventions being particularly useful if

they are participatory. However, that review only included eight studies, limiting the extent to which findings can be generalized beyond specific study settings.

Our inclusive focus on wider unprofessional behaviours takes a contemporary and more comprehensive view than the studies reported above, one that is looking beyond (1) bullying behaviours, and (2) one profession, seeking instead to examine a wider literature through the strengths of the realist approach. This comprises a wider range of terms and a broader methodological range including for example, detailed qualitative studies and greater contextual understandings. By contrast, extant literature uses a range of terms that are taken for granted, making conceptual clarity problematic. Our review seeks to understand the different types of unprofessional behaviours that may arise under different circumstances, for different groups in different contexts, which may in turn produce different consequences (Shale, 2019).

Healthcare managers and leaders are likely to need to select from a judicious mix of interventions and strategies tailored to the type of unprofessional behaviour. The findings from this review will be applicable to multiple healthcare workers (clinical and non-clinical) and draw on evidence from settings within an acute healthcare context. By adopting a realist approach in our study design, we intend to produce evidence-based, generalizable findings to determine what works, and why, for whom, and in what circumstances. We will draw on global literature, therefore our findings will also have applicability to other healthcare settings beyond those publicly funded like the NHS.

4. Building on previous work

Attention to contexts, mechanisms and outcomes enables a careful analysis of underlying assumptions made about how and why a strategy may (or may not) work in a particular setting. This depth of analysis provides decision-makers with an output presenting empirical evidence alongside theoretical framing to support their ability to implement or reject a strategy as it pertains to their circumstances. To date, systematic reviews exploring unprofessional behaviours do not evidence this granular detail and instead often summarise a lack of evidence at a general level.

Our review thus complements and builds on the recent systematic review (Keller et al., 2020), which identifies one aspect of unprofessional behaviours; namely the predictors and triggers of staff incivility within healthcare teams. Indeed, our proposed review is the crucial next step to this work seeking to capture the interplay between complex mechanisms at multiple levels, go beyond narrow intervention-outcome associations and to develop actionable, transferable theory that can underpin intervention and strategy development. Indeed these authors call for further empirical work, with a focus on interventions at an organizational level are (objective 5). This review also usefully provides a number of possible mechanisms to inform our early theorizing and establishment of an initial programme theory.

Our review also builds directly on a recent HS&DR study (Raine et al., 2020) which maps some of the terrain regarding workplace bullying and incivility, as part of an overall study on “Workplace-based interventions to promote healthy lifestyles in the NHS workforce”. Raine and colleagues used descriptive statistics and generated key characteristics reviews and ‘reviews of reviews’ to produce an evidence map, but did not directly interrogate the literature they identified. They found 18 reviews related to violence, bullying or other unacceptable behaviour in the workplace. Fifteen were focused on health-care settings, but only three were focussed on staff behaviours (all nurses) and these reviews will be useful to our proposed study (Armstrong, 2018; Bambi et al., 2017; Blackstock et al., 2018). The other eleven were about patient related violence or incivility, which are not part of our proposed work. Raine et al (2020) suggest “*a specific and focused research question arising from the current evidence map …. could provide a more thorough and critical assessment of the*

available evidence". Our review specifically addresses this by going beyond the mapping work they have undertaken providing specific and focused research questions on unprofessional behaviours among healthcare staff. Our review therefore differs significantly from their rapid scoping review (Raine et al., 2020) in a number of ways; 1) we focus exclusively on unprofessional behaviours among staff (not towards patients); 2) we will interrogate the literature we identify (thus go beyond the mapping of the literature they have undertaken); 3) by taking a realist approach to reviewing data we can produce knowledge that differentiates between contexts, enabling granular detail about what works, for whom and under what circumstances.

This study also builds on:

1. PI (Maben) and Co-applicants (Jones (PI) and Mannion's) Freedom to Speak up Guardian Project evaluating the implementation of Freedom to Speak Up Guardians in England (project ref: 16/116/25 Jones PI) where bullying and harassment constitute 45% of concerns reported (Jones et al., 2020; O'Donovan and McAuliffe, 2020; Mannion et al., 2019; Mannion and Davies, 2019);
2. Co-applicant Westbook's large-scale evaluation of an organisational intervention to address unprofessional behaviours and create a culture of safety and respect, being implemented across hospitals in multiple Australian states (Westbrook, 2018; Westbrook et al., 2018);
3. The work of Illing et al (2016; 2013), an NIHR HS&DR funded project which synthesised evidence on the occurrence, causes, consequences, prevention and management of bullying and harassing behaviours in the NHS.

5. Aims and objectives

5.1. Overall aim

To improve context-specific understanding of how, why and in what circumstances healthcare staffs' unprofessional behaviours in acute healthcare settings can be best mitigated, managed and prevented.

5.2. Objectives

To conduct a realist review of the literature on strategies to address staff unprofessional behaviours in acute healthcare settings. This review seeks to:

1. Understand any differences and similarities between terms referring to unprofessional behaviours (e.g. incivility, deviant, transgressive or disruptive and unprofessional behaviours) and how these terms are used by different professional groups in acute healthcare settings;
2. Understand the contexts of unprofessional behaviours; the mechanisms which trigger different types of unprofessional behaviours; and the outcomes of unprofessional behaviours on staff, patients and wider system of healthcare;
3. Identify strategies designed to mitigate, manage and prevent unprofessional behaviours and explore how, why and in what circumstances these are most useful.
4. Produce recommendations and resources that support the tailoring, implementation, monitoring and evaluation of contextually-sensitive strategies to tackle unprofessional behaviours and their impacts.
5. Build on research findings to develop an empirical study of strategies and interventions.

