Rapid Review on System Leadership in Health Care

System Leadership: What do we know and what do we need to find out?

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Executive Summary

There is widespread consensus in the literature that system leadership means working across organisational boundaries which requires new and specific sets of skills and competencies (*Doing Things Differently: Rethinking Leadership Behaviours. Resource Exploring Themes, Behaviours and Indicators.*, 2019; *Future Systems Leadership Scoping Project*, 2021). There is also significant agreement about the pivotal role of change management and implementation skills needed by system leaders to steer health care organisations through the emerging challenges in the NHS in England.

Creating new governance structures and navigating deftly the political settings and context of health care provision in England is also seen as a key task of system leaders. Terms such as complexity, adaptability, uncertainty and risk are frequently used to describe the difficulties faced by system leaders on a daily basis. Beyond terminological similarities, the field however appears to lack a robust and consistent definition of what a health system is, what system leadership amounts to and which attributes, qualities and styles are most suitable to system leadership.

This rapid review synthesised empirical research on system leadership in the health care sector. Our analysis revealed particular gaps in our current understanding of system leadership. First, the existing research understands system leadership through situated or contextualised research studies which limits the applicability or generalisability of findings. Generic mapping of leadership tasks against leadership skills and competencies have not been undertaken yet which hinders the clear formulation of training and development objectives for system leaders at this stage.

Second, more than ever health systems are characterised by continuous change, which require leaders to steer and manage highly dynamic and at times, unpredictable, transformations. This means that system leaders will have to make effective decisions in a climate of uncertainty and sometimes increased risks to service provision and care quality. Balancing longer term system sustainability and with limited resources for improved population health outcomes and much needed progress in tackling health inequalities will create huge challenges for health care leaders. The current research does not offer actionable evidence about any generic set of skills for this type of work for system leaders.

Our recommendations are to

1. Conduct a qualitative study to explore how different groups of system leaders define and perceive themselves including an analysis of the skills and competencies required for each group
2. Undertake a mixed methods study to examine the needs of system leadership in the newly emerging transformational space occupied by Primary Care Network leads and Integrated Care Boards

3. Design a study to explore how Equality, Diversity and Inclusion (EDI) is situated within health care systems and how to embed it into business as usual through the lens of system leadership
4. Undertake a revision of the Healthcare Leadership Model from the perspective of system leadership
5. Conduct an independent evaluation of system leadership training and development interventions in England
6. Explore the opportunities and impact of technological advances, such as Artificial Intelligence (AI) and medical innovations for system leaders

Tables and Figures

1. Background

The NHS Leadership Observatory has commissioned a team of researchers at the Medical School of Edge Hill University and at the Alliance Manchester Business School at the University of Manchester to undertake a rapid review of published empirical research to identify the current evidence-base for system leadership in health care. This is set against a policy background of the formal establishment of 42 Integrated Care Systems (ICS) across the whole of the NHS in England in July 2022. These are partnerships, to be put on a statutory footing for the first time, between the organisations that meet health and care needs across an area, to coordinate services and to plan in a way that improves population health and reduces inequalities between different groups, populations or individuals. One system leader, as reported by the NHS Confederation in its assessment of progress made by ICSs so far, asserts that "ICSs are a revolution in the mindset, not just a reorganisation of services." (https://www.nhsconfed.org/publications/state-integrated-care-systems-202122).

Changes to how health care is delivered and how health systems are organised in England through the emergence of ICS and Primary Care Networks (PCN), as well as the need to respond to emergencies such as the recent COVID-19 pandemic, has reinforced the view that system leadership may be key to the effective management of healthcare in times of rapid innovation and continuous change.

1.1. System Leadership

System leadership is understood to refer to leader and leadership attributes, qualities, behaviours, mindsets and actions which have a system wide impact. It is variously defined as 'actions that support the implementation of sustainable practice change' (Stanley, 2017, p.128) or discussed as part of policy making and governance themes in health care (Dickinson & Smith, 2021; Fitzgerald, 2017). It transcends organisational cultures and boundaries and is distinct from other forms of organisational leadership.

There is some discussion as to whether or not system leadership only narrowly applies to system leaders in the NHS context, i.e. those in leadership positions that span several organisations such as the emerging ICS, or wider commissioning and regulatory agencies, or NHS England and Improvement. Additionally, system leadership also occurs, by default, at the intersection of local, regional or national decision making that creates effective change for health care services. From this perspective, system leadership qualities and attributes pertain to all staff who have the potential to influence people who they do not have a direct, line management responsibility for and who can develop collaborative partnerships to implement and sustain change. It is also increasingly argued that staff at all levels, including clinicians, first line and middle managers, may be understood as leaders as they need to co-ordinate care for patients (Chambers & Taylor, 2021).

The lack of consensus around a clear and robust definition of system leadership has been noted in recent research (Chambers et al., 2020). Questions have been raised about how to effectively enact system leadership, what would constitute system leadership in specific

contexts, and what processes are required to support system leadership capacity and capability for health and care staff. This is all set against a background of concerns that leadership in the NHS for equality, diversity and inclusion (EDI), which impacts directly on the workforce and on population health inequalities, still has a long way to go as recent reports of misogyny and racism in a healthcare system that is 'disjointed, siloed, unresponsive and defensive' suggest (Kapadia et al, 2022, BMJ editorial, 2020, NHS Leadership Academy, 2021).

Whilst there is a voluminous literature on theories of leadership there is little on how these theories apply in practice to support healthcare leaders in meeting the challenges they face. There is even less on how effective leadership development can be implemented and evaluated. In the context of healthcare there is a growing body of empirical evidence about effective teams but little research evidence that defines system leadership and the associated skills, knowledge, behaviours and other attributes that would contribute to the capacity and capability to lead in a healthcare system.

Evidence on the impact of leadership training and development interventions is most demonstrated on lower levels of impact, charting the reaction to the training and development and self-reported learning, and far less articulated on higher levels of impact, such as behaviour change and organisational performance (West et al, 2015). To our knowledge, there is also, no rigorous evidence of the financial or social return on investment. In effect, this means that the rigour, relevance and applicability of existing competency frameworks, such as, for example, the NHS Healthcare Leadership Model and the Faculty of Medical Leadership and Management (FMLM) framework to healthcare system leadership is uncertain.

1.2. Wider policy context

This rapid review was commissioned in a time of significant change and extraordinary challenges for the NHS in England. Over the last 2 years the NHS in England, with its partners, has demonstrated significant resilience at the local system level, whilst also attempting to focus on at risk communities. Our report will take account of this recent test of strengths as well as of ongoing transformations which are being instigated through the White Paper on Health and Social Care,[1] the development of ICS and Integrated Care Boards (ICB) with new governance duties and obligations in England, and the awaited review of leadership by the Messenger Review.[2]

The White Paper 'Joining Up Care for People, Places and Populations' which was launched on 9th February 2022 identified key pillars of effective and patient focused health care delivery for the NHS in England. It reiterated the need for new governance structures that underpin the emerging integrated care service landscape in England. It also confirmed the direction of travel towards increased patient focused health care delivery. Finally, the Messenger Review was set up to consider the drivers of leadership performance in previously fragmented health

[1] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1055687/joining-up-care-for-people-places-and-populations-web-accessible.pdf

[2] https://www.gov.uk/government/publications/review-of-health-and-social-care-leadership-terms-of-reference/review-of-health-and-social-care-leadership-in-england-terms-of-reference

service delivery structures, the standards expected of clinical leaders and the required incentives for professionals in leadership roles when creating new and innovative health service delivery structures for patients.

