HS&DR Project: 18/01/06

Understanding key mechanisms of successfully leading integrated team-based services in health and social care: A realist synthesis

Professor Ruth Harris (Co-Principle Investigator) – Kings College London
Dr Simon Fletcher (Co-Principle Investigator) – Kingston and St Georges University London
Sarah Sims – Kings College London
Professor Jill Manthorpe – Kings College London
Sally Brearley – Kings College London
Professor Fiona Ross – Kingston and St Georges University London

Protocol

1. Full title of project

Understanding key mechanisms of successfully leading integrated team-based services in health and social care: A realist synthesis

2. Summary of research

Effective leadership is regarded as a central element of well-coordinated and safe care (NHS Leadership Academy 2011; Drucker 2002; NIHR 2013; Ahmed et al. 2015; Smith et al. 2018). Where leadership is ineffective (or absent) in health and social care organisations, services fail and patients and service users are harmed (e.g. Francis, 2013). As the organisation of health and social care becomes more integrated and multifaceted with increasing cross-sector and interagency collaboration (NHS England, 2014; Ham & Murray 2015), leadership has become more complicated, with specific and unique factors making effective leadership more challenging (e.g. Fillingham & Weir 2014; Turner et al. 2016). Leading integrated teams across different professional, organisational and sectorial boundaries to achieve high quality, safe, affordable and effective care is a key goal of all care systems. While there is a great deal of descriptive research on leadership and leadership development within health, its focus has been largely profession-specific in nature (e.g. Royal College of Physicians 2017; Royal College of Nursing, 2018). As a result, it rarely addresses the situation faced by leaders working across health and social care boundaries. Importantly, there is little understanding of what the mechanisms are for effective leadership across integrated health and social care systems might be, or the contexts that influence good leadership, or the nature of the resulting outcomes (Fillingham & Weir 2014).

Given this gap in our knowledge, this review aims to identify and refine the programme theories of leadership of integrated team-based services in health/social care, exploring what works, for whom and in what circumstances. It will provide practical guidelines for policy makers, health and social care leaders and managers and clinicians to help them design work systems and leadership development initiatives to support effective leadership of complex multi-system services. The review will have the following objectives: (1*)* to investigate who are the leaders of integrated team-based services and what activities contribute to their leadership roles and responsibilities; (2) to explore how leaders lead/manage integrated team-based health and social care services that span multiple organisations, agencies and sectors; (3) to develop realist programme theories that explain successful leadership of integrated team-based health and social care services iteratively through stakeholder consultation and evidence review; (4) to identify the development needs of the leaders of integrated team-based health and social care services; and (5) to provide recommendations about optimal organisational and inter-organisational structures and processes that support effective leadership of the integrated health and social care system.

Previous findings from a realist synthesis of teamwork funded by the NIHR and undertaken by members of our group identified 13 key mechanisms that affected how teams functioned in health and social care settings (Harris et al., 2013; Hewitt et al., 2014, 2015; Sims et al., 2015a, 2015b). Leadership was one of these mechanisms. The synthesis revealed that leadership influenced a range of attitudes and behaviours by the team. Based on this initial work, we propose to undertake a full synthesis of team leadership.

In undertaking a realist review on leadership of integrated teams, exploring what aspects work, for whom and in what circumstances (Pawson 2006), relevant literature will be identified from electronic searches of databases including Medline, CINAHL, Embase, PsychINFO and Health Management Information Consortium. Reference lists and citation searches will also be undertaken as will grey literature searches. In line with realist methods, we will not have specific predetermined inclusion/exclusion criteria based upon research

method or quality, but we will report areas of general weakness in evidence and individual

study weakness where appropriate.

Relevant materials from the searches will be retrieved and added to a structured data extraction form. These forms will be independently examined for inclusion. Data will be analysed thematically to provide a comprehensive description of mechanisms, contexts and outcomes of team leadership. This process will draw on the realist review work of Rycroft-Malone et al (2012) and Wong et al (2016; 2017) which build on Pawson's (2006) earlier work on realist enquiry. In doing so, we will identify prominent recurrent patterns of context and outcome configurations and seek to explain how these occurred – by use of specific mechanism(s).

Due to the complexity of this review, we will hold three stakeholder consultation events involving individuals with leadership experience, realist review expertise who together with the advisory group and research team will collaborate to identify and agree "realist theories" on the mechanisms and contexts of leadership.

Anticipated impacts include: informing future research into integrated team-based leadership; refining theoretical understanding of leadership to enable further investigation; informing policies and practices to directly influence the delivery of care; informing leadership development programmes to improve effective training.

We will follow RAMESES Guidelines (Wong et al. 2016, 2017) when reporting the findings from this review. It is anticipated that the final report containing synthesised review findings will identify the underlying mechanisms of integrated team-based leadership, and explain how these produce their effects, as well as highlight the key contextual factors that impact success or failure.

Findings will be disseminated to stakeholders, including: health and social care staff, managers and leaders, clinical and human resource directors in provider organisations, local authorities, voluntary sector, private sector, policy makers; leadership groups and patient/ service user and carer organisations. Dissemination activities will include: papers in peer-reviewed academic and professional journals, contributions to scientific and professional meetings, and social media (e.g. Twitter, LinkedIn).

