Leadership in Health Se

Integrated Care System Leadership: A Rapid Realist Review

Journal:	*Leadership in Health Services*
Manuscript ID	LHS-12-2023-0092.R2
Manuscript Type:	Original Article
Keywords:	Health leadership competencies, Health leadership initiatives, Health services sector

Integrated Care System Leadership: A Rapid Realist Review

Abstract

Purpose

Given the complex nature of Integrated Care Systems, the geographical spread, and the large number of organisations involved in partnership delivery, the importance of leadership cannot be overstated. This paper presents novel findings from a rapid realist review of Integrated Care Systems (ICS) leadership in England. The overall review question was: *how does leadership in ICSs work, for whom, and in what circumstances?*

Design/methodology/approach

Development of initial programme theories and associated context–mechanism–outcome configurations (CMOCs) were supported by the theory-gleaning activities of (i) a review of ICS strategies and guidance documents, (ii) a scoping review of the literature, and (iii) interviews with key informants. A refined programme theory was then developed by testing these CMOCs against empirical data published in academic literature. Following screening and testing, 6 CMOCs were extracted from 18 documents. The study design, conduct, and reporting were informed by the Realist And Metanarrative Evidence Syntheses: Evolving Standards (RAMESES) training materials (Wong, Westhorp, *et al.*, 2013).

Findings

The review informed four programme theories explaining that leadership in ICSs works when i) ICS leaders hold themselves and others to account for improving population health, ii) a sense of purpose is fostered through a clear vision, ii) partners across the system are engaged in problem ownership, and iv) relationships are built at all levels of the system.

Originality

This review will be of relevance to academics and healthcare leaders within ICSs in England, offering critical insights into ICS leadership, integrating diverse evidence to develop new evidence-based recommendations, filling a gap in the current literature, and informing leadership practice and healthcare systems.

Keywords: ICSs, leadership, realist review, health and social care integration

Background

By 2035, the number of people with four or more diseases is expected to double, with a third also having mental health conditions (NHS England, 2019, p. 2). The population is aging and becoming medically complex (Charlesworth and Johnson, 2018, p. 97). This demographic shift poses challenges for health and social care, traditionally designed for acute illnesses, not chronic conditions. Integrated care has emerged as a response, driven by financial and policy factors (Ling et al., 2012, p.2). In England, health and social care services have adopted partnership working through Integrated Care Systems (ICSs), which became statutory bodies in July 2022, encompassing all NHS Provider Trusts (Hospital, Community, and Mental Health Trusts), Primary Care Services including GP Practices, Local Authorities, Care Providers, and Voluntary, Community and Social Enterprise organisations that are involved in the provision of health and social care.

ICSs, as complex systems spanning vast areas, rely on senior leaders to improve population health, reduce inequities, and maximise value. Leadership is crucial in these partnerships, often being the primary driver of large-scale change and ICS development (Bhat *et al.*, 2022).

The International Conference on Integrated Care (Stein *et al.*, 2023) emphasized the need for effective leadership in integrated care. However, in a recent review of system leadership in health care, Kaehne et al (2022) found no empirical studies that examined the value of different approaches to leadership. Literature suggests that successful integration hinges on robust leadership and governance at the system level across health and social care (Asthana *et al.*, 2020; Dickson and Tholl, 2020; Erens *et al.*, 2016; Evans *et al.*, 2016; González-Ortiz *et al.*, 2018; Goodwin and Smith, 2011; Ham *et al.*, 2011; Maruthappu *et al.*, 2015). In Scotland, leadership qualities were deemed critical for integrating health and care services (Hutchison, 2015). Leadership ability, alongside organisational culture, workforce management, and inter-organisational collaboration, is pivotal in integrated health systems (Bhat *et al.*, 2022).