The NHS in England has long placed particular emphasis on management education and leadership development, including training and development in leadership skills. In 2011, it funded the development of a Healthcare Leadership framework (NHS Leadership Academy, 2013) which provided a unified model of leadership overcoming the disparate leadership competence frameworks along professional lines.

Other leadership competency frameworks for specific professional groups have nevertheless continued to advance, such as the FMLM, Clinical Leadership Competency Framework (CLCF) and the General Medical Council (GMC), setting out the skills and competencies required for nurse or medical leaders in the respective professional associations.

In addition, leadership approaches with different emphasis have also been articulated and proposed, based on either specific sets of principles, such as value based leadership models (Bartel et al., 2004; De Brún & McAuliffe, 2020; Moen & Prescott, 2016) or on specific skills required for improving patient care, such as servant and authentic leadership (Matei & Matei, 2014; Murphy et al., 2020a; Schwartz et al., 2002; Trastek et al., 2014; van Dierendonck, 2011; West et al., 2015). Various other approaches in the leadership field rest on perceptions of central features of leadership behaviour, such as the capacity to deal with complexity and contingency (Porter-O'Grady, 2020; Pype et al., 2017; Uhl-Bien et al., 2020). In lieu of clearly defined system leadership frameworks, these have been adopted to answer the specific demands of leading health care services at system level.

Against this background, this rapid review was commissioned to identify existing empirical research on system leadership in healthcare. We operationalised the requirements of the commissioning brief to extend to definitions of 'health and social care system' and 'system leadership' since initial scoping of existing literature appeared to suggest that these terms were insufficiently and inconsistently described or elucidated.

2. Research Aims

This rapid review reports on the current empirical evidence about system leadership in health care. It identifies the gaps in knowledge about system leadership and makes recommendations for future research in this field.

3. Research Questions

The rapid review addresses the following research questions:

1. What is the current evidence about system leadership in healthcare?
2. How does existing understanding about system leadership map against the 9 dimensions of the Healthcare Leadership Model (NHS Leadership Academy)?
3. What are the implications for system leadership and leadership development which promotes inclusion, equality and diversity?
4. What are the gaps in our knowledge about system leadership and training which require further research and investigation?

We identified research question 1 as the primary research question informing our search strategy whilst we addressed the other research questions in relation to the evidence that emerged from our analysis of the primary research question.

4. Methods

A rapid review of research evidence was undertaken using systematic review methods in line with interim Cochrane Guidelines on the conduct of rapid reviews (Garritty et al., 2021). Rapid reviews are increasingly being used in research to synthesise evidence in a timely manner (Khangura et al., 2012). This approach to systematic review is well suited to healthcare where there is often an urgent need for evidence to inform decision making (Haby et al., 2016). The review was structured using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher, Liberati, Tetzlaff and Altman, 2009).

4.1. Search strategy

An iterative approach to the development of the search strategy was undertaken. Search terms were identified by the project team (involving subject experts) and via an exploratory search of known key articles indexed in the MEDLINE database. A scoping search was developed in MEDLINE using free-text and subject headings. The search was tested and refined to ensure it captured known relevant studies. Focused searches were then undertaken in MEDLINE, CINAHL, HMIC, Scopus and Google Scholar. Targeted website searches were also undertaken in NICE Evidence Search, Google Scholar, Department of Health and Social Care, Kings Fund and the NHS Leadership Academy. Keywords searched included "systems leadership" or "systems-based leadership" or "system leadership" or "system-based leadership" or "distributed leadership" or "collective leadership" or "community leadership" or "collaborative leadership". Synonyms of these keywords were searched in combination with the context of health. Full search strategies can be found in the Appendix. Searches were conducted on 10th October 2021.

A snow-balling approach to identifying relevant studies was also utilised. Citation searches were undertaken of included studies and references of the included studies were screened. Subject experts within the project team were consulted for additional relevant studies. Citations were uploaded to a reference-management software (Endnote) and duplicates were removed.

4.2. Study selection

Titles and abstracts were reviewed using the *Rayyan.ai* platform. For inclusion, papers needed to be empirical studies reporting findings on system leadership in health and social care and be published from 2010 onwards in the English language. The decision to only include empirical studies was informed by the parameters of the commission to undertake this piece of work. Non-empirical papers identified from the search were however drawn on to inform the discussion section of the review. In line with the interim Cochrane guidance on rapid reviews (Garritty et al., 2021), 20% of abstracts were screened by two reviewers and disagreements were resolved by consulting the wider team. Full-text publications for included abstracts were obtained and screened against the inclusion criteria by two independent reviewers. The PRISMA Flow diagram is included on page 31 of this report.

4.3. Search results

The focused database searches identified 3019 citations of which 1037 were removed as duplicates. This resulted in 1982 citations with a further 323 identified through targeted website searches and 72 through searching the reference lists of included studies. Abstracts and titles were then reviewed to determine the relevance of citations to the inclusion criteria for the review. 2306 citations were excluded as they did not report on empirical data. This resulted in 71 citations for full-text screening. Following full-text review a further 60 citations were excluded resulting in 11 papers which were included in the rapid review

4.4. Data extraction and analysis

A data extraction tool was developed by the project team. Two independent reviewers extracted data from five papers to pilot the tool (Garritty et al., 2021). This was shared and discussed with the wider team and the data extraction tool was further refined. Data were then extracted from the remaining papers by different members of the project team. Information extracted from papers included specific details of the publication, study aims, participants, study design and data collection methods. Data relating to the main findings from papers were also extracted and organised thematically within the data extraction table.

A deductive and inductive approach to the identification of themes was undertaken using 'best-fit' framework analysis (Carroll et al., 2013; Haby et al., 2016). Data that did not fit the 'a priori' framework were coded and, where sufficiently strong, generated additional themes. As this is the first rapid review to synthesise existing published empirical evidence of system leadership, this 'best fit' approach appeared appropriate.

Seven key themes were identified through data extraction and analysis. These include: definitions of system or systems leadership, the nature of health and social care systems, leadership styles, personal attributes, skills and competencies, equality, diversity and inclusion, and governance and resources.

5. Findings

5.1. Overall description

The search revealed that there was little empirical research in relation to health and care system leadership. The studies selected for this review were mainly empirical studies of system leadership in the workplace, some evaluations of training and development interventions. The studies were exclusively qualitative or mixed methods research favouring an observational design. No experimental or quasi-experimental design was utilised in the selected studies.

Eleven studies were included in the rapid review (see Table 1 on pages 28-30 for key characteristics of included studies). Eight studies originated from the UK and three from the USA. There was a high level of variation relating to the purpose of studies. Some studies undertook evaluations of system leadership development interventions and programmes in the NHS. Others focused on system leadership more specific to public health, ICS, physician involvement and COVID-19 related. Seven studies adopted a qualitative study design and four used mixed methods. Semi-structured and in-depth interviews were the main method of data collection used in nine studies. Two studies used online surveys, two used observations, one used focus group discussions and one study used documentary analysis. Our rapid review employed a narrative synthesis approach to report the key themes below.