The project will start in April 2019 and last 18 months. Key project activities include: literature searching/screening; data abstraction; analysis and synthesis; consultation events to develop and agree leadership theory; advisory group meetings and dissemination.

3. Background and rationale

Brief literature review

Leadership is a complex concept. While variation exists in its definitions, there is a consensus that a leadership role encompasses the direction of group activities towards shared goals, management of on-going change and support for wider organisational vision, values and objectives (e.g. Dopson & Annabelle, 2003; Dopson et al., 2016). Although there are many definitions some of which seek to differentiate it from management (e.g. Iliffe & Manthorpe 2017), effective leadership is regarded as a central element of well-coordinated and safe care (NHS Leadership Academy 2011; Drucker 2002; NIHR 2013; Simon et al 2018). Where leadership is ineffective (or absent) in health and social care organisations, there is evidence that services fail and patients/service users are harmed (e.g. Berwick 2013; Francis, 2013).

As the organisation of health and social care becomes more integrated and multifaceted with increasing cross-sector and interagency collaboration (NHS England 2014; Ham & Murray 2015), leadership is becoming more complicated, with specific and unique factors making effective leadership more challenging (Fillingham & Weir 2014; Turner et al. 2016). Leading integrated teams/groups across different professional, organisational and sectorial boundaries to achieve high quality, safe, affordable and effective care is a key goal of all health and social care systems. Previous research on leadership was based on the notion

that leaders provide guidance and support for members of single teams, often a model of professional leadership based on seniority, authority and deferment (e.g. Reeves et al 2010a; Borkowski 2015). However, there is a growing realization that leadership in health and social care is more complex than this. Good quality care depends on skilled leaders who oversee the coordination of staff who benefit from input from various specialties (e.g. Brewer et al. 2016; Forman et al., 2014). Increasingly, leaders commission or oversee care delivery spanning traditional boundaries and may provide simultaneous leadership of the following: profession-specific teams; non-professional staff; interprofessional teams; larger collaborative groups and networks – comprising many different health and social care providers that span organisations and sectors (Reeves et al. 2010b; 2018; Dow et al. 2017).

Research funded by NIHR's HS&DR programme found that clarity of leadership and conflict in leadership were highly significant predictors of team performance in stroke care teams (Harris et al. 2013; Hewitt et al. 2014, Sims et al. 2015a, 2015b). Leadership was not always evident with staff in acute and rehabilitation settings reporting it difficult to identify a clear leader. They tended to focus on the support and guidance provided by their own professional leader rather than the leader of the larger interprofessional team (Harris et al. 2013; Sims et al. 2015b). This may not be surprising since some teams, particularly large teams like those reported in Harris et al (2013), comprise over 80 members. As a result, members' perceptions of leaders can differ from those of the individuals who are formally appointed to these roles. Moreover, such teams may have a complex array of formal and informal leadership structures and arrangements (Klein, et al., 2006), which are rarely acknowledged. Increasingly, integrated teams theoretically include a widening range of professional groups, support workers and third sector or commercial sector staff, which further adds to this complexity.

Other important recent research funded by the HS&DR suggests that around a third of hospital staff have substantial dual roles as clinicians and leaders/managers (Buchanan et al, 2013). Research has also found that organisations which achieve high levels of clinician engagement are more likely to perform well, however, there can be a continuing `tribalism' between managers and staff from different professions, with a lack of effective coordination and integration of services (Peck & Dickinson 2008; Reeves et al 2010a). In addition, it seems hard to separate out clinical and management work and more support may be needed for those in leadership roles, as in practice responsibilities are more distributed and leadership/management styles more diverse (Hartley et al, 2008). This situation is also compounded by a lack of clinical leadership, for example, a national audit of stroke care found that a quarter of NHS hospitals have vacancies for leadership positions (Royal College of Physicians, 2017) and care home manager posts are vacant at around 15% (Orrellana et al 2017).

The notion of shared (also called collective, collaborative or distributed) leadership is increasingly suggested as an approach to help address these shifts in integrated service delivery, markets, and their associated challenges. The Health Foundation (2009) proposed that the characteristics of shared leadership might include: a shared vision; existence of a strategy and plans for implementation; joint accountability for progress; having a recognised leader but sharing responsibility for outcomes; a context of main stakeholders and agreement about how they communicate. A recent survey of over 200 UK health professionals found that all participating health professional groups reported a high level of agreement with the concept of shared leadership (Forsyth & Mason, 2017). Further, it has been reported that a shared approach to leadership in health care can result in increased levels of activity/achievement, improvements in team processes, and service improvements (Health Foundation 2009).

Shared leadership of integrated care services will become increasingly important as there is a greater mixed economy of care delivery with provision becoming more 'pluralised', as outlined in the Five Year Forward View (NHS England, 2014). Traditional professional boundaries are becoming more blurred with more individual clinicians spanning agency boundaries in their day-to-day work (Dementia UK, 2018). In response to this, greater

emphasis is being placed on 'collective leadership' to help develop a shared approach to leadership within and across health and social care teams. The ambition is to provide open and supportive communication as well as candid and mutual feedback to nurture agreed/shared goals (HSC Collective Leadership Strategy 2017). Although this type of leadership has been reported as a useful approach to address complex organisational problems (e.g. Quick 2017), there is limited research about how it operates within health and social care contexts.