5.2. Research questions

- In what ways are unprofessional behaviours defined, developed and experienced by staff in acute healthcare settings?
- In what ways do current strategies address these behaviours or not?

- What are the mechanisms acting at individual, group, profession, and organisational levels that underpin strategies aimed at reducing unprofessional behaviours?
- What are the outcomes of unprofessional behaviours on staff (well-being; psychological safety), organisations (recruitment, turnover) and patients (e.g. patient safety and care quality)?
- What are the contexts which determine whether the different mechanisms produce their intended outcomes?
- What changes are needed to existing and/or future strategies to make them more effective?

6. Research Plan/ Methods

We will undertake a realist review and produce resources to support NHS leaders and managers in their approaches to mitigate, manage and ultimately prevent unprofessional behaviours amongst staff in acute healthcare settings. Realist reviews are theory-driven and synthesise literature about complex social interventions. They focus on understanding the mechanisms by which strategies work (or not) and seek to understand contextual influences on whether, why, how and for whom these might work (Wong et al., 2013). This synthesis and theory development will also be used as a starting point for a larger, empirical investigation into effective strategies to address unprofessional behaviours in the UK.

The realist approach to data collection and analysis is driven by *retroduction*, a form of logical inference, which starts with the empirical and explains outcomes and events by identifying the underlying mechanisms which are capable of producing them (Sayer, 1992). It is therefore essential that we consider not only the specific unprofessional behaviours within the healthcare workforce, but any differences and similarities between staff groups as well (e.g. by specialty, professional group, setting, seniority). By illuminating these contexts and working practices, we will also be able to determine how they might influence the presence or minimisation of unprofessional behaviours between and within healthcare staff working in acute settings. We are applying the realist review methodology to answer objectives one to three; our fourth objective is to develop a range of resources to support NHS managers/leaders to better understand healthcare staff working in acute settings experiencing work-related unprofessional behaviours. Our resources will provide critical guidance on the implementation of appropriate strategies to mitigate, manage and prevent unprofessional behaviour to improve staff and patient outcomes. Our fifth objective will provide us with a way of working towards testing which strategies and interventions work, over a longer period of time. Whilst these objectives are all discrete (identifying the cause of the problem, and possible solutions) they may reside in the same or separate literature. The review will be conducted in an integrated way, with emerging ideas and insights from reviewed papers informing further future searching (see figure 2 project flow chart attached).

6.1. Realist review – objectives 1 -3

The realist approach advocates that in order to infer a causal outcome (O) between two events (X and Y), one needs to understand the underlying mechanism (M) that connects them and the context (C) in which the relationship occurs (Pawson et al., 2005). These are usually represented as Context (C) + Mechanism (M) = Outcome (O) (CMO configurations are heuristics to represent data configurations). For example, in order to evaluate whether a strategy prevents unprofessional behaviours or enhances speaking up behaviours (O), we will examine its underlying mechanisms (M) (e.g. what are the resources offered and how might these effect changes in participants through reasoning/response), and its contiguous contexts (C) (e.g. are there other localised stressors at work hindering or helping these behaviours?). We draw on the work of Dalkin et al (2015) who discuss the importance of conceptualising mechanisms on an activation continuum, rather than a binary trigger (on/off switch). Realist review is thus about hypothesizing and testing such CMO configurations.

Theoretical explanations developed through realist review are referred to as "middle-range theories" which "...involve abstraction... but [are] close enough to observed data to be incorporated in propositions that permit empirical testing" (Merton, 1967). These middle-range theories can support implementation and some authors have suggested that rather than see a 'theory' as a 'relatively isolated, static, reified source guiding implementation', 'theorising' should be embraced as processes that actively use empirical data in 'developing, validating, modifying, and advancing conceptual knowledge in the field' (Kislov et al., 2019).

The plan of investigation will follow a detailed realist review protocol informed by Pawson's five iterative stages in realist reviews, and the RAMESES realist review quality and publication standards (Pawson et al., 2005; Wong et al., 2013). This realist review protocol has been written by the project team, who have experience in conducting such reviews, supported by a realist synthesis expert (MP). The review will be registered with PROSPERO, which helps avoid duplication and enhance transparency. The review process incorporates iterative cycles of engagement with the literature and with our stakeholder group (see below and figure 2). These iterative sense-making cycles of engagement will enable the research team to test out theories with stakeholders to produce action-oriented middle-range theory which can inform change at individual, group, profession, and organisational levels.

6.2. Step 1: Identifying existing theories

The goal of this step is to identify theories that explain how and why a particular work environment or professional group culture, or setting may influence unprofessional behaviours and in what contexts these are most experienced and have impacted. This step will identify the mechanisms at individual, group and professional levels by which strategies prevent or reduce the impact of these behaviours across and within healthcare staff groups. These theories will help explain why, for whom and in which contexts these strategies are most beneficial for staff working in acute settings. This process, of identifying existing theories will inform the construction of our initial programme theories (e.g. psychological/ social theories that link the empirical data to wider explanations) (Merton, 1967).