5.2. Definitions of System or system leadership

Any definition of system or systems leadership was of key interest to this review. Initial scoping revealed that there existed a plethora of different definitions of both terms which, in turn, may engender widely different approaches to leadership styles, leadership skills and competencies required for effectively leading health care organisations at system level. An added complication is introduced by the largely emerging and still maturing nature of ‘systems’ in health care provision in England, with ICS and ICBs still being defined and developed. In effect, it means that system may have meant something else at the time when some of the included studies were conducted to what it means now or, in fact, what it may mean if, and when, the final destination as envisaged by the HSC White paper is reached. This terminological inconstancy reflecting continuing change has ramifications for our understanding of the skills and competencies and behaviours necessary to lead in health care organisations.

Text box 1: FMLM Definition of System Leadership

System leadership is to:

- Demonstrate effectiveness in contributing to and influencing policy development
- Understand and positively influence strategy and culture within and beyond their own organisation
- Demonstrate ability to negotiate effectively
- Demonstrate situational awareness in the handling of complex, challenging or ambiguous circumstances
- Demonstrate sensitivity when working with a wide range of stakeholders
- Demonstrate respectful communication and engagement, considering the perspectives, considerations and feedback of stakeholders
- Promote the alignment of clinical colleagues within the system in which they operate
- Exhibit awareness and knowledge of population health and how to improve it.

Source: https://www.fmlm.ac.uk/members/leadership-and-management-standards-for-medical-professionals/system-leadership

The question for this review was whether existing empirical studies in the field formulated or used a consistent definition of systems and/or system leadership. If no consistent use of either of these terms was evident, we wanted to know if there were features or aspects of system or system leadership shared by the included studies.

There was a degree of consensus about the scope and reach of a 'system'. Several papers highlighted that 'system' by definition extends beyond single organisations, and required work across organisational boundaries. There was little recognition or mention of cross-sectoral work, involving social care or the community sector but this may have been because all included studies had a focus on health care services. However, this also demonstrates a particular weakness in our current understanding of 'system' in research; it appears that cross-sectoral collaboration, whilst recognised as important, so far has not received clear articulation and definition as system work in empirical research on system leadership. What does it mean to lead collaborative projects or programmes that extend across care sectors with entrenched differences in professional approaches, care models, stakeholder perspectives, cultures and funding? There appears to be no empirical work on how leadership is situated in this important feature of the English 'system' at present.

System leadership was also defined in the included studies through identifying the type and style of leadership that was thought to be most suitable to system work. There was a clear preference amongst those studies which articulated definitions of system leadership for collective, collaborative, or shared and distributed leadership. This preference however was not based on any detailed analytical work and appears to be rooted in terminological affinities, where 'leading collaboratively' appears to have a natural fit with working together

across organisational boundaries. We found no empirical studies which explored the advantages or disadvantages of different styles of leadership work in health care systems. This represents a significant weakness of the evidence base at present, as one feature of the emerging integrated care system in England is the need for providers of different size, status and influence to work together. How leaders navigate asymmetries of power, influence and resources would be a key skill for future health care leaders but was not explored further in the included studies.

The studies included in our rapid review were much clearer about the nature of leadership work. Many of them pointed to the evolving nature of the system which would require adaptability, agility and an ability of leaders to deal with complexity and ambiguity. We will discuss the use of complexity later on in the discussion section as this is an important aspect of leadership skills and competencies in systems. It is noteworthy however in this context that in the selected studies complexity was not defined further. This highlights the need for additional analytical work to understand the implications of complexity in leadership work, where solutions to intractable or 'wicked issues' need to be found beyond the labelling of things simply as 'complex'.

We were also keen to see whether included studies had articulated the need of leaders to have effective negotiating political skills. Recent studies point to the political aspects of some system leadership tasks (Maslin-Prothero et al., 2008; Waring et al., 2022) and it was disappointing to see only one study in our rapid review hint at the political work required by system leaders. Thompson and Nelson-Marten (2011) pointed to the need for specific knowledge about political processes as health systems would increasingly operate between and across local, regional (devolved) and national political systems.

Studies by Evans (2021) and Bolden et al (2020) explicitly mentioned the definition of Ghate et al., (2013) which appears to have some appeal to empirical researchers investigating system leadership in health care provision. Their definition may be a useful normative starting point for future conceptual and empirical work in this context.

Text box 2: Definition of System Leadership by Ghate et al 2013

Systems leadership is an attempt to effect change for the social good across multiple interacting and intersecting systems, resting on the assumption that better and more efficient public services can result from more joined-up working across multiple service sectors.

It is characterised by two key attributes. Firstly, that it is a collective form of leadership: systems leadership is 'leadership as participation' rather than 'leadership as performance', and although it is individuals and not systems that produce change, systems leadership by definition is the concerted effort of many people working together at different places in the system and at different levels, rather than of single leaders acting unilaterally. Secondly, systems leadership crosses boundaries, both physical and virtual, existing simultaneously in multiple dimensions. It therefore extends individual leaders well beyond the usual limits of their formal responsibilities and authority.

Source: https://thestaffcollege.uk/wp-content/uploads/VSC_Synthesis_exec_complete.pdf

In summary, the included studies shared some notion of scope and reach of system leadership as extending beyond single organisations and boundaries. One constant was the central theme of working across organisational boundaries. Prominent leadership theories included, not surprisingly, collective, collaborative and distributed approaches although these were advocated more on affinity than on the availability of empirical evidence. There was also a degree of consensus around the importance of adaptability, agility and working in and with complexity and ambiguity.

There was also an absence of thought involving social care and community organisations around what constitutes a 'system' and hence, skills and competencies required for navigating a multi-organisational setting including organisations with differential resources, power, culture and political influence were not identified or researched. Whilst there was an acknowledgement of the main challenges of system leadership as being adaptable and able to cope with uncertainty or complexity, there was no further analytical or empirical work about which skills and competencies were related to these challenges. Last but not least, with one exception (Thompson & Nelson-Marten, 2011) reflections on the political nature of system leadership work were absent.

5.3. Nature of Health and social care system

Given the lack of reflection on the cross sectoral boundary work in most of the studies, it seemed important to further thematically analyse how authors conceived of the health and social care system. We conducted a sub-analysis of this important aspect and found that studies by Beharrell (2021) and Timmins (2015) articulated the need for awareness by system leaders of the socio-political context of the NHS in England, including the stream of NHS policies addressing health inequalities as a strategic priority. Both studies pointed to constant

change as a key challenge for system leadership requiring health care leaders to be aware of the possibility of rapid change and the short-term horizon of policy initiatives. Smith et al. (2020) echoed this and pointed to reducing the pressures at Emergency Departments as a current (pre-pandemic) political priority. We also found an interesting contribution in this context in the same study where authors pointed out the difference between leadership work implementing innovations and leadership work implementing policy changes.