A leader's ability to transition from organisation-centred to a broader, multi-organisational focus is vital for ICS operation and sustainability (Charles *et al.*, 2018; Deffenbaugh, 2018; Tweed *et al.*, 2018; Wistow *et al.*, 2016), including developing partnerships across system members (Paice and Hasan, 2013; Social Care Institute for Excellence, 2018; Tweed *et al.*, 2018). The NHS Confederation advocates a 'collective' leadership approach for ICSs (Ham, 2022), with a consensus on the necessity of a 'systems leadership' style. Effective integrated care leaders are expected to communicate a shared vision, foster trust, and manage the workforce effectively (Charles *et al.*, 2018; González-Ortiz *et al.*, 2018; Thakrar and Bell, 2017).

Despite the recognised importance of leadership in ICS implementation and operation, research often focuses more on the identity of leaders rather than their actions (Sims *et al.*, 2021, p. 13), hindering the understanding and application of effective leadership practices. Additionally, there is an assumption that senior leaders can adapt their existing leadership styles to the new ICS structures (Chambers *et al.*, 2020), but a clear definition of 'systems leadership' and evidence for the necessary skills and attributes are lacking (Kaehne *et al.*, 2022, p. 7).

In summary, while the significance of leadership in implementing, developing, and sustaining integrated care is widely recognised, empirical studies in this area are scarce (Evans *et al.*, 2016). Research has often focused on the attributes and skills of leaders, rather than their actions and behaviours. Notably, empirical evidence on the leadership of Integrated Care Systems (ICSs) in England is particularly limited, despite their widespread adoption.

This rapid review aims to enrich both theoretical and practical understanding of leadership in ICSs. It seeks to elucidate how and why leadership works within these systems, aiding those

involved in ICSs to better comprehend and foster leadership development. The review employed a realist method, focusing on Context, Mechanisms, and Outcomes (Booth *et al.*, 2018). It involved reviewing ICS strategies and guidance, a scoping review of literature, and interviews with key informants knowledgeable about ICS leadership. These steps helped in formulating and refining programme theories about the functioning of leadership in ICSs, its effective contexts, and the reasons behind its success.

Accordingly, the objectives of this study are: (1) To create an initial rough programme theory (IRPT) based on a scoping review of strategies and guidance relating to the implementation and purpose of ICSs and initial stakeholder interviews with key informants; (2) To develop the initial rough programme theory into a refined programme theory based on empirical data published in the academic literature.

Methods

This study utilises realist approaches to formulate theories for effective leadership in ICSs, focusing on desired outcomes (Pawson and Tilley, 1997; Wong et al., 2017). Theories, termed IRPT, were developed using diverse sources, aligning with Realist And Metanarrative Evidence Syntheses: Evolving Standards (RAMESES) guidelines (Wong, Greenhalgh, et al., 2013; Wong, Westhorp, et al., 2013). The research process employed the context + mechanism = outcome (CMO) heuristic (Wong et al., 2017), analysing literature, ICS strategies, and conducting interviews. Ethical review and approval were obtained via the authors' own institutional protocols. These theories were then empirically tested, refining the IRPTs as shown in figure 1.