Working from a broader systems approach, Zaccaro & DeChurch (2012) argue that leadership is a particularly important driver of effectiveness within and across teams and services. However, these authors suggest that a key leadership challenge is to understand how leaders work to align interconnected, and at times, competing goals of different teams comprising different professions, organisations and sectors to ensure that the goals of the overall care system can be successful. Zaccaro & DeChurch (2012) developed a model of how different forms of shared leadership may function using a systems approach (Table 1).

Forms of shared Leadership	Description
Shared: Rotated	The full responsibilities of leadership are cycled among different individual members of the system
Shared: Distributed	Different component team leaders or members of the leadership team are individually responsible for separate leadership functions
Shared: Simultaneous	All component leaders or members of the leadership team are mutually engaged in leadership activities

Table 1: Differing forms of shared leadership

However, there is no research to support how the proposed types of shared leadership may operate across health/social care systems; thus research is needed to understand how systems' dynamics and effectiveness are advocated (Zaccaro & DeChurch, 2012; DeChurch et al. 2011; DeChurch & Marks 2006). Furthermore, several contextual factors have been identified that may influence how leadership is operationalised (Zaccaro et al 2012), including organisational, cultural and functional diversity as well as geographic dispersion of systems. Against this background, there is a need to examine what specific mechanisms of shared leadership are effective and how they relate to these broader contexts and systems.

<u>Relevance to NHS and social policy and practice</u>

Effective leadership is deemed essential to deliver high quality and safe care (e.g. NHS Leadership Academy 2011; NIHR 2013; Ahmed et al. 2015; Smith et al. 2018). Leaders are critical for promoting clinical and professional cultures that support continuous improvement, coordination, integration and patient/user engagement (Chatalalsingh & Reeves, 2014; West et al., 2015; Naylor et al. 2015; NHS staff Survey 2017). Indeed, leadership was identified by the Care Quality Commission (CQC) as a key factor in ensuring high quality care, with "well-led" being one central criterion for inspections at both organisational and service levels (CQC, 2014). However, current understandings of leadership tend to be framed within single organisational boundaries and do not recognise the challenges of working externally, leading other professionals, and with leading changes that affect other stakeholders.

Leadership of integrated care is important because the Five Year Forward View sets out a clear direction for how health and social care services must develop to deliver high quality care and treatment in the context of changing patient/user need, increased service delivery pressures and restrained budgets (NHS England, 2014). The NHS already works across a wide range of providers and within several sectors and the interdependence between health and social care will certainly increase with new partnerships with local communities, local authorities, and employers (NHS England, 2014).

The newly emerging integrated care systems outlined NHS England (2014) aim to bring together organisations and their partners to plan and oversee the implementation of

improvements in health and care. It has been argued that current and future integrated care systems must address a range of development needs if they are to be successful, with the development of integrated leaders being vital to this shift (Ham 2018). Specifically, leaders based in integrated care systems need to develop shared vision and a strong sense of common purpose between the organisations involved based on collaborative leadership (Ham 2018).

Therefore, ongoing and future changes in service delivery mean that health and social care leaders will be less often influencing just one organisation but instead will be working between several organisations across primary and secondary care, health and social care and publicly funded services, the not-for-profit sector and private businesses. Today's health and social care leaders will therefore need different skills than their predecessors to enable system leadership, building partnerships and working across organisations and sectors (Kings Fund 2011; Naylor et al. 2015). As noted above, shared leadership, focused on developing shared leadership within teams, and across teams/services, has recently been suggested by the HSC Collective Leadership Strategy (2017) as an approach for leaders to address the new challenges of leading services.

While there is a great deal of descriptive research on leadership and leadership development within health, its focus has been largely profession-specific in nature (e.g. General Medical Council 2012; Maxwell 2017; Royal College of Physicians 2017; Royal College of Nursing, 2018). As a result, it rarely addresses the situation faced by leaders working across health and social care boundaries. Importantly, there is little understanding of what the mechanisms are for good/effective leadership across integrated health and social care systems, the contexts that influence good leadership or the nature of the resulting outcomes (Fillingham & Weir 2014).

Given this gap in our knowledge and the pressing need to know what might support good leaders in this policy and practice priority area, this review focuses on identifying what might constitute successful leadership across professional, sector and agency boundaries that seek to promote integrated and thereby improved services across health and social care. The review will undertake an extensive search of the health and social care literature to identify the concepts/theories of leadership to examine what mechanisms work, for whom and in what circumstances. The results from this synthesis, informed by patient, user and carer perspectives, will support the ongoing development and organisation of health/social care, inform leadership development programmes and refine theoretical understandings of leadership to enable future research.