This indicates the need for different sets of skills and abilities by leaders who face demands for organisational change, yet also have to deal with clinical and technological innovations which fundamentally transform the design and delivery of health care. Whilst no studies included in our review investigated the different skill sets required by health care leaders for the different domains of change and how they intersect, it clearly appears to be of paramount importance to conduct additional research around this as the pace of technological and medical innovations is increasing.

In summary, the speed of policy change in the NHS in England is best illustrated by the fact that none of the studies worked with the current ICS health and social care system concept of neighbourhood, place, system which is clearly articulated in the NHS White Paper (DHSC, 2022). Whilst there was an awareness of policy priority setting from central government, there was little evidence of detailed understanding or research around the political nature of health and social care system, and, with one exception, an absence of appreciation of the transformative potential at system level of innovations, technological and otherwise, which will have implications for system leadership work. In addition, there was no apparent recognition of the conjunction of policy changes with innovations, in the field of artificial intelligence, medical devices and others, and how this would further test leadership skills.

5.4. Leadership styles

Our thematic analysis of the category ‘system leadership style’ yielded a significant amount of different concepts, terms and approaches. There was a conceptual plurality to defining and conceiving leadership styles that made it difficult to reconcile emerging study findings. Most studies did not define styles through commonly agreed concepts such as distributed or shared leadership but through a list of tasks and demands or, alternatively, skills which leaders had to have to successfully navigate the health care system. In our studies, distributed or shared leadership styles was only mentioned once (Boyd et al., 2016). The plurality of different conceptual levels found in this review rendered conclusions about the most suitable leadership style almost impossible.

The ability to make quick decisions and follow through, having good communication skills, balancing the need for control as well as granting autonomy to staff were mentioned, alongside being energetic, trusting and being trustworthy, demonstrating vulnerability, using inclusive language, being curious and open minded. This focus on qualities of leaders more than on leadership styles reveals, in our opinion, a conceptual confusion at the heart of these empirical studies and indicates that more research needs to be done to empirically test the

effectiveness of different styles in different situations and scenarios relevant to system leadership.

The lack of precision when defining leadership styles was demonstrated clearly by Smith et al. (2020) where two system leadership outcomes were equated with styles. The authors identified 'being person focused' and 'being task focused' as a desirable leadership style, thus defining leadership styles through *qualities* of leadership and what they needed to accomplish. Whilst Timmins (2015) argued that heroic leadership styles were inappropriate to lead in health systems, there was no further elucidation of leadership styles associated with system leadership.

This points to the conclusion that the included studies rarely articulated any link between system leadership and specific leadership styles, although there was a general preference for distributed and shared leadership. The studies predominantly identified roles and tasks seen as essential to system leadership in specific contexts and expressed little in the way of particular leadership styles.

This 'inductive' approach appears to reveal a significant gap of evidence about which leadership style works best in effectively leading in health systems. Although there is a consistent thread running through some concepts such as cross boundary work, collaboration, and shared leadership style, the link between them appears to be based on terminological affinities rather than robust empirical research.

5.5. Personal attributes and qualities

In the conceptual edifice of leadership studies, personal attributes and qualities are linked to specific leadership styles and particular skills and competencies. Attributes and qualities play an enabling and facilitating role for certain skills and competencies which, in turn, link into the various styles. In our review, the included studies identified a plethora of different attributes which were perceived as vital to effectively leading in the health care system. There were personal qualities such as being collegiate, decisive, empathetic, courteous, cheerful, personable, persevering, lacking personal ego, being self-aware, and resilient. There was less clarity on why specifically these attributes were essential to system leadership and it appeared that there was little analytical or empirical work on why these personal qualities would be advantageous to system leadership work and not others. This lack of discrimination between generic leadership qualities and those attributes specific to system leadership may illustrate a lack of conceptual refinement of system leadership qualities and an absence as yet of empirical research testing these qualities in system leadership contexts. It clearly demonstrates the need for further research on this aspect.

5.6. Skills and Competencies

Whilst the generic nature of the personal attributes and qualities of system leaders in the studies in our rapid review did not yield conclusive details, the skills and competencies for system leadership identified in the papers showed some clear signs of an emerging consensus.

One reason may be that aligning specific leadership skills with system features may be an easier task for researchers working in the field. Creating a conceptual link from the 'need to collaborate with other organisations' to the 'skill to build alliances' and 'engage others' may be based on hermeneutic affinities that are intuitively grasped.

Consequently, the papers in our review identified some concrete skills such as being an effective change agent, have competencies in change theory or logic model development, have the ability to utilise research and be familiar with implementation science to introduce evidence-based practice. These skill sets were clearly articulated and supported through empirical evidence in the included studies. Only one study (*Leadership in Integrated Care Systems*, 2018) pointed to the need for governance building and population health management skills. This is surprising given the repeated re-organisations of the NHS which frequently presented leaders with significant governance challenges in the past (through the development of Clinical Commissioning Groups) and today (through the emergence of ICS infrastructure).

Developing the skills to build new governance structures, to implement large scale innovation programmes and plan and map service and system change through logic models is a priority for system leaders and requires familiarity with a new type of expertise. Whilst articulated in our studies in an embryonic way, more research is needed to assess the extent to which these skills are critical to system leaders and in which settings.

5.7. Governance/resources

Given frequent reorganisations of the NHS in England, governance structures are an important driver as well as a focus of change for health systems. We would expect research in system leadership to pay significant attention to governance, not least by virtue of its transformative capacity through its regulatory and quality improvement agendas.

Most studies included in our rapid review did indeed investigate various aspects of system governance and concluded that system leadership is key to effectively utilising existing or creating novel governance structures in the emerging integrated care landscape. Governance was seen as key driver for change as well as a critical conduit for providing whole system perspectives (Bolden et al., 2020) in an arena of often conflicting or contradictory national, regional or local priorities and policies. There was also an acknowledgement (Timmins, 2015) that the current regulatory apparatus of the NHS in England currently supports stasis rather than constructive change and innovation.

In addition, shared funding and shared accountability were identified as key conceptual and practical challenges for system leaders. It is interesting to observe that no studies highlighted this dual role of governance structures as simultaneously being a subject *and* object of change in health systems and, consequently, appeared to underplay the importance of system leadership skills operating at the junction of this dual role, with system leaders driving change and designing and implementing new governance frameworks at the same time. The transformation taking place in primary care networks to mature alongside newly established

integrated care system creates significant demands on system leaders which still awaits detailed investigation and research.

5.8. Leadership training and development aspects

We were keen to screen the included papers for any indication that system leadership training or development had been measured in terms of its impact on staff or patient outcomes. Whilst there is ample discussion in the wider literature about the shortcomings of current research on assessing the impact of leadership training for patient care (Marston et al., 2020; Nelson et al., 2007; Terkamo-Moisio et al., 2021), there is some evidence about leadership training effects on staff confidence and staff skills. Recent studies (Lyons et al., 2018; Murphy et al., 2020b; Nelson et al., 2007) have also advanced our understanding of how to measure leadership training impact which, although technically outside the remit of this rapid review, reinforces the need to determine the quality, status and extent of empirical evidence on leadership training effects.