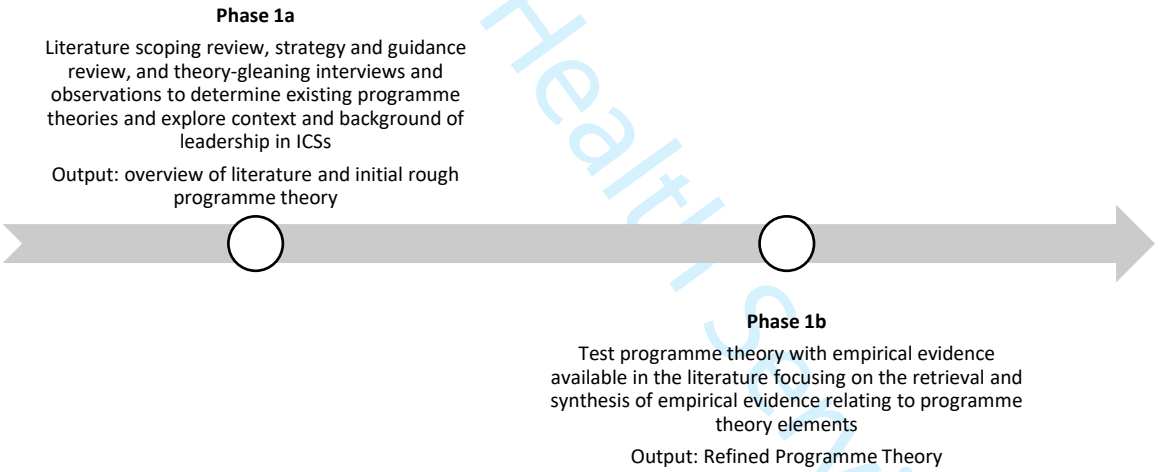

Figure 1: Phases in the Development of Initial Programme Theory

This study built initial rough programme theories by analysing ICSs policy documents, guidance, and key informant interviews, drawing on Pawson and Tilley's (1997) concept that policymakers' expectations offer a basis for testable theory. Thirteen policy and guidance documents, along with five semi-structured interviews with ICS senior leaders, were analysed to identify contexts, mechanisms, and outcomes of leadership in ICSs, leading to four programme theories and nine Context-Mechanism-Outcome configurations.

Search

Adhering to RAMESES standards for transparency, this review targets literature post-2017, coinciding with the inception of England's ICSs. This timeframe aligns with the historical

evolution of ICSs and the pilot phase resulting in a rapid realist review, that uses realist processes within a limited literature set (Wong, Westhorp, *et al.*, 2013, p. 18).

Selection and Appraisal

In Phase 1b, two reviewers (LK, RG) screened studies by title, abstract, and full-text for relevance, addressing any conflicts. They evaluated studies' potential to affect leadership theories in ICSs, focusing on 'conceptual richness' and 'thickness' for meaningful contributions (Booth *et al.*, 2013; Dada *et al.*, 2023; Pawson, 2006a; Wong, 2018). The rigour of each study was assessed based on trustworthiness and relevance to testing initial rough programme theories, including robust data points from methodologically weaker studies as per realist methodology (Pawson, 2006b).

Data Extraction

Each paper's characteristics, including objectives, study location, design, and participants, were extracted. Focus was on identifying context-mechanism-outcome configurations and refining programme theory. Dalkin et al.'s (2015) formula: M (resource) + C→M (reasoning) = O, and operational definitions of context, mechanism, and outcome, as shown in table 1, guided mechanism-context delineation.

Table 1: Operational Definitions of Context, Mechanisms, and Outcomes

	Operational Description
Context	A situation or condition that existed prior to the formation of ICS, or a situation or condition outside of the control of the ICS that is relevant to the leadership of ICS, and may change over time
Mechanism	Activities, processes, and actions related to ICS leadership (resources) and the responses or reactions of leaders, or other members of the system, that follow (reasoning)
Outcome	Result or consequence of ICS leadership (intended or unintended)

Data Synthesis

Data extracts, including interview quotes, observation notes, and study excerpts, were compiled to detail contexts, mechanisms, and outcomes, forming Context-Mechanism-Outcome Configurations (CMOCs). Thematic organisation mirrored thematic analysis (Gilmore *et al.*, 2019), with the realist review approach aiding in discerning relationships between elements (Rycroft-Malone *et al.*, 2012). This involved juxtaposing and reconciling evidence to refine theories and develop comprehensive CMO configurations, integrating data to clarify the interaction between context, mechanism, and outcome (Pawson, 2006c).

Programme Theory Development

Search Results

After screening the initial 5,716 records by title and abstract, 99 records were screened by full text. 22 records were evaluated for relevance (Alonso and Andrews, 2022; Aufegger *et al.*, 2020; Aunger, Millar, Rafferty, Mannion, *et al.*, 2022; Bell *et al.*, 2022; Chang, 2021; Elliott *et al.*, 2020; Embuldeniya *et al.*, 2018; Gordon *et al.*, 2020; Harlock *et al.*, 2020; Kozlowska *et al.*, 2020; MacLeod *et al.*, 2019; Martin, 2021; Martin and Knowles, 2019; Miller and Stein, 2020; Mitchell *et al.*, 2020; Nicholson *et al.*, 2018; Pearson and Watson, 2018; Robert *et al.*,

2022; Round *et al.*, 2018; Shand and Turner, 2019; Sims *et al.*, 2021; Urtaran-Laresgoiti *et al.*, 2018) and 1 was excluded (Alonso and Andrews, 2022) resulting in 21 being included for richness assessment. 3 studies were excluded following a review of richness (Elliott *et al.*, 2020; Martin and Knowles, 2019; Robert *et al.*, 2022), the remaining 18 papers were reviewed for rigour, considered trustworthy, and therefore included in the review. Contributions of included papers to final CMOCs is included in *Supplementary File 1*.