The rationale for this step is that for strategies to be successful in moderating unprofessional behaviours it is necessary to understand the relationship between the development of normalised patterns of behaviours (the [causal] underpinning theory or theories), so that the strategies selected can 'intervene' effectively. In realist terms, these are the programmes. Programmes are "theories incarnate" – that is, underpinning the design of programmes are assumptions about why certain components are required and how they might work. The designers have put them together in a certain way based on their (often implicit) theories about what needs to be done to get one or more desired outcomes. This stage is not intended to be exhaustive. To develop initial programme theories, in the first instance we will iteratively;

a) draw on preliminary discussions with the healthcare workforce, patients and the public;

b) consult with our multidisciplinary stakeholder group which includes : policy-makers; subject experts (police; law); Royal colleges; regulators; academics; midwives, paramedics and PPI representatives, including those with BAME perspectives;

c) examine healthcare literature already known to the research team about unprofessional behaviours terminology (namely, the literature identified in our initial scoping review and used to develop this proposal) and use the 26 behaviours reported by Westbrook et al for comparison against behaviours identified in the literature.

This first informal screening of the literature will sensitise the team to the breadth and depth of published and unpublished literature on unprofessional behaviours. By investigating the

theoretical underpinnings of programmes we can map out the conceptual and theoretical landscape of unprofessional behaviour causes and outcomes and how they are supposed to work in acute healthcare settings to develop our initial programme theories. Building these initial programme theories will require iterative discussions within the project team and with our stakeholders to make sense of and synthesise the different assumptions. Once the programme theories have been developed by the project team it will be presented to the stakeholder group to obtain their feedback. We will refine the initial programme theories based on their feedback.

6.3. Step 2: Specific review - search for evidence

Evidence search

Of the three realist synthesis search models identified by Booth et al., (2020) our approach follows the 'Exclusive (Realist-only) searches' model. We anticipate identifying the majority of studies for the review in an exhaustive primary search. We have already worked with our Realist information specialist (JW) and have undertaken a number of scoping search strategies to determine depth and breadth of searches (e.g. staff groups; settings [acute only] etc.) Follow-up searches will be conducted if our primary searches have not adequately identified literature to address emerging questions to test and refine theories (see additional searches section below for further detail).

Throughout the review, complementary CLUSTER search techniques (for example citation searching) will be used to ensure closely related studies likely to inform theory development and testing are included (Booth et al., 2013). All search results will be saved in reference management software. A detailed spreadsheet will record all searches conducted, to ensure transparency when reporting the search activities. In this formal, primary search we will:

a) Search for studies of unprofessional behaviours in acute healthcare settings with all healthcare staff. Searches will be run in academic databases including Medline, Embase and CINAHL and sources of trade, policy and grey literature. Search strategies will comprise search terms, synonyms and index terms for: Acute care AND Healthcare staff AND Unprofessional behaviours;

b) use English language papers (dates to be set after initial searches)

c) conduct a grey literature search on professional codes of conduct produced by the Royal Colleges and the literature on cases brought to the NMC/ HCPC/GMC for unprofessional behaviour; using databases such as Health Management Information Consortium database and websites including NHS Employers, NHS Health Education England and Google (limited to screening the first 200 results).

A preliminary trial of primary search terms indicates that across multiple databases, we can anticipate approximately 1,500 abstracts (not including grey literature).

Screening

We will include all empirical and if necessary, non-empirical literature (e.g. additional grey literature) that will help provide causal explanations in relation to our research questions. The following initial inclusion criteria will be applied:

- Study design: all study designs
- Types of settings: acute healthcare settings (acute, critical, emergency) and unprofessional behaviours as exhibited and experienced by healthcare staff
- Types of participants: all employed staff groups including students on placements

- Types of strategies: all studies that include any strategies/interventions designed to reduce unprofessional behaviours at the individual, team and organisational level
- Outcome measures: Staff wellbeing (stress, burnout, resilience) staff turnover, absenteeism, malpractice claims, patient complaints, magnet hospital/recruitment, patient safety (avoidable harm, errors, speaking up rates, safety incidents, improved listening/response), cost, - all studies that focused on one or more of these aspects.
- We will include work related cyber bullying and other forms of online unprofessional behaviour if it is intra-staff (but we will not review literature/regulation around unprofessional behaviours relating to social media posts about patients & families).

Screening will be undertaken by the Research Fellow (to be recruited), in collaboration with the PI(JM) and co-app (RA). A 10% random sub-sample of the citations retrieved from searching will be reviewed independently for quality control (by a second reviewer MP or RA). Any disagreements will be resolved by discussion between the RF, the second reviewer and the PI (JM). If disagreements still remain then a third member of the team (AJ; RM or JWe) will review and any disagreements will be resolved through further review/discussion.