3a. Evidence explaining why this research is needed now

This realist synthesis is timely as the leadership of integrated services/systems is becoming more prominent as an essential feature of integration and quality. As discussed above, this has its risks because, at present, we do not have a firm understanding of concepts and theories of leadership of integrated team-based health and social care systems – and thus leadership can mean many things to different individuals. This research is also needed now because leadership of integrated team-based services, which can span services and sectors, is different to leadership of traditional hierarchically modelled, single professional teams. As such, different abilities are likely to be required acknowledging differing value bases and the need to exert influence in different ways with different professional groups and sectors. As the organisation and delivery of health and social care evolve, services will increasingly be provided by different practitioners and support workers with multiple membership and leadership (e.g. Cranston et al. 2018). Effective leadership of integrated team-based services (acknowledging the requirement for development of new or different leadership approaches) will be needed to prevent care becoming further fragmented with the consequent lack of continuity, inefficiencies and safety risks. Traditional organisational, psychology and management models of leadership do not reflect this conceptualisation of integrated leadership.

There is an important emphasis on the development of clinical leaders with resources

allocated to achieve this (NHS England 2014). However, it is crucial that this leadership development addresses the changing leadership skills required to lead diverse integrated teams within and across sectors. It is not known how leaders experience their role and what challenges they encounter in leading the delivery of high-quality services that improve patient/user outcomes. As noted above, because there may be different, and sometimes competing goals, effective leadership is required within and across integrated teams (Bienefeld & Grote 2013) to prevent care becoming fragmented. Most research has focused on team processes (within teams) and has overlooked the effects of collaboration required for care delivery (across teams, sectors and services). It is argued that leadership of an integrated team brings unique challenges for leaders (DeChurch & Marks 2006) including the challenge to successfully synchronise actions and goals across component teams (DeChurch et al 2011).

Lastly, in a review of leadership development research, Day et al. (2014) identified, for example, a lack of evidence about how expert leaders develop in practice and thus there is a need to step back and focus on what happens in the everyday work of leaders as they practice and develop. These approaches may mean that informal and formal leaders emerge, thus increasing the diversity, complexity and uncertainty of integrated team leadership development.

4. Aims and objectives

Given the gaps in knowledge outlined above, this review has the following aims and objectives:

Aims

This review aims to identify and refine the programme theories of leadership of integrated team-based services in health/social care, exploring what works, for whom and in what circumstances. It will provide practical guidelines for policymakers, health and social care leaders, managers and clinicians to help them design work systems and leadership development initiatives to support effective leadership of complex multi-system services.

Objectives:

1. To investigate who are the leaders of integrated team-based services and what activities contribute to their leadership roles and responsibilities.
2. To explore how leaders lead/manage integrated team-based health and social care services that span multiple organisations, agencies and sectors.
3. To develop realist programme theories that explain successful leadership of integrated team-based health and social care services iteratively through stakeholder consultation and evidence review
4. To identify the development needs of the leaders of integrated team-based health and social care services.
5. To provide recommendations about optimal organisational and inter-organisational structures and processes that support effective leadership of the integrated health and social care system.

5. Research plan/methods

As with all complex social interventions, it can be assumed that leadership will work for different stakeholders in various settings in different ways. However, available theory explaining its potential is limited. Therefore, we will conduct a realist review (Pawson et al. 2004; Greenhalgh et al. 2011), developing and iteratively refining initial programme theories through stakeholder consultation and evidence review. This approach has been successfully used by the co-applicants in the following NIHR-funded work: a study of teamwork in stroke care (Harris et al, 2013), a study of intentional rounding in nursing (Sims et al., 2018), a review of shared-decision making (Manthorpe, CI, in press), and a current review of service user/carer engagement in mental health services in Ethiopia (Abeyneh, Manthorpe, CI, 2018 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6057009/).

A range of strategies will be employed, including searches of relevant academic and grey

literature including health and social care policy documents and stakeholder consultation. Given the complexity of this review, we will hold three separate stakeholder consultation events during the project to 'ground' the review in the lived experience of leaders of integrated team and patient/user/carer and public involvement (PPI) members of the review advisory group. We will invite 8-10 individuals with health and social care leadership experience, realist review expertise, health/social care leadership policymaking experience. These individuals will meet with advisory group members (see below) and the research team to elicit "realist theories" on the mechanisms and contexts of leadership. This process is recommended in realist evaluation, as understanding what key stakeholders know about an intervention and their reasoning for or against its implementation is essential to understanding it.

The review will be conducted in three interlinked phases:

Phase 1 – Development of initial programme theories
In the first phase, initial program theories, i.e. purported ideas of 'what is supposed to happen?' or 'how is it supposed to work?' will be identified and made explicit. This will be undertaken in two ways:

1. By examining academic, policy and grey literature about leadership of complex integrated teams. Academic literature will be identified by electronic searches of databases including Medline, CINAHL, Embase, PsychINFO, Health Management Information Consortium, government and other specialist health and social care websites. Grey literature relating to policy and organisational-based material will be sought by searching Google Scholar, government and other specialist websites (e.g. Leadership Academy, Skills for Care, King's Fund, Advance HE, The Institute of Healthcare Management). Four members of the research team (Reeves, Harris, Sims, Fletcher) will independently examine documents to identify any purported mechanisms of leadership (i.e. theories or assumptions about why/how leadership was successful/was expected to work). This will continue until no new mechanisms are identified. Discussion between the whole research team will generate, through consensus, a combined list of preliminary context-mechanism-outcome configurations of leadership of complex integrated teams/services to be refined throughout the review.