Phase 1a: Literature Scoping

The initial literature search aimed at theory building and understanding the scope of literature on leadership in ICSs (Booth et al., 2018, p. 154). This scoping review provided a contextual overview, contributing to the IRPT, later tested against empirical evidence in phase 1b.

ICSs Guidance and Policy

ICS policy and guidance documents informed the development of IRPT (RAMESES II, 2017). These documents often mirror the social, economic, historical, and political contexts of their creation, providing insights into the complex systems where programmes are developed and implemented (Miller and Alvarado, 2005). Thirteen documents were selected and analysed (Department of Health & Social Care, 2021; Department of Health and Social Care, 2022a, 2022b; National Audit Office, 2022; NHS Employers, 2022; NHS England and NHS Improvement, 2021a, 2021b, 2021c, 2022, 2021a, 2021b).

The scoping exercise highlighted essential elements for effective leadership in integrated health and social care, encompassing individual leader traits and structural considerations, detailed in Figure 2.

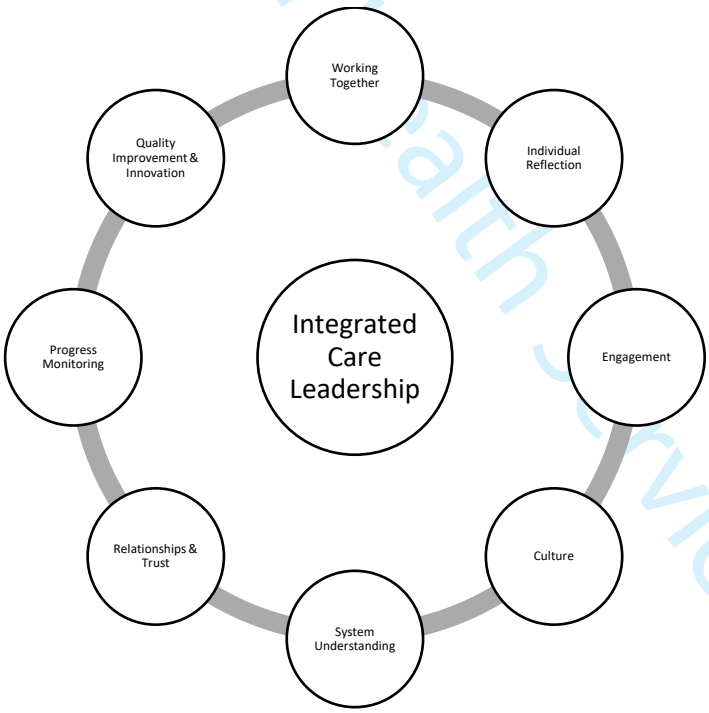

Figure 2: Literature Scoping Key Themes

Individual Reflection

Leaders need to reflect and develop their thoughts and feelings, changing as necessary (Baylis and Trimble, 2018; Sullivan-Taylor *et al.*, 2022). This involves continuous learning and fostering an adaptive learning culture (Charles *et al.*, 2018; Hendry *et al.*, 2021; Miller and

Stein, 2020), underpinned by emotional intelligence and self-understanding (Good Governance Institute and Coventry University, 2022; King and Mendez-Sawyer, 2021).

Working Together

Integrated care leadership involves tackling complex 'wicked' problems and managing conflicts (Hulks *et al.*, 2017; Social Care Institute for Excellence, 2018). Leaders must collaborate, share power, and use distributed leadership approaches (Aunger, Millar, Rafferty, Mannion, *et al.*, 2022; Baylis and Trimble, 2018; Harris *et al.*, 2022; Miller and Stein, 2020). Clear governance structures and data sharing are crucial for managing risk and decision-making (Booth-Smith, 2017; Cheng and Catallo, 2019; Harris *et al.*, 2022).