Amongst our included studies, there were only two papers which reported some training outcomes. Boyd et al., (2016) concluded that training led to increased self-confidence, improved empathy and higher quality interactions as well as better relationships amongst professionals. This echoes some of the existing research and is likely to be found at system level as well as organisational and team level. Evans (2021) indicated that leadership training is likely to be effective as and when it is delivered through experiential and practice based learning, rather than formal class room based training. Coaching and mentoring were deemed to be particularly effective ways of developing leaders. This has significant implications for current leadership training and development programmes at the system level particularly for those delivered through class-based courses, failing to integrate with coaching and mentoring interventions. Since most ad hoc leadership development takes place in the workplace, formal programmes are only one part of a wide range of leadership development interventions. It appears important to align any formal coaching and training with the informal systems leadership development experienced in the workplace.

In summary, however, none of the included studies in our rapid review contributed significant additional insights or evidence to any perceived or objectively measured impact or effect of leadership training at system level.

5.9. Equality, Diversity and Inclusion (EDI)

The recent White Paper speaks of the challenges in the NHS of ensuring equality in the workforce, recognising its diversity and developing inclusive policy and practice for patients and staff. Given that equality legislation directly impacts on working conditions for the very diverse workforce in the English NHS, we expected EDI to be clearly articulated as a system leadership task with its requisite skills and competencies. Our analysis of the included papers however revealed an almost universal absence of research and lack of awareness of EDI as a key endeavour within the health care system. Whilst two studies (Bolden et al., 2020; Boyd et al., 2016) pointed to the value of a diverse workforce reflective of the communities it

serves, the only other facet of diversity mentioned in the papers was a reference to gender awareness. The absence of EDI was remarkable since health inequalities and the need to tackle these through effective system leadership is clearly articulated in the NHS White paper and relevant ICS policies. It is difficult to see how health inequalities can be addressed successfully without a robust and rigorous debate about discriminatory practices within the health system. System leadership would be a prime candidate for initiating, facilitating and advancing this discussion across organisations. In fact, it may require system leaders to advocate for population groups currently disadvantaged or underserved by the health system. The lack of recognition of EDI as a key pillar of system leadership work in the included studies does not bode well for a proactive approach by system leaders in this respect.

In summary, EDI is a clearly under-researched area of system leadership given its more recent pre-eminence in public and NHS policy discourse.

5.10. Other

We also analysed the included studies as to any other articulated specific themes or topics. It seemed that the notion of a vision shared by all stakeholders and a sense of shared priorities were important to the authors of several studies (Bigland et al., 2020; Bolden et al., 2020; Evans et al., 2021) whilst North (2020) pointed to practising clinically as the foundation of credibility for system leaders as well as for their ability to influence their colleagues (North, 2020). The authors indicated that there is an incongruity of purpose for system leaders where they have to reconcile clinical targets and clinical service demands with system transformation aims and objectives. If their ability to influence change in organisations was conditional upon them practising clinically, their professional identity was a central pillar of credibility in the system. Authors of the SCIE report (2018) also pointed to a lack of training and expertise in complex change programme implementation (*Leadership in Integrated Care Systems*, 2018), an aspect of system leadership highlighted earlier and further discussed in the section below.

5.11. Summary

Despite the centrality of the concept of systems leadership in healthcare policy there is little empirical research in this field. There is no consensus about the definition of systems leadership. Our analysis revealed that most of the papers did not operate with a clearly defined concepts of system leadership, nor indeed a well-defined notion of health and social care systems in the first place. This lack of clarity about basic concepts appears to have permitted authors of most studies in our review to translate and interpret system leadership as situation specific and, consequently, focus on what they thought the most important challenges and demands were for system leadership in those contexts. There was hence no overarching notion of what system leadership is, what it amounts to, nor which attributes and qualities system leaders need to have to effectively steer health systems.

There were also clearly some associative links made in the studies between system leadership skills, leadership styles or approaches which were mainly based on discursive affinities, such as collaborative working and shared leadership, rather than on robust empirical evidence of what works. It is also noteworthy that EDI was the most under-researched aspect of current leadership practice whilst governance received a signification amount of attention in the papers yet was interpreted differently by the authors.

6. Healthcare Leadership Model and Review Findings

We aimed to review the Healthcare Leadership Model through our analysis of empirical studies on systems leadership rather than construct this rapid review to validate the model. We used a simple mapping approach to find out the extent to which our findings aligned and provided empirical support for the 9 domains of the Healthcare Leadership Model (NHS Leadership Academy 2013).

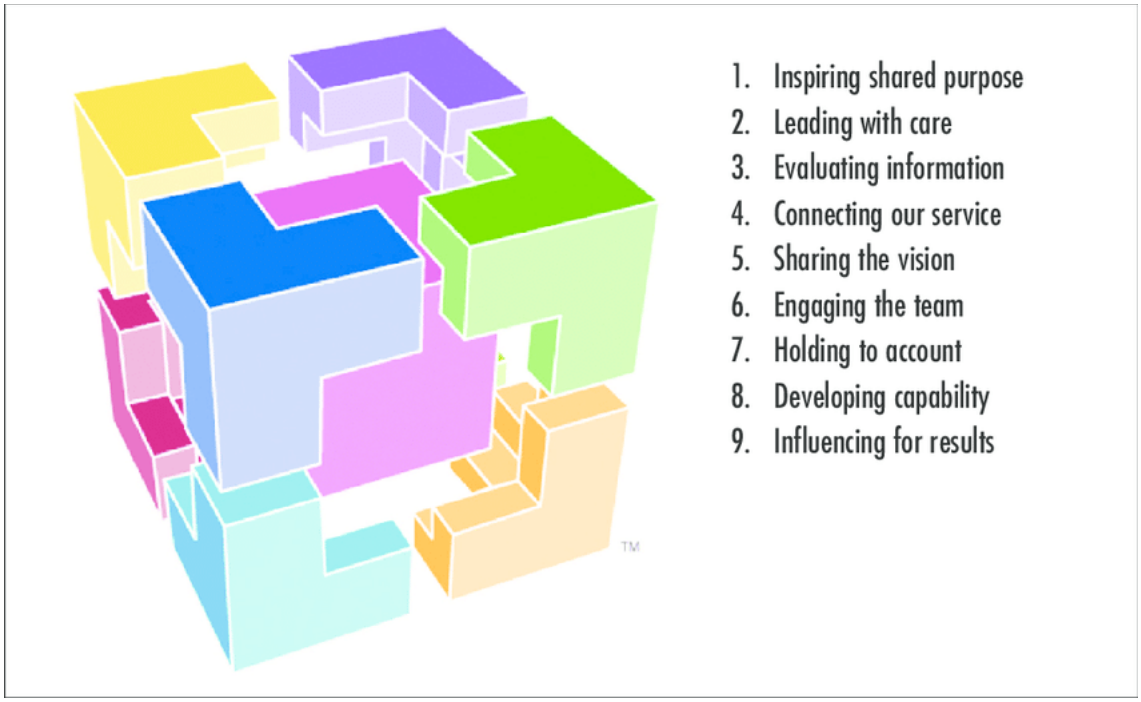


Figure 1: Healthcare Leadership Model

Source: https://www.researchgate.net/figure/The-nine-leadership-dimensions-of-the-Healthcare-Leadership-Model-From-NHS-Leadership_fig1_273467709/download

Of the nine domains, the first two domains ('Inspiring shared purpose', 'Leading with care') were not elucidated by the empirical findings of our rapid review indicating that it would require significant recalibration in this section. The third domain ('Evaluating information', however, contains the task to identify new information and concepts. Our analysis showed that there is a considerable number of newly emerging health care concepts that will be required for effectively leading in health systems, such as population health management skills and familiarity with complex adaptive systems amongst others. This places systems thinking, an understanding of how the parts of the system connect together and an ability to seek out collaborative partnerships at the centre of systems leadership.