2. By consulting with key stakeholders and experts to elicit their theories and assumptions about how leadership of integrated teams works. At the first consultation event, participants will be asked to think about their own knowledge and experience of leadership. For example, health and social care leaders will be asked to comment upon their own personal experiences of leading different teams/service and discuss instances when they felt it worked particularly well or not so well. In realist evaluation, such information is useful for their insight and explanatory nature, which can help identify the contexts and mechanisms which are conducive to the outcome of an intervention (Pawson & Tilley, 1997). It is likely that the literature identified will be broad and many initial programme theories will be identified. This first stakeholder consultation event will provide important insights into current priorities around leadership within integrated care that will inform the scope of the literature search and direct the research team towards more pertinent aspects of leadership of complex, integrated teams.

Phase 2 – Retrieval, review and synthesis of evidence
In this phase, empirical evidence will be sought and reviewed to refine the programme theories. This phase will be undertaken by two activities:

1. Evidence review
1a. Literature searching and screening. First, empirical literature will be identified from electronic searches of databases including Medline, CINAHL, Embase, PsychINFO and Health Management Information Consortium. Reference lists of relevant papers will be scanned and citation searches conducted in order to identify further materials. Expert advice about generating relevant search terms will be sought from the University's Library and

Information Sciences Specialists and revised as additional key words are generated. Papers and other information that satisfy any of the following criteria will be identified as potentially relevant and will be retrieved for review: describe or evaluate leadership; detail its implementation or development in various settings; address the experience of team leaders, team members, policy makers related to leadership; describe the organisational or political context of leadership; reviews of leadership.

To generate an initial insight into the potential volume of literature the research team will be managing during the review, searches of two electronic databases (Medline, CINAHL) were undertaken using the following search terms 'integrated leadership' and 'collaborative leadership'. These brief exploratory searches produced over 3000 abstracts, suggesting that the review will involve a substantial amount of material.

Only English language documents will be included in the review of the literature. In line with realist methodology, we will not have specific predetermined inclusion and exclusion criteria based upon research method or quality, but we will report areas of general weakness in evidence and individual study weakness where appropriate. Documents will be selected as relevant based on what they can contribute to theory development and/or refinement. The abstracts of all papers identified by searches will be screened for suitability.

1b. Extraction of key information. All potentially relevant papers will be retrieved and assessed by a member of the research team using a structured data extraction form. It is envisaged that the following information will be recorded for each potentially relevant paper: literature item details – whether descriptive, evaluative or a review paper; health and social care service areas in which leadership is situated; description of leadership activities; any reported outcomes in relation to leadership activities, enabling or inhibiting contexts linked to leadership; clarification and explanation about context-mechanism-outcome configurations.

Each of the data extraction forms will be independently examined by at least two members of the research team for inclusion. Data or information from each of the included materials will be analysed thematically to provide a comprehensive description of the purported mechanisms of team leadership. Contexts that appear to trigger or inhibit the mechanisms will be identified and outcomes for health and social care staff, teams, organisations and patients/users/cares/family members when the mechanism is present or absent will be noted.

1c. Analysis and synthesis. All extracted information will be analysed and synthesised to identify the relationships between identified mechanisms, contexts and outcomes. This process will draw on the realist review work of Rycroft-Malone et al (2012) and Wong et al (2016; 2017) which build on Pawson's (2006) earlier work on realist enquiry. In doing so, we will undertake the following: organisation of extracted information into evidence tables representing different bodies of literature; identification of themes across evidence tables in relation to emerging patterns in between mechanisms, contexts and outcomes; and linking the emerging patterns to develop hypotheses. Our previous experience of realist work suggests this part of the process will be resource intensive so will engage all project members – research team, advisory group (see below) and the consultation event participants. Analysis and synthesis will occur iteratively and are likely to run in parallel, with analysis informing syntheses. We will identify prominent recurrent patterns of context and outcome configurations and seek to explain how these occurred.

2. Stakeholder consultation
At the second event, participants will be asked to provide advice to the research team with the volume of data generated from the searches. If available theories are limited within the literature, the consultation event could generate additional theories that were not previously identified. If the number of theories is unwieldy, the stakeholder event will enable key individuals to advise the research team on which should be selected for further investigation.

Phase 3 – Testing and refining of the initial programme theory

In this phase, further refinement and testing of the programme theories will be undertaken by juxtaposing, adjudicating, reconciling, consolidating and situating the evidence analysed in phase 2 (Pawson 2006). This will generate a revised programme theory. This final phase will consist of the following activities:

1. The research team will interrogate each explanatory inference identified in phase 2 to elicit how each primary study supports, weakens, modifies and refocuses the initial programme theories and how particular mechanisms produce outcomes, within specific contexts. Comparisons between contexts and different types of health and social care services will be sought to test the refined programme theories and draw out patterns of demi- regularity. Furthermore, the refined programme theories will be tested against substantive theory on leadership of complex systems.