Additional searching
An important process in realist reviews is finding additional data needed to confirm, refine or refute aspects of developing programme theory throughout the review. If we find that we require more data to develop, confirm, refute or refine programme theory development, we will conduct additional searches (see Figure 2). We may also look at literature about the healthcare workforce in other countries or consult professions outside healthcare (e.g. police, law, army) who experience the same broader societal organisational and structural changes but in a different professions. For each additional search the project team will meet to discuss and set/review the inclusion and exclusion criteria as appropriate/required. 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. These searches will greatly increase the amount of relevant data available to us for the realist review. Managing the volume of data may be a challenge at this stage. If there is a large volume of literature from additional searching, we would prioritise included studies based on key criteria such as (1) UK based evidence, and/or (2) organisational and structural and team based strategies (not only individual approaches to addressing unprofessional behaviours). The screening processes will be as described above.

6.4. Step 3: Article selection
Documents will be prioritised and selected based on relevance (whether data can contribute to theory building and/or testing) and rigour (whether the methods used to generate the relevant data are credible and trustworthy). Our provisional criteria for classifying the potential contribution of studies are:
Major:
- Studies which contribute to the study aims and are conducted in an NHS context; or,
- Studies which contribute to the study aims and are conducted in contexts (e.g. universal, publicly-funded health-care systems) with similarities to the NHS; or
- Studies which contribute to the study aims and can clearly help to identify mechanisms which could plausibly operate in the context of the NHS (e.g. law, police and army).

Minor:
- Studies conducted in non-UK health-care systems that are markedly different to the NHS (e.g. fee-for-service, private insurance scheme systems) but where the

mechanisms causing or moderating unprofessional behaviours could plausibly operate in the context of those working in the NHS.

Classification decisions will be checked between two reviewers and discussed with the rest of the team. The RF will read all included papers and finalise article selection by including documents or studies that contain data relevant to the realist analysis – i.e. those that could inform some aspect of the programme theory. Decisions will be made regarding whether a paper is to be included in the study or not based on a combination of relevance (based on inclusion criteria above) and rigour (e.g. how trustworthy the study is).This will allow us to determine whether papers make a major or minor contribution. We will use the RAMESES guidelines for reporting realist review (Wong, et al., 2016). Following an initial random sample of documents (10%) being selected, assessed and discussed between two reviewers to ensure that decisions for final inclusion have been made consistently, the remaining 90% of decisions re rigour will be made by the RF.

6.5. Step 4: Extracting and organising data

The full texts of the included papers will be uploaded in a reference manager software tool. Relevant sections of texts that have been interpreted as related to contexts, mechanisms and/or their relationships to outcomes will be coded and organised in Excel or NVivo. This 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). These will be analysed separately and then brought together in further iterative analysis cycles. Each new element of relevant data will be used to refine aspects of the programme theory, and as it is refined, included studies and documents will be re-scrutinised to search for data relevant to the revised programme theory that may have been missed initially. The characteristics of the studies will be extracted separately into an Excel spreadsheet to provide a descriptive overview.

We will start the coding and analysis process by using the literature that has been deemed to make a ‘major’ contribution to the research questions to start building and refining our programme theory, while progressively focusing the review. Articles categorised as providing ‘minor’ contributions will be analysed to address particular aspects of the programme theory where necessary. The aim of the review will be to reach theoretical saturation in achieving the objectives, rather than to aggregate every single study that exists in the area. Decisions about whether a study can have a ‘major’ or ‘minor’ contribution may change over the course of the project, as the analysis progresses. All changes will be documented and recorded as part of an audit trail to increase transparency and ensure consistency.

6.6. Step 5: Synthesising the evidence and drawing conclusions

Our data analysis will use realist logic to make sense of the initial programme theory. Data will be interrogated at individual, team and organisational levels to establish their relationships. This type of analysis will enable us to understand how the most relevant and important mechanisms work in different contexts, thus allowing us to build more transferable CMOCs. During the review, we will move iteratively between the analysis of particular examples from the literature, refinement of programme theory, and further iterative searching for data to test particular subsections of the programme theory. As outlined above, the realist review will follow current RAMESES quality and publication standards (Wong et al., 2013) and we will use the following analytic processes to make sense of our data (Pawson, 2006; Pearson et al., 2015):

- Compare and contrast sources of evidence – for example, where evidence about strategies in one paper or report allows insights into evidence about outcomes in another paper.
- Reconciling of sources of evidence – where results differ in apparently similar circumstances, further investigation is appropriate in order to find explanations for why these different results occurred.
- Adjudication of sources of evidence – included papers would be divided into those which can make 'major' or 'minor' contributions to our research questions and those that are considered 'thick' and 'thin' conceptually (Pearson et al., 2015).
- Consolidation of sources of evidence – where outcomes differ in particular contexts, an explanation can be constructed of how and why these outcomes occur differently.
- We will also identify a number of middle range theories (e.g. theories around groupthink and psychological safety) to enable us to move beyond description and provide a 'set of assumptions' lying behind the observed associations (Merton, 1967).

This process will allow us to explore why some strategies are more or less beneficial for some staff groups and in some contexts but not others. Our output from this final stage will be an evidence informed programme theory to answer our aim to improve understanding of how, why and in what contexts strategies can be designed and implemented to minimise unprofessional behaviours and maximise speaking up behaviours.