The fourth domain of 'Connecting our service' appears to be critical to system leadership, whilst somewhat underdeveloped in the health care leadership model itself. What is defined as exemplary in the model, 'to build strategic relationships to make links with the broader system' should be taken to be essential for system leaders.

In turn, domain 5 ('Sharing the vision') adopts another dimension under the perspective of leading at system level. Developing trust and credibility as a leadership task is extended beyond organisational boundaries through the system lens. This raises the question as to how leaders will achieve this across organisations of different status, resources and operating under different funding regimes to the NHS. It is an issue that equally applies to domain 6, 'Engaging the team'. System leaders will need to demonstrate skills which allow them to influence teams and parts of the health and social care system that lie outside their own organisation and sphere of formal control which will present particular challenges and require specific skills and competencies. Again, the Healthcare Leadership Model categorises some of these tasks currently as *exemplary* when they will most likely become *essential* for effective system leadership.

Domain 7 ('Holding to account') also presents a distinct challenge to leadership at system level. Whilst 'holding to account' was mainly interpreted in the current leadership model as a staff performance issue, under conditions of leading health systems, this is likely to veer towards designing, sustaining and reviewing accountability structures associated with strong and robust governance arrangements for integrated care system and collaborative arrangements involving multiple care providers at neighbourhood, place or system level. It will include peer-to-peer holding to account across organisations. This is not just an issue of scope or magnitude but one of novel and innovative skills that cannot be developed and honed exclusively at teams or organisational leadership level.

Last but not least, Domain 8 ('Developing capacity') and 9 ('Influencing for results') of the leadership model set out key requirements for the system leader, yet still currently underarticulate significant dimensions of this work when translated into the system context. Developing capability would need to take place not only within teams or organisations but also system wide which requires forming a strong link with workforce training and development, identifying and promoting future leaders, and doing this in an equitable way to enhance the diversity of system leaders in the long term. Once again, what was seen as exemplary leadership ability in the current leadership model will most likely be an essential skill for future system leaders.

7. Discussion

This rapid review set out to identify, analyse and synthesise published evidence about system leadership in health care, define any existing gaps in our knowledge about system leadership research and detail the implications of EDI agenda for system leadership in health care practice. In this discussion section we will pull together the findings from our analysis of the 11 included studies and discuss them in relation to the research questions, with special reference to the existing Healthcare Leadership Model where appropriate.[3]

There is widespread consensus in the wider literature that system leadership means working across organisational boundaries which requires new and specific sets of skills and competencies (*Doing Things Differently: Rethinking Leadership Behaviours. Resource Exploring Themes, Behaviours and Indicators.*, 2019; *Future Systems Leadership Scoping Project*, 2021). There is also significant agreement about the pivotal role of change management and implementation skills needed by system leaders to steer health care organisations through the emerging challenges in the NHS in England. Creating new governance structures and navigating deftly the political settings and context of health care provision in England is also seen as a key task of system leaders. Terms such as complexity, adaptability, uncertainty and risk were frequently used to describe the difficulties faced by system leaders on a daily basis. Beyond terminological similarities, the field however appears to lack a robust and consistent definition of what a health system is, what system leadership amounts to and which attributes, qualities and styles are most suitable to system leadership. This highlights a lacuna of research and further work to be done, and it makes formulating recommendations for training and professional development difficult.

Our analysis revealed particular gaps in our understanding of system leadership. First, the existing research understands system leadership through situated or contextualised research studies which limits the applicability or generalisability of findings. Generic mapping of leadership tasks against leadership skills and competencies has not been undertaken yet which hinders the clear formulation of training and development objectives for system leaders at this stage.

Second, more than ever health systems are characterised by continuous change, which require leaders to steer and manage highly dynamic and at times, unpredictable, transformations. This means that system leaders will have to make effective decisions in a climate of uncertainty and sometimes increased risks to service provision and care quality. Balancing longer term system sustainability and with limited resources for improved population health outcomes and much needed progress in tackling health inequalities will create huge challenges for health care leaders. They will need the skills to tolerate uncertainties, manage risks to local and regional care provision and, at the same time, develop stronger and more resilient and responsive health systems. At the moment, it is not clear that there is a generic set of skills for this type of work for system leaders as the challenges in health care, including emerging technologies and new threats to public health, will place

[3] https://www.leadershipacademy.nhs.uk/wp-content/uploads/2014/10/NHSLeadership-LeadershipModel-colour.pdf

varying and seemingly contradictory demands on leaders. This has also been articulated in the recent report by NHS Confederation on the state of the integrated care systems.[4]

It seems to us that working across organisational boundaries requires leading without authority and influencing others through drivers and incentives different from traditional management tools. Working in contexts that are marked by ambiguity places considerable demands on system leaders which include continuous sense making. Mentoring and coaching appears to be a key mechanism to ensure that system leadership can be part of learning as a lifelong and holistic process during transformative and possibly disruptive periods.

Our review suggests that it is important to frame leadership competencies through the various dimensions and locations in which system leaders operate, be that at individual, team, or organisational level. EDI however remains a pertinent issue for system leaders across all domains, whenever they are exposed to different perspectives.

[4] https://www.nhsconfed.org/publications/state-integrated-care-systems-202122

8. Strengths and limitations of Rapid Review

This rapid review has strengths and limitations. To our knowledge this is the first synthesis of systematically searched peer reviewed empirical studies on system leadership in health care. Using a rapid review methodology has enabled us to quickly produce a narrative synthesis of existing research in this field. However, rapid review methodology also has certain limitations.

With regards to this review, a broader set of search terms may have captured additional relevant studies. As this would have generated a larger set of results to screen it would have been beyond the capacity of the rapid review. That said, we aimed to mitigate this by ensuring the search was informed by subject experts and from scanning the search terms of relevant papers and refining the search to include them.

In addition, we searched multiple databases, the grey literature and employed supplementary search techniques. In addition, our exclusion and inclusion criteria may have meant that some published papers on system leadership that were published before the selected date range were not picked up. More time would have allowed us to hand search key journals in the field to identify additional publications. Lastly, we did not include papers published in other areas or disciplines such as business studies or social psychology which means that lessons learned in these fields did not contribute to our rapid review.