2. At the final consultation event, interpretations from Phase 3 of the review will be tested through the experiences and expertise of the stakeholder group. Recommendations will be sought about what leadership mechanisms may be of most benefit and what contextual factors might support their success. Furthermore, participants will be asked to consider how best to present study findings and outputs to be useful to the NHS and social care.

Report writing
We will follow RAMESES Guidelines (Wong et al. 2016, 2017) when reporting the findings from this review. It is anticipated that the final report containing synthesised review findings will identify the underlying mechanisms of integrated team-based leadership, and explain how these produce their effects, as well as highlight the key contextual factors that impact success or failure. Recommendations can then be made as to how employers can best target or develop integrated team leadership development for specific groups in various settings. Specific output and dissemination activities related to this report are outlined below.

6. Dissemination, outputs and anticipated Impact

Project Outputs
This project will add to more informed empirical understanding of leadership of integrated team-based services, which is very timely given the ongoing shifts occurring across the NHS following the Five Year Forward View (NHS England (2014) and the Long Term Plan and Green Paper on Social Care (both expected Winter 2018). The review results will also inform leadership development programmes and refine the theoretical understanding of leadership to enable future research in this area.

It is anticipated that the review will also generate a range of other outputs, such as:

- Case studies/exemplars/vignettes of effective integrated leadership practice
- A typology of integrated leadership types, processes and contexts.
- Mechanisms that will identify key skills/attributes of leading integrated teams/services
- Evidence about possible transferable leadership skills across settings/sectors
- Key information for colleagues involved in the planning or revising of health/social care leadership training programmes.

Dissemination
Key findings from this review will be disseminated to stakeholders. We will draw on the networks and expertise of the research team, advisory group and collaborators to disseminate the research outputs widely and appropriately. Key audiences are expected to include:

- We will also generate opportunities to provide learning and key messages to higher education with and through the Leadership Foundation.
- Health and social care staff, managers and leaders together with clinical and human resource directors who have responsibility for the provision of health and social care in provider organisations, local authorities, voluntary and private sector as well as NHS acute, mental health and community trusts

- Managers and directors of networks, e.g. Academic Health Sciences Network and the CLAHRCs (and their successors) who have responsibility for applied research, knowledge exchange and promoting innovation through pathways of care across a health system
- Health and social care policymakers, nationally and internationally
- Health Education England, Royal Colleges and other leadership groups (e.g. NHS Leadership Academy, Skills for Care, Local Government Association, Care England, National Care Forum, King's Fund, Advance HE, The Institute of Healthcare Management), NHS Improvement, who are influential in policy concerning leadership in different contexts
- National patient/ service user and carer organisations.

Planned publications, presentations and other materials will include:

- A mid-project progress report and a final report to the NIHR HS&DR Programme. In addition, at least three papers (including a protocol paper) will be submitted to peer-reviewed academic journals and a further paper will be submitted to a professional journal.

Furthermore, the project will engage in other forms of dissemination:

- Conference presentations at scientific and professional meetings (e.g. the NHS Confederation and Foundation Trust Network and through the Advance HE)
- Website dissemination and short briefing papers (produced throughout the project drawing attention to emerging lessons and messages) for national and international dissemination targeted for key audiences (e.g. health service managers, care sector leaders policy makers and patient, user and carer organisations)
- Social media dissemination via the use of Twitter and LinkedIn applications to promote and direct followers to relevant websites to read, downloadable reports and papers.

The project team has a strong track record of producing high quality academic publications as well as shorter more accessible outputs in the form of blogs, editorials and opinion pieces. We share research findings and learning in accessible ways.

<u>Anticipated impact and possible barriers</u>

The team will proactively shape the impact trajectory, through consultation throughout the study and with key organisations e.g. HEE, NHSI, KF. This will ensure that outputs are useful and apposite to target audiences to facilitate implementation. Outputs will focus on the specific development needs of leaders of complex integrated teams to inform existing leadership programmes and to design innovative content and delivery approaches tailored to the needs of leading integrated teams. The findings from the review will generate a detailed understanding of the key factors (contexts, mechanisms and outcomes) related to successfully leading integrated team-based services across health and social care settings. As such, the project will generate a range of possible impacts, including:

- Informing future empirical research into integrated team-based leadership
- Refining the theoretical understanding of leadership to enable further investigation
- Informing organisational/agency policies and practices to directly influence the delivery of patient care
- Informing leadership development programmes to strengthen the training of effective health and social care leaders.

Collectively, these findings will therefore directly inform research, clinical practice, improve the quality of leader, practitioner and patient/user, carer experiences.

In relation to possible barriers, implementation will depend on the financial status of different health and social care organisations, however, the review findings will provide important information that will contribute to leadership development, clinical staff management and the delivery of care. Specific barriers we envisage include the large size of material about leadership which may be very general – and the need to ensure that we carefully make records of our inclusion and exclusion criteria and solve queries collectively.

7. Project / research timetable

The project will be undertaken in 18 months. Key project activities will include: project set up; literature searching and screening; analysis and synthesis review materials; report writing; consultation events; advisory group meetings; project team meetings; dissemination. See Appendix for a flow diagram of key project activities and Table 2 for a monthly project timetable.