6.7. Step 6: Testing findings and developing resources for NHS managers/ leaders

We will then test and refine our emerging evidence informed findings and programme theory with our stakeholder group. Informed by evidence-based implementation theory and stakeholder involvement we will use findings from our realist review to produce actionable theory to inform recommendations to support policy makers, health services managers/leaders, and local team leaders. We will develop resources to support NHS managers/leaders and Speak Up Guardians to use the findings to select, tailor, implement and evaluate contextually-sensitive strategies to recognise and tackle unprofessional behaviours. This will support NHS managers/leaders to better understand how work environments may help or hinder unprofessional behaviours and identify what they can do to reduce and manage such behaviours and enhance, for example, speaking up and listening behaviours in the workplace. We will use our existing relationships with stakeholders as a foundation for building the networks and an understanding that will enable the findings from this research to be useful, widely disseminated, and for us to develop our resources for NHS managers/leaders. In order to understand what is required in terms of resources to influence change, and the most effective implementation strategy(ies), we will ensure our stakeholder group has the required breadth and depth with membership as outlined above (see PPI section in on-line form) and below (project management section) and in table 3 which will be kept under review. Further members will be approached and invited as required. The exact design and components of the resources will develop iteratively through the project in collaboration with our stakeholder group (including our PPI members).

Resources that NHS managers/leaders can implement to reduce unprofessional behaviours and maximise speaking up behaviours will be produced. These will be pragmatic, reflect 'real-world' issues facing NHS organisations and a robust implementation work package runs throughout this study to support implementation so that they can make a difference in practice. We will use the 'Evidence Integration Triangle' (EIT) (Glasgow et al., 2012) as a framework to inform the structure and conduct of our stakeholder meetings. The EIT will support the team to bring together stakeholders around the evidence produced from our realist review in a collaborative, action-oriented way. We will use the EIT to structure and conduct the stakeholder group enabling us to create a facilitative context in which research can inform practical decision-making, and for experiential knowledge from lived experiences

and from professional practice to inform interpretation of that research. We will use the three components of the EIT (see below) to structure and inform the facilitation of the stakeholder group meetings.

Practical evidence-based strategies. The emerging contextualised findings of our realist review will be presented to the stakeholder group and critical discussion of these findings will be facilitated. Insights will be incorporated into programme theory refinement.

Pragmatic, longitudinal measures of progress. The stakeholder group will discuss what is useful and meaningful in the workplace to monitor behaviour change from the outset of the project and as the project evolves. This will inform our understanding of how project findings can inform the design of locally-relevant, meaningful and usable resources and outcome/process measures within local/regional/national systems.

Participatory implementation process. We expect local understandings of implementation issues to be particularly important in shaping our reviews, but this may work 'both ways'. Therefore, we will challenge our stakeholders to consider what might be possible in terms of implementation in their workplaces, or what changes would enable something to become possible.

We aim to disseminate our key messages and recommendations to a wide range of stakeholders using the most appropriate communication methods for each group. Key audiences will be identified using existing networks and communication strategies, together with the advice of the stakeholder and sensemaking groups. In table 3 below, we outline our initial thoughts about the different stakeholder groups and the way in which our research findings might be targeted / used:

Table 3: Stakeholder groups as dissemination audiences/beneficiaries of the research

Group	Stakeholder	Relevant stakeholders and dissemination audiences/beneficiaries of the research
1	Policy makers	Influencing change to the healthcare workforce at a national level (e.g. BMA, GMC, RCN, RCM, HCPC, NMC, College of Deans for nursing and midwifery and Deaneries)
2	Employers / healthcare leaders/ managers	Shaping the structure of organisations in which healthcare staff work (e.g. NHS Employers, King's Fund, Occupational Health leaders)
3	Team leaders	Shaping the immediate work environment for individual professionals (e.g. doctors/consultants, Matrons, midwife/nurse consultants, paramedic team leaders; ancillary staff line mangers)
4	Healthcare workforce and patients and the public	e.g. Doctors, nurses, midwives and paramedics experiencing unprofessional behaviours; and their families, colleagues, patients and the public.

7. Dissemination, Outputs and anticipated Impact

The project will produce five major types of output in collaboration with our stakeholder group and will present some of these at our end of study project dissemination workshop:

1. **Resources for NHS managers/leaders.** See above. This will achieve impact over the medium- to longer-term (1-5 years) once policy makers, NHS managers/leaders, and organisations supporting the healthcare workforce are able to implement changes and evaluate the impact of those changes. We aim to support this stage in a subsequent proposal; to draw on the findings of this review to develop a larger, UK empirical investigation into effective strategies to address unprofessional behaviours.