Relationships and Trust

Building trust within systems relies on strong relationships, effective communication, and managing power dynamics (Aunger *et al.*, 2022; Baylis and Trimble, 2018; Hulks *et al.*, 2017). Trust fosters collaboration and understanding of partners' motivations (Deffenbaugh, 2018; Ham, 2022; Harris *et al.*, 2022).

Culture

A shared culture is essential for collaborative working, facilitating common goals and a unified narrative (Bell *et al.*, 2022; Harris *et al.*, 2022; Urtaran-Laresgoiti *et al.*, 2018). Cultural alignment reduces conflict and supports shared values and vision (Cheng and Catallo, 2020; Nicholson *et al.*, 2018).

Engagement

Engaging with patients, communities, and the public involves co-creation and ensuring genuine influence in service design (Charles *et al.*, 2018; Ham, 2022; Sullivan-Taylor *et al.*, 2022). Leaders should partner with a range of organisations, including the voluntary sector, for a population-based approach (Alderwick *et al.*, 2021; Hendry *et al.*, 2021).

System Understanding

Leaders must understand the health and social care sectors and manage conflicts between organisational and system priorities (Deffenbaugh, 2018; Harris *et al.*, 2022; Miller and Stein, 2020).

Progress Monitoring

Monitoring performance through agreed indicators is vital for evaluating progress and demonstrating impact (Department of Health and Social Care, 2022a; Martin, 2021; Round *et al.*, 2018)

Quality Improvement and Innovation

Leaders should foster a culture of improvement and innovation, empowering the workforce and developing quality improvement capabilities (Gordon *et al.*, 2020; NHS Confederation, 2018; Turner *et al.*, 2018).

Substantive Theory

The phase 1a scoping exercise identified strategies and practices for effective ICS leadership, needing further organisation and coherence. Literature informed the use of substantive theories for programme theories, providing a bridge to existing research (Marchal *et al.*, 2018; Papoutsi *et al.*, 2018). Systems leadership theory aligned best with the findings.

Systems Leadership in Health Care

Systems leadership focuses on understanding and addressing interdependencies in health care systems (NHS Leadership Academy, 2013; NHS North West Leadership Academy, 2021). It involves engaging a wide range of stakeholders and navigating complex environments, though empirical research in this area is limited (Kaehne *et al.*, 2022). Whilst there are many types of 'systems' within healthcare and leadership contexts, in this paper the term system is used to refer to Integrated Care Systems.

NHS NWLA Doing Things Differently System Leadership Behaviours Framework

The framework identifies key behaviours for effective system leadership, developed through collaborative projects with various sector leaders (NHS North West Leadership Academy, 2018). Four overarching themes of 'Being', 'Relating and Communicating', 'Leading & Visioning', and 'Delivering' structure the findings, exploring what works in different contexts to support effective ICS leadership.

Initial Rough Programme Theories

An IRPT is foundational for a realist review, providing structure for analysis (Shearn *et al.*, 2017). Developed using the 'Doing Things Differently' framework, IRPTs in this study offer a narrative on leadership effectiveness in ICSs integrating programme strategies, NHS guidance, and key informant interviews. IRPTs for this study are provided in *Supplementary File 2* and summarise the interplay of context, mechanism, and outcomes, exemplified through quotations supporting the programme theories (Rycroft-Malone *et al.*, 2012).

Phase 1b: Empirical testing of CMOCs

The original nine CMOCs supporting programme theories, with two each for Being, Leading & Visioning, Relating, and communicating, and three for Delivering, were validated against 18 empirical papers, synthesising contexts, mechanisms, and outcomes. Evidence for contexts, mechanisms, and outcomes were gleaned from these papers and compared to the original nine CMOCs. Four CMOCs (1, 6, 7, 8) had empirical support with refinements, one (3) lacked evidence, and four (2, 9, 4, 5) were merged due to insufficient distinct evidence, resulting in the following six CMOCs.