Month	Phase	Activity
0-3	Pre-Project set up	- Form advisory group - Recruit participants for consultation events - Develop/test search strategies - Prepare protocol paper - Research team meetings (x2)
1-4	Develop initial programme theories	- Literature searches - Screening/identification of possible leadership mechanisms - Advisory group meeting - 1st Stakeholder consultation event - Submit protocol paper - Research team meetings
5-10	Retrieval, review & synthesis of evidence	- Literature searching/screening (evidence review) - Abstraction of key information - Analysis and synthesis - Programme theory development - Advisory group meeting - 2nd Stakeholder consultation event - Produce interim report - Research team meetings
11-15	Testing & refining initial programme theory	- Further analysis - Refinement and testing of the programme theories - Advisory group meeting - 3rd Stakeholder consultation event - Prepare final project report - Research team meetings -
16-18		- Complete and submit final project report - Design accessible evidence-based outputs eg briefings, "leadership insights" and podcasts tailored for leaders in different agencies and linked to policy requirements Build engagement with leadership development programmes providing advice on developing relevant educational material - Prepare/submit journal papers - International conference presentation

Table 2: Project timetable

8. Project management

The project will be based in the Faculty of Health, Social Care and Education at Kingston University and St George's, University of London (KUSGUL), with the involvement of a co-lead applicant and co-applicants from King's College London, the Centre for Public Engagement at KUSGUL, and an international leadership expert.

The review will be co-led by Simon Fletcher and Ruth Harris (co-PIs), who will work together to collaboratively provide overall direction and management of this realist review. Fiona Ross will provide dedicated one-to-one support and mentorship for Simon to facilitate development of project management and research leadership skills. Sarah Sims, research associate and Simon Fletcher, will undertake all tasks related to the review (e.g. literature searches, screening, analysis and synthesis).

Fiona Ross and Jill Manthorpe will provide expertise on leadership as well as support the overall development of the project. Sally Brearley will contribute to patient and public involvement (including users and carers) in the project. She will also co-chair the advisory group with Fiona Ross. Prof Stephen Zaccaro, a US-based expert in systems informed team leadership and an executive leadership coach will serve as an expert international consultant.

In addition to regular fortnightly meetings between the research team, there will be several methods for ensuring close working between the team. We will have three formal meetings over the course of the project, which will bring together all members of the project team for in-depth project planning and review. Informal contact will also take place throughout the project via email and Skype, and the whole team will be involved in the key phases of the project, including literature searches, screening, abstraction of information, interpretation of results, writing of the report and wider dissemination. Collectively, the project team has a depth of experience and expertise of successfully managing funded research projects, including NIHR-funded projects.

Advisory Group

An advisory group of 6-8 members will provide support and guidance to the review. A matrix approach will be taken to the composition of the advisory group, ensuring it consists of health and social care leaders from different professions/services with differing expertise experience, research or practice associated with service leadership. To ensure the review has an integrated approach to PPIE, 2 to 3 patients/users will also be recruited to the advisory group. As mentioned above, this group will be co-chaired by experts in leadership and PPI, Fiona Ross and Sally Brearley. This group will meet on three occasions: at the start of the project (to help provide advice on the parameters of the review); at the mid-point (to discuss/validate the formation of the proposed mechanisms derived from the realist synthesis) and then at the end of the review to discuss emerging review findings and dissemination activities.

9. Ethics/regulatory approvals

As this is a review and synthesis of literature no formal ethical approval is needed. However, the team will apply good practices of research governance and conduct.

10. Patient and public involvement

Previous empirical studies undertaken by the researchers in this team especially the HS&DR funded work (Harris et al., 2013 Hewitt et al., 2014, 2015; Sims et al., 2015a, 2015b, Smith et al 2008, Ross et al 2014) have greatly informed the thinking behind this review. The research team believes it is important that the insights of patients, service users, carers and the public are reflected in exploring when leadership works and how.

Over the last 15 years members of the project team have innovated in the field of involvement of the public in shaping and co-delivering research. Fiona Ross led the establishment of the Centre for Public Engagement at KUSGUL. Sally Brearley has worked with in the Centre throughout to shape the governance and new thinking on PPI methods, which are central to our thinking rather than an ‘add-on’. We do not employ formulaic approaches to PPI in our research. The involvement springs from the research question and the design is framed on the advice and experience of what works. Moreover, we have shown that the quality of a synthesis of literature is increased by being tethered and interrogated

through the lens of the lived experience (e.g. Harris et al 2013; Sims et al 2018).

As noted above, we will integrate patient, user and carer views in both the advisory group and the consultation events. These perspectives will provide meaningful PPI engagement to provide the research team with a critical edge to interrogate the right questions to ask and to provide reflections on the emerging review findings. As such, it will add an important dimension to the project. We have used similar approaches in previous studies (Hewitt et al., 2015, Ross et al 2014), which have influenced our thinking. Indeed, as noted above, patients', service users' and carers' perspectives and experiences of service leadership will be integrated throughout the review (as key informants and critical friends) calling researchers to account through interrogation of key findings as the review progresses. We will draw on our existing networks of PPIE collaborators, NIHR INVOLVE and local service user representative organisations to identify people who would be interested in being part of the advisory group. We will carefully recruit PPI members with a range of experience of complex service delivery to the advisory group with due regard for equality of opportunity.