2. **Academic outputs.** An NIHR HS&DR report for publication will be submitted; an overall findings paper submitted to a high-impact peer-reviewed journal (e.g. BMJ Quality and Safety); conference presentations at healthcare staff well-being conferences (such as Health Services Research UK). This will 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.
3. **Plain English summaries.** We will create plain English summaries tailored to different audiences (e.g. healthcare professionals, NHS managers/leaders, training providers, policy makers). This will achieve impact through knowledge transfer in the short- to medium-term (1 month-2 years) by providing a meaningful summary of findings increasing knowledge and understanding of unprofessional behaviours, and will equip different audiences with evidence to support actions they may take.
4. **Innovative forms of communication.** We have had positive experiences of involving film makers to help with the communication of study outcomes (Schwartz Rounds realist evaluation: HSDR 13/07/49) and using the medium of theatre to perform research findings (Is there a doctor in the house: Evidence Synthesis Working Group: NIHR SPCR Project Number 390). Therefore, depending on the results of the realist review, we will translate some of our outputs into cartoons, videos, animations and/or interactive performances to facilitate wider distribution. These will increase knowledge & normalise strategies that support speaking up and management of unprofessional behaviours.
5. **Media engagement strategy.** We will identify the most appropriate way to engage with our non-Academic stakeholder groups. For example through engagement with relevant professional bodies (e.g., British Medical Association, General medical council, Royal College of Nursing, Royal College of Midwives, NHS Employers etc) and through promoting our findings via alternative publication routes (e.g. Health Services Journal, Nursing Times/Standard, BMJ, The Conversation, Twitter). We will also invite experienced communications officers at the Universities of Surrey, Cardiff, Hull, Leeds and Birmingham to the later stakeholder group meetings to help us develop our communication and dissemination.
6. **PPI / Stakeholder Engagement:** PPI and our stakeholder representatives will be actively involved in the production all outputs. The stakeholder group, including PPI representatives, will be encouraged to think about alternative or additional approaches to dissemination, which will inevitably include different approaches or networks. Our research will enter the healthcare system through our strategic partnerships with NHS Employers; NHS England; and through the wider and innovative dissemination strategies outlined above. Previous dissemination e.g. realist evaluation of Schwartz Rounds (HS&DR-13/07/49) have had impact (e.g. *Understanding Schwartz Rounds* film 3,476 views on YouTube (https://www.youtube.com/watch?v=C34ygCIdjCo) and organisational guide (over 275 downloads and 280 hard copies distributed): https://www.surrey.ac.uk/content/schwartz-organisational-guide-questionnaire).

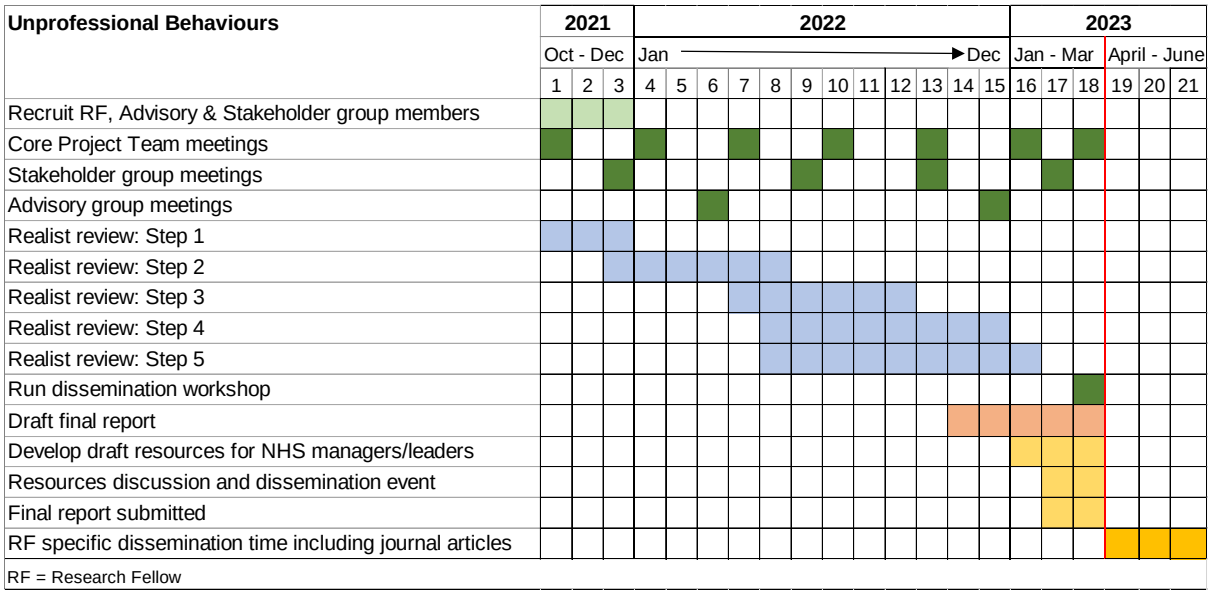
8. Project / research timeline

The key tasks and their timings are outlined below and shown in the Project Gantt chart:

Months	Tasks
1-3	Recruit, brief & train research fellow & Advisory Group and Stakeholder Group members
	Stakeholder Group meeting (1; month 3); Step 1 of realist review (locate existing theories and build initial programme theory); with input from the first Stakeholder Group meeting
4-6	Start Step 2 of realist review (search for evidence and screen results)
	Iteratively refine initial programme theory based on initial search data and run additional searches as indicated by the emerging programme theory
	Advisory Group meeting (1; month 6)

7-9	Complete Step 2 of realist review, and Start Step 3 (select articles), Step 4 (extract and organize data) and Step 5 (synthesise the evidence) Stakeholder Group meeting (2; month 9)
10-12	Complete Step 3 of realist review and continue Steps 4 and 5, refining programme theory
13-15	Continue with Steps 4 and 5 of the realist review, refining the programme theory; draft dissemination plans and drafting of final report Stakeholder Group meeting (3; month 13); Advisory Group meeting (2; month 15) Complete Step 5 of the realist review, resulting in a final programme theory
16-18	Draft the final project report and other dissemination materials Stakeholder Group meeting (4; month 17), with draft documents shared for feedback and advice; and NHS manager/leader resources piloted Run the end of study dissemination workshop (stakeholders including PPI reps invited) Draft of NHS managers/leaders resources and hold dissemination event Complete final report and submit; Finalise resources and disseminate (post report submission).