9. Recommendations

1. Conduct a qualitative study to explore how different groups of system leaders define and perceive themselves including an analysis of the skills and competencies required for each group
2. Undertake a mixed methods study to examine the needs of system leadership in the newly emerging transformational space occupied by Primary Care Network leads and Integrated Care Boards
3. Design a study to explore how EDI is situated within health care systems and how to embed it in business as usual through the lens of system leadership
4. Undertake a revision of the Healthcare Leadership Model from the perspective of system leadership
5. Conduct an independent evaluation of system leadership training and development interventions in England
6. Explore the opportunities and impact of technological advances, such as AI and medical innovations for system leaders

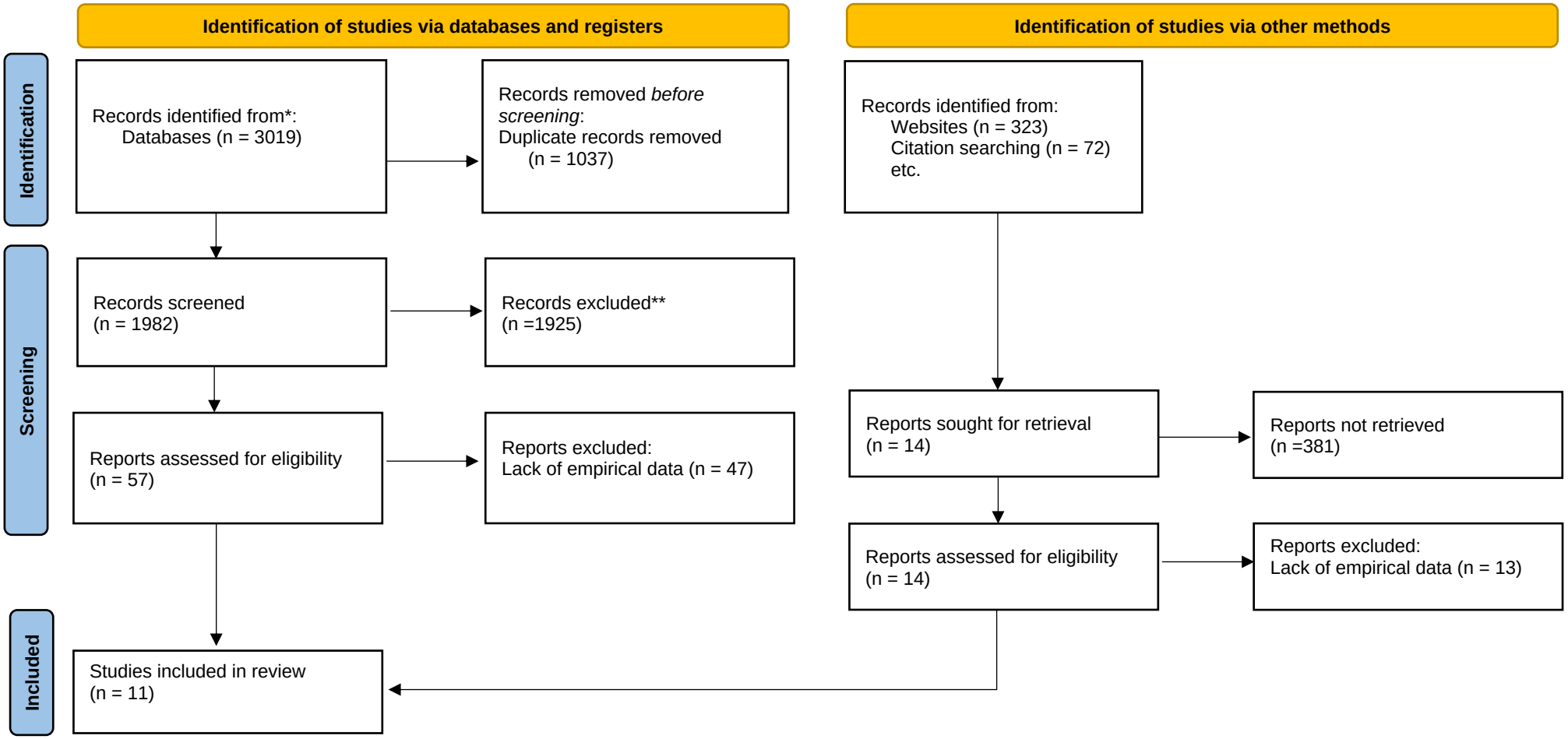
Table 1: Overview of included studies

Author	Year	Country	Aim	Participants/settings	Study design	Data collection method
Beharrel et al.	2021	Wales, UK	To evaluate the concept of systems leadership and a strategy network	20 participants from the NHS, and a consortium of partners collaborating during the building of the Welsh surge hospital	Qualitative study	Semi structured interviews, Field notes
Bigland et al.	2020	England, UK	To provide empirical evidence on systems leadership within the UK public health system	27 participants from different sectors including public health, police, education, fire service, voluntary and community sectors, local authority, and the NHS	Qualitative case study design	Semi structured interviews
Bolden et al.	2019	England, UK	To evaluate a 'systems leadership' development intervention designed to build capacity of cross-sector partnerships to address 'wicked' health and social care challenges	24 participants drawn from the *Systems Leadership: Local Vision (LV)* initiative	Mixed methods	Surveys, In-depth interviews
Boyd et al.	2016	England, UK	To evaluate the NHS Leadership Academy's Intersect Programme designed to develop systems leadership capacity	25 participants attending the NHS Leadership Academy's Intersect Programme	Mixed methods	Telephone interviews, Online surveys
Evans et al.	2021	England, UK	To identify strategies for developing the systems leadership capacity of public health specialists in England	29 participants including senior leaders from the Faculty of Public Health (FPH), public health specialists and	Mixed methods	Semi-structured interviews Focus group discussions

				coordinators of public health specialist' training		
North	2020	USA	To determine the requisite system leadership competencies required of entry-level health professionals to advance a successful interprofessional practice model.	4 participants from major health care organizations	Mixed methods	In-depth interviews, Surveys
Onyura et al.	2019	USA	To review evidence on physician participation in health system leadership		Qualitative study	State-of-the-art review of evidence
Smith et al.	2020	England, UK	To describe the processes of effective leadership to ensure effective integrated teamworking.	15 participants from integrated, interprofessional and social care (IgTs) teams	Qualitative study	Semi-structured interviews
Timmins	2015	England, UK	To identify necessary qualities, attributes and skills required to function as a systems leader	10 participants involved in systems leadership within NHS England, Local Councils and Third Sector	Qualitative study	In-depth interviews
Thompson and Nelson-Marten	2011	USA	To demonstrate how systems leadership and change agent skills can be acquired through sequenced educational strategies	Clinical Nursing Specialist (CNS) students at the University of Colorado, College of Nursing	Qualitative study	Anecdotal comments
SCIE	2018	United Kingdom	To advance understanding of systems leadership and leadership of integrated care systems in England	18 participants involved in systems leadership across Clinical Commissioning Groups (CCGs), Social Care,	Qualitative study	In-depth interviews

				Local Councils and NHS England		

Figure 2 PRISMA Flow Diagram



Source: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: http://www.prisma-statement.org/

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Appendix - Search Strategies

MEDLINE

Ovid MEDLINE(R) ALL <1946 to October 08, 2021>

1 *Leadership/

2 (system or systems or system-based or systems-based).ti.

3 1 and 2

4 ((system or systems or system-based or systems-based) adj3 leader*).ti,kw.