IPT: *Being*

CMOC 1: In the context of ICS formation and development (C) leaders with a clear and sustained vision communicate clarity of intent (M – Res), which fosters a sense of purpose in stakeholders (M- Rea) and helps to focus on the achievement of ICSs' objectives (O).

Empirical studies emphasise the need for ICS leaders to consistently commit to a clear vision, facilitating supportive actions aligned with ICS goals by partners collaboratively and independently, while minimizing miscommunications. The lack of this clear vision contributes to management challenges (Aufegger *et al.*, 2020; Aunger, Millar, Rafferty, Mannion, *et al.*, 2022; Harlock *et al.*, 2020; Kozlowska *et al.*, 2020; MacLeod *et al.*, 2019; Martin, 2021; Miller and Stein, 2020; Round *et al.*, 2018; Sims *et al.*, 2021; Urtaran-Laresgoiti *et al.*, 2018).

IPT: Leading & Visioning

CMOC 2: In the context of determining and measuring ICS priorities (C), the transparent and democratic engagement of clinical and care professionals, non-health partners and local communities (M-Res) promotes a sense of mutual accountability (M-Rea), and a focus on population health and wellbeing reducing the impact of health and social inequalities (O)

CMOC 1 emphasises a clear, sustained vision for ICS objectives, mandating partner action, while CMOC 2 focuses on mutual accountability through partner engagement in developing

and measuring ICS priorities (Sims *et al.*, 2021). Empirical literature underscores involving all stakeholders, including the public, in setting local ICS priorities, especially in early integration stages (Bell *et al.*, 2022; Gordon *et al.*, 2020; Harlock *et al.*, 2020; MacLeod *et al.*, 2019; Martin, 2021; Miller and Stein, 2020; Mitchell *et al.*, 2020; Nicholson *et al.*, 2018; Round *et al.*, 2018; Urtaran-Laresgoiti *et al.*, 2018). This involvement aims to address broader ICS goals like population health, illness prevention, and reducing health inequalities.

IPT: Relating & Communicating

CMOC 3: In the context of bringing together health and social care organisations with different histories, funding mechanisms, and governance (C) developing strong relationships through shared goals and frequent face to face interactions (M-Res) nurtures trust and understanding (M-Rea), which supports collaborative decision-making and the resolution of tensions (O)

The literature underscores recognising historical power and resource imbalances between health, social care, and the voluntary sector as crucial for developing collaborative relationships (Chang, 2021; Gordon *et al.*, 2020; Martin, 2021; Sims *et al.*, 2021). Trust, fostered through frequent interactions and face-to-face meetings, is vital, as is resolving tensions to maintain trust and collaboration (Aunger, Millar, Rafferty, Mannion, *et al.*, 2022; Bell *et al.*, 2022; Embuldeniya *et al.*, 2018; Harlock *et al.*, 2020; MacLeod *et al.*, 2019; Miller and Stein, 2020; Nicholson *et al.*, 2018; Shand and Turner, 2019).

IPT: Delivering

CMOC 4: In the context of a shared culture of learning (C) system partners facilitating and supporting each other to innovate and identify learning from successes and failures (M-Res) supports psychological safety and encourages creativity and innovative thinking (M-Rea), leading to effective service redesign and continuous improvement (O)

ICSs require a novel approach to health and social care, fostering learning and innovation (Sims *et al.*, 2021). Empirical studies emphasise developing processes that support innovation (Gordon *et al.*, 2020) and encourage experimentation while managing risks (MacLeod *et al.*, 2019). Leaders should create conditions for innovation by mobilising resources and allowing for risk-taking and learning from mistakes, crucial for inventive service delivery (Martin, 2021; Miller and Stein, 2020; Mitchell *et al.*, 2020; Round *et al.*, 2018; Urtaran-Laresgoiti *et al.*, 2018).