Gantt chart



9. Project management

The project team will be led by JM and will comprise of the co-applicants and a Research Fellow (RF) to be recruited. JM has substantial NIHR HS&DR project management experience, as well as topic and methodological expertise (see below). The team will take responsibility for outputs and for leading resources production. The advisory group will monitor progress against milestones and spend against promote the project, and facilitate communication between organisations with stakeholders and help maximise dissemination and impact of findings. JM (PI) is supported by the wider team of co-applicants and will chair and lead internal project meetings with co-applicants and collaborators and take overall responsibility for the project and outputs, including:

1. Project management, including budget management (with the support of institutional administrative and research support systems) and day-to-day risks and issues.
2. Project outcomes quality and timely delivery and NIHR reporting requirements.
3. Relationships between researchers, stakeholder group and partners.
4. Data management. The core team will plan and share all elements using appropriate software. Any data held will conform to local and national data protection policies.
5. Guidance and career development support for the recruited Research Fellow.

6. Production of outputs and their dissemination.

The project team will meet every two weeks initially, then monthly and subsequently 2-3 monthly, ideally face-to-face to coincide with stakeholder group meetings, but with individuals joining meetings remotely where necessary (e.g. phone, Zoom). Meeting minutes and action points will be circulated to all co-applicants. A subset of the project team (JM, RA and the RF) will meet weekly. Additional meetings and email contact between team members will take place as and when needed, and will complement the project meetings. Secure file-sharing will take place using a secure OneDrive site hosted at the University of Surrey which also allows non-Surrey users to access authorised folders. Overall research governance and financial/project management oversight will be provided by University of Surrey; and all data handling will comply with the Data Protection Policies of our respective institutions, and with EU General Data Protection Regulation (GDPR) requirements.

10. Ethics

We understand from the University of Surrey's Ethics committee that we do not need ethics for a secondary realist review of the evidence.

11. PPI and stakeholder group

To date we have worked with patients and the public and healthcare professionals to develop this proposal and we wish to continue to work with these people if the project is funded.

1. Stakeholder group (including PPI)

The stakeholder group will meet four times during the 18-month project, two face-to-face meetings and two teleconference/ zoom (Covid-19 restrictions allowing). The group will help us to: make sense of the findings from the review; optimise our dissemination plans; and produce feasible and practical recommendations for the key audiences.

This group includes representatives that are patients, the public and healthcare staff with experience of unprofessional behaviours. We have several colleagues and PPI members already recruited: Janet Holah (Nursing Service User and Carer Group at the University of Surrey) has been involved in the production of a University policy on identifying unprofessional behaviours and who to tell and how in a safe environment and speaks to undergraduate nursing students about the challenges of speaking up and how best to manage unprofessional behaviours in practice; Bob McAlister (previously PPI representative on our Speak Up Guardians project [PI Aled Jones: HS&DR:16/116/25]) has also agreed to be a PPI member of the stakeholder group. Bob is the former head of Professional Standards for a large UK Police Force. He also chaired the All Wales Police/ Independent Investigators Working Group. Since retiring he has undertaken complaint investigations in a Private and State Prison settings and for a Secondary School and he is a founder member of Welsh Government's Public Involvement Delivery Board which oversees public involvement in Health and social care research.

Other members include colleagues from the regulators NMC; GMC and HCPC; NHS Employers; Gail Adams (Head of Professional Services, Unison); Roger Kline (Snowy White peaks author); Paul Jebb (Morecambe Bay senior leader); Heather Caudle (chief nurse and BAME community member); Dr Lilith Whiley at Kingston University – a senior lecturer in Organisation Behaviour and HRM; Helen Stanley; (unprofessional behaviour experience through the misconduct process, leading to Fitness to Practice panels). Staff PPI members representing a range of professions including members with lived experience of unprofessional behaviours in the workplace.

2. Advisory group

The advisory group will meet face-to-face or via teleconference/Zoom on two occasions during the 18-month project. The advisory group will help us to: monitor progress against milestones and spend against budget; provide advice where necessary (for example around dissemination and impact); promote the project to stakeholders; and help maximise dissemination and impact of findings for all readers including patients and the public. The advisory group will comprise a small group of individuals with an interest in the topic area, including PPI representatives and those from NHS settings; colleagues already agreed to be members include: Professor Jean McHale Professor of HealthCare Law; David Naylor (leadership and organisational development team King's Fund); Joanne Greenhalgh (realist expert); Professor Karen Mattick (medical educator and NIHR HS&DR PI Care Under pressure; a realist synthesis of doctor poor mental-health including impact of unprofessional behaviours). Dr Chris Woodrow, Associate Professor in Organisational Behaviour, Henley Business School, University of Reading. Others will be recruited as needed.

Overall issues for both groups

For both groups we recognise that not every member will be able to attend every meeting and will encourage non-attenders to send a nominee and/or to contribute their insights by another means (e.g. email and/or telephone conversation). We will cost for travel; overnight accommodation and child-care costs and daily rates have all been costed using INVOLVE rates of remuneration. We also recognise that for some group members there may be some inhibition or tension of discussing views in a larger group, so we will provide opportunities for stakeholders to discuss the topic further with the research team between meetings. For example, we will convene 'briefing meetings' as required before the 'full' stakeholder meeting - to better prepare those who may be inhibited.