5 ("distributed leadership" or "collective leadership" or "community leadership" or "collaborative leadership").ti,kw.

6 (("systems leader*" or "systems-based leader*" or "system leader*" or "system-based leader*" or "distributed leadership" or "collective leadership" or "community leadership" or "collaborative leadership") and (nurs* or medic* or physician* or doctor* or clinic* or health or healthcare or hospital* or "primary care" or "secondary care" or "community care" or "integrated care" or nhs or "national health service")).tw,kw.

7 ((systems or systems-based or system or collective or complex or complexity or distributed or community or collaborative or "people centred" or "people centered" or "patient-centred" or "patient centered" or interorganisational or intersectoral or "place based" or neighbourhood or neighborhood or population or inequalities or ecosystem or "co-ordinated care" or "informal care" or integrated or "place-based") adj3 leader*).ti

8 (nurs* or medic* or doctor* or physician* or clinic* or health or healthcare or hospital* or "primary care" or "secondary care" or "community care" or "integrated care" or nhs or "national health service" or model* or theor* or framework* or concept*).ti.

9 7 and 8

10 (leadership and ("political skill*" or "political astute*")).ti.

11 3 or 4 or 5 or 6 or 9 or 10

12 limit 11 to (english language and yr="2010 -Current")

HMIC

HMIC Health Management Information Consortium <1979 to July 2021>

1 Leadership/

2 (system or systems or system-based or systems-based).ti.

3 1 and 2

4 ((system or systems or system-based or systems-based) and leader*).ti.

5 ("systems leader*" or "systems-based leader*" or "system leader*" or "system-based leader*" or "distributed leadership" or "collective leadership" or "community leadership" or "collaborative leadership").tw.

6 ((systems or systems-based or system or collective or complex or complexity or distributed or community or collaborative or "people centred" or "people centered" or "patient-centred" or "patient centered" or interorganisational or intersectoral or "place based" or neighbourhood or neighborhood or population or inequalities or ecosystem or "co-ordinated care" or "informal care" or integrated or "place-based") adj3 (leader* or skill* or competenc* or style*)).m_titl.

7 (leadership and ("political skill*" or "political astute*")).ti.

8 3 or 4 or 5 or 7

CINAHL

S1 (MM "Leadership")

S2 TI system or systems or system-based or systems-based

S3 S1 AND S2

S4 TI ((system or systems or system-based or systems-based) N3 leader*)

S5 TI ("distributed leadership" or "collective leadership" or "community leadership" or "collaborative leadership")

S6 TI ((("systems leader*" or "systems-based leader*" or "system leader*" or "system-based leader*" or "distributed leadership" or "collective leadership" or "community leadership" or "collaborative leadership") and (nurs* or medic* or physician* or doctor* or clinic* or health or healthcare or hospital* or "primary care" or "secondary care" or "community care" or "integrated care" or nhs or "national health service"))) OR AB ((("systems leader*" or "systems-based leader*" or "system leader*" or "system-based leader*" or "distributed leadership" or "collective leadership" or "community leadership" or "collaborative leadership") and (nurs* or medic* or physician* or doctor* or clinic* or health or healthcare or hospital* or "primary care" or "secondary care" or "community care" or "integrated care" or nhs or "national health service")))

S7 TI (((systems or systems-based or system or collective or complex or complexity or distributed or community or collaborative or "people centred" or "people centered" or "patient-centred" or "patient centered" or interorganisational or intersectoral or "place based" or neighbourhood or neighborhood or population or inequalities or ecosystem or "co-ordinated care" or "informal care" or integrated or "place-based") N3 leader*)) AND TI ((nurs* or medic* or physician* or doctor* or clinic* or health or healthcare or hospital* or

"primary care" or "secondary care" or "community care" or "integrated care" or nhs or "national health service"))

S8 TI (leadership AND ("political skill*" OR "political astute*")) OR AB (leadership AND ("political skill*" OR "political astute*"))

S8 S3 OR S4 OR S5 OR S6 OR S7 OR S8

S10 S3 OR S4 OR S5 OR S6 OR S7 OR S8 Limiters - Publication Year: 2010-2021 Narrow by Language: - english

SCOPUS

((TITLE (((system OR systems OR system-based OR systems-based) W/3 leader*) OR ("distributed leadership" OR "collective leadership" OR "community leadership" OR "collaborative leadership")) AND TITLE-ABS-KEY (nurs* OR medic* OR physician* OR doctor* OR clinic* OR health OR healthcare OR hospital* OR "primary care" OR "secondary care" OR "community care" OR "integrated care" OR nhs OR "national health service"))) OR ((TITLE (((systems OR systems-based OR system OR collective OR complex OR complexity OR distributed OR community OR collaborative OR "people centred" OR "people centered" OR "patient-centred" OR "patient centered" OR interorganisational OR intersectoral OR "place based" OR neighbourhood OR neighborhood OR population OR inequalities OR ecosystem OR "co-ordinated care" OR "informal care" OR integrated OR "place-based") W/3 leader* OR (leadership AND ("political skill*" OR "political astute*"))) AND TITLE ((nurs* OR medic* OR doctor* OR physician* OR clinic* OR health OR healthcare OR hospital* OR "primary care" OR "secondary care" OR "community care" OR "integrated care" OR nhs OR "national health service" OR model* OR theor* OR framework* OR concept*)))) AND (LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR , 2015) OR LIMIT-TO (PUBYEAR , 2014) OR LIMIT-TO (PUBYEAR , 2013) OR LIMIT-TO (PUBYEAR , 2012) OR LIMIT-TO (PUBYEAR , 2011) OR LIMIT-TO (PUBYEAR , 2010)) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re") OR LIMIT-TO (DOCTYPE , "ch") OR LIMIT-TO (DOCTYPE , "bk")) AND (LIMIT-TO (LANGUAGE , "English"))

Google Scholar

allintitle: "systems leadership" health

allintitle: "system leadership" health

allintitle: "systems leadership" healthcare

allintitle: "system leadership" healthcare

allintitle: "systems leadership" "primary care"

allintitle: "system leadership" "primary care"

allintitle: "system leadership" "integrated care"

allintitle: leadership "patient centred"

allintitle: system leadership review

allintitle: systems leadership review

allintitle: leadership "informal care"

allintitle: systems leadership complex health

allintitle: systems leadership complex healthcare

allintitle: system leadership complex healthcare

allintitle: system leadership complex health

allintitle: leadership collaborative healthcare

allintitle: leadership collaborative health

allintitle: leadership "co-ordinated care"

allintitle: distributed leadership health

allintitle: distributed leadership healthcare

allintitle: leadership distributed health

allintitle: leadership distributed healthcare

allintitle: leadership collective health

allintitle: leadership collective healthcare

allintitle: leadership complexity healthcare

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allintitle: leadership complex healthcare

allintitle: leadership complex health

NICE Evidence Search (Filter by Policy and Strategy, Systematic Reviews, Primary Research)

"systems leadership"

"distributed leadership"

"complexity leadership"

"community leadership"

"complex leadership"

"collective leadership"

"collaborative leadership"

"Patient centred leadership"

"People centred leadership"