CMOC 5: In the context of population health management and digitalisation (C) the use of shared digital intelligence (M-Res) supports leaders to better understand local population needs (M-Rea) which leads to improved targeting or prioritisation of local communities, so they access services (O)

There was empirical evidence of the need for real-time data sharing across partners and an acknowledgement that this was limited by a lack of shared systems or information governance requirements (Embuldeniya *et al.*, 2018; Pearson and Watson, 2018). The development of shared data systems, or intelligence dashboards, which can be used at all levels to support delivery to local communities (Bell *et al.*, 2022; Gordon *et al.*, 2020; Mitchell *et al.*, 2020; Nicholson *et al.*, 2018), was therefore seen of importance to support leaders in utilising intelligence to target interventions. (Bell *et al.*, 2022; Gordon *et al.*, 2020; Mitchell *et al.*, 2020; Nicholson *et al.*, 2018).

CMOC 6: In the context of developing a culture of accountability (C), clear governance structures and transparent decision-making, with a robust process for monitoring and

evaluation (M-Res) ensures partners accountability for quality, value for money, effective service provision (M-Rea) which leads to the achievement of system outcomes (O)

Empirical evidence indicates that clear, collaborative governance and engagement processes, like regular action-focused meetings, enhance system accountability and progress monitoring (Bell *et al.*, 2022; Gordon *et al.*, 2020; Sims *et al.*, 2021). However, historical health and social care sector differences can impede this approach (Pearson and Watson, 2018). Leaders who challenge the status quo in a transparent environment facilitate goal achievement (MacLeod *et al.*, 2019; Miller and Stein, 2020; Nicholson *et al.*, 2018), with progress monitoring against meaningful measures bolstering accountability and outcome achievement (Aunger, Millar, Rafferty, Mannion, *et al.*, 2022; Mitchell *et al.*, 2020; Urtaran-Laresgoiti *et al.*, 2018).

Discussion

Our findings build on previous studies by suggesting key mechanisms for effective leadership and identifying that leadership in ICSs work when: i) ICS leaders hold themselves and others to account for improving population health, ii) a sense of purpose is fostered through a clear vision, iii) partners across the system are engaged in problem ownership, and iv) relationships are built at all levels of the system. Whilst these findings were derived from, and therefore relate to, executive level leaders within an ICS the findings may be of relevance differing leadership levels within an ICS context.

Many of the CMOC elements identified in this review are similar to those identified by other, non-realist studies, such as the challenges arising from health and social care organisations with different histories, funding mechanisms, and governance functions collaborating in partnership (Barker, 2014; Exworthy *et al.*, 2017; Miller *et al.*, 2021; Miller and Glasby, 2016; Parkin, 2019), increasing the validity of our findings. However, we build on these elements by making connections between the resources (mechanism) offered in contexts and the reasoning of those involved in leadership of ICSs; for example, the development of trust and understanding. The refined theories corroborate existing ICS leadership guidance, emphasising relationship development and maintenance across health and social care systems for sustained partnership and collaboration.

This aligns with previous realist reviews on integrated care leadership (Aunger, Millar, Rafferty, Mannion, *et al.*, 2022; Harris *et al.*, 2022), explaining how relationships bolster effective ICS leadership. Aunger *et al* (2021) has previously noted the complexity involved in health and social care partnerships, like ICSs, due to the large number of organisations coming together across sectors; impacting not only effective communication but hindering the development of trust due to previously established competitive approaches. This resonates with our findings; we argue that historical imbalances in cross sector organisational partnerships impacts on collaborative working, and the development of trust. Aunger *et al* (2021) suggest a clear patient focus from all parties across the system as a means to overcome these pre-existing differences and conflicts, this was linked to our notion of a 'shared sense of purpose'.

Our research builds on existing realist-informed studies of healthcare partnerships or collaboration (Aunger, Millar and Greenhalgh, 2021; Aunger, Millar, Greenhalgh, et al., 2021a, 2021b; Aunger, Millar, Rafferty and Mannion, 2022; Aunger, Millar, Rafferty, Mannion, et al., 2022), and in particular recent realist reviews focused on leading in integrated care (Harris et al., 2022; Sims et al., 2021) by providing a specific focus on ICS leadership and offering Programme Theories as guidelines for ICS leadership development.

This rapid realist review was based on leadership within ICSs and informed, in part, by key informant interviews with leaders from a regional ICS. However, the results can be applied to

ICSs across England