Expert advice has been sought from the Centre for Public Engagement at KUSGUL in the form of Sally Brearley, a Fellow of the Centre, who contributed to the development of this proposal. She will also be contributing to the review in the form of providing expert PPI input as well as co-chairing the advisory group with Fiona Ross, another PPI expert.

Funding Statement
This project has been funded by the National Institute for Health Research to the value of £219,830.28. This award is sufficient to complete the research as outlined in the project proposal.

11. Project/research expertise

We are an interprofessional and interdisciplinary team of experienced health and social care practitioners, leaders and researchers. The team has the following project/research expertise:

Simon Fletcher has growing expertise in undertaking a range of different literature reviews examining the effects of collaborative interventions in health and social care. These reviews have specifically explored: the effects of interprofessional education (Reeves et al, 2016) interprofessional online learning (Reeves et al, 2017), inteprofessional collaboration in sports medicine (Fletcher et al, 2017), the impact of faculty development (Newman et al, 2018) and interventions designed to enhance family member integration in intensive care contexts (Xyrichis et al, in press). Ranging from full systematic reviews, scoping studies and systematic rapid evidence assessments, involvement in these projects has provided much insight into the value of structured evidence evaluation in health and social care and moreover how the nature and characteristics of an evidence base are influenced by a diverse range of factors.

Ruth Harris, professor of health care for older adults at King's College, London, has a clinical background in nursing of older people and developing and evaluating new clinical roles and models of service provision. She is an international nursing research leader who has expertise in professional practice. She has successfully led two NIHR funded projects which involved realist reviews of teamwork and intentional rounding.

Sarah Sims is an experienced researcher with expertise in conducting complex mixed-method studies in the NHS. She led the realist synthesis work for a study of teamwork.

Fiona Ross has experience as a leader, manager and researcher in applied health research in primary care and has led a programme of work, developing different methods and approaches in working with patients and the public in research. She also set up the Centre for Public Engagement at KUSGUL, and was Director of Research at the Leadership Foundation for Higher Education (now AdvanceHE).

Sally Brearley brings the patient and public (PPI) voice to the team. She is based at the Centre for Patient and Public Engagement at KUSGUL and has been involved in many funded research projects.

Jill Manthorpe is professor of social work at King's College London and is Director of the NIHR Health and Social Care Workforce Research Unit. She has considerable experience of literature reviews and primary research on the workforce in different sectors, with her most recent study on the subject being a current evaluation of the Department for Education's Frontline leadership programme.

Stephen Zaccaro brings international perspective on understanding the nature of leadership within different systems expertise as well as expertise in the coaching of executive leaders.

The research team is small but multidisciplinary, and this review builds upon existing collaborations between these colleagues, which will facilitate good working relationships and clear expectations. Collectively, the team has expertise realist evaluation and review methods (e.g. Harris et al., 2013 Sims et al., 2015a, 2015b, Reeves 2015; Ericson et al. 2018; Sims et al 2018).

The project team will also be able to draw on the expertise of university colleagues who will be available for informal advice and guidance. For example, work commissioned by NHS Improvement, currently taking place within KUSGUL, is exploring the characteristics and attributes of effective interdisciplinary allied health leaders and what leadership governance structures exist that affect the quality and productivity of this role. Insights offered from colleagues about their related work will strengthen this project.

12. Success criteria and barriers to proposed work

Criteria for the successful completion of this realist review include:

- Expertise and experience with realist review and realist evaluation methods shared by research team members
- Collective intellectual input from two senior researchers in the role of co-PIs (Reeves, Harris), supported by two experienced research associates (Sims, Fletcher)
- A research team which is already assembled so no delays will be incurred for recruitment
- Regular interaction using meetings for the research team members (who have positive research relationships) to progress the review in a timely fashion.
- The team's extensive networks of colleagues with leadership experience and methodological expertise who can be accessed to form an advisory group to effectively steer the project
- The team's excellent PPI input by two experts (Brearley, Ross) to ensure patients'. users' and carers' perspectives are effectively embedded into the review
- The team's expertise and creativity to ensure a range of dissemination activities will be undertaken helping to broaden the reach and impact of findings.

Possible risks/barriers, as well as our mitigation strategies, include:

- Ensuring high quality review findings. We have prepared this application and will conduct the review using the realist principles developed by Pawson & Tilley (1997) and Pawson (2006) for realist work, which have been successfully employed by research team members in two previously completed realist reviews (Harris et al., 2013; Sims et al 2018). Drawing upon these principles and experience will ensure that the review is rigorous, robust and trustworthy.
- Possible difficulty recruiting lay people into the project. If we experience this problem, the research team will draw upon our PPI experts to use their broad networks to overcome this problem.
- Possible difficulty sustaining lay and professional involvement throughout the project. Drawing on our PPI experts and our professional networks we will ensure that project meetings maximise opportunities for their active participation.

- Possible attrition of individuals during the three consultative events. If this does happen, the research team are well positioned to draw upon their extensive networks to recruit additional individuals with the necessary expertise and experience to replace those who withdraw.