12. Project/ research experience

Team: The research team includes clinical and academic expertise in unprofessional behaviours (JM, RA, RM, AJ, JWe, JW), organisational culture (JM, RM, RA), patient safety (AJ, JW, MP), methodological training/experience in realist synthesis (JM, MP, RA, JW) and experience in creating innovative resources for health managers/leaders to disseminate research findings and ensure the research has impact (JM, AJ, RM, JWe).

Research Team	Role/expertise
PI: Jill Maben (JM) 7.5% FTE	***Professor of Health Services Research and Nursing***. Nurse, social scientist & experienced PI.; Expertise in: staff wellbeing & patient care experience; realist evaluation; realist synthesis. Five previous NIHR HS&DR grants (three as PI) realist evaluation of UK Schwartz Rounds (HS&DR - 13/07/49). **Role:** Project delivery to a high standard including time, budget & outputs.
Russell Mannion (RM) 5%	***Professor of Health Systems.*** Expertise in health systems reform; patient safety and quality improvement. Held 24 HSDR grants & 10 PRP grants(PI/CI) including supervising realist reviews. Member SDO/HSDR commissioning board (2009-2014); current member of Advisory Working Group National Guardian's Office. **Role:** Topic expert workplace culture, patient safety, quality improvement.
Aled Jones (AJ) 5%	***Professor of Patient Safety & Healthcare Quality.*** Expertise in health services research: workplace culture; patient safety & employee "speaking up" (patient care, patient safety); 4 previous NIHR HS&DR grants (one as PI FTSUG implementation). **Role**: Support review stages including workplace culture literature & qualitative analysis.
Johanna Westbrook (JWe) 3%	***Professor of Patient Safety and Health Informatics.*** Expertise in patient safety; health informatics evaluation; health system sustainability; health services research(>400 publications, >£20M in research funding). Leads Australian project evaluating organisational intervention to reduce staff unprofessional behaviours in acute hospitals. **Role:** topic expert-understanding of unprofessional behaviours

Research Team	Role/expertise
Mark Pearson (MP) 5%	***Senior Lecturer in Implementation Science & Knowledge Mobilisation.*** Expertise in realist methods; Implementation Science; complex evidence synthesis; intervention development. Three previous NIHR HS&DR grants including realist synthesis of interventions to tackle doctors' mental ill-health (HS&DR – 16/53/12). **Role:** Methodological expert.
Ruth Abrams (RA) 10%	***Lecturer in Health Sciences Research.*** Expertise in realist methods; qualitative research; healthcare workforce; organisational design/ culture; teamwork. **Role:** Supporting the PI and RF in realist synthesis.
Judy Wright (JW) 10%	***Information specialist***. Expertise in search methods for realist synthesis, systematic reviews and health services reviews. Holds 1 current and 6 previous HS&DR grants (Co-I) including 3 realist reviews **Role:** Responsible for search method design and gathering and managing all review literature.
Research Fellow (RF) (100%)	***To be appointed.*** Post-doctoral fellow with experience of realist synthesis and literature reviewing will be appointed for 21 months (18 months project & extra 3 months dissemination and refinement of outputs).

13. Success Criteria and potential barriers

Success criteria

- Meeting project milestones as outlined in project timeline and Gantt chart
- Evidence of building on the work of Westbrook (2018) and Westbrook et al (2018).
- Produce a review capable of explaining what works, for whom and in what circumstances in relation to unprofessional behaviour reduction and identify
- Evidence of engagement through stakeholder group (PPI, Stakeholders; Royal Colleges; NHS Employers; Health Education England; GMC; The King's Fund)
- Evidence of collaboration and co-production of our resources with patients, the public, staff including team leaders/managers and policy makers
- Translating evidence into practice: use of EIT framework will support collaborative, action-oriented stakeholder engagement and guide the translation of findings into practice
- Production of resources to enable key NHS managers/leaders to reduce unprofessional behaviours or utilise the most effective strategy for different contexts, circumstances and professional groups
- Attendance at our end of project dissemination event(s) including representation from key stakeholders (Royal Colleges, Regulators, PPI, NHS Employers, NHS England)

Potential barriers

- Continued Covid-19 related issues may be barrier to stakeholder engagement, but given the project is not due to commence until July 2021 we anticipate this to be minimal and staff stakeholder engagement can be delayed until later in the project. We have also suggested online meetings as needed and meeting face to face only where Covid-restrictions allow.
- Managing the breadth of the synthesis across the literature. We have however set out how we will prioritise evidence (detailed inclusion/ exclusion criteria) and intend to conceptually map terms across literature relying on distinctions between what is deemed as conceptually thick or thin as it pertains to our aims and objectives.
- Quality of the research on strategies is already limited. However by taking a realist synthesis approach, effectiveness is not determined in the same way as other reviews (e.g. systematic reviews) but instead uses empirical papers to understand how an intervention works and in what contexts, developing evidence informed programme theories and hypotheses.
- There may be limited evidence for some of the staff groups in the review. However we have planned an iterative approach to searching, including reviewing grey literature and secondary searches to develop, test and refine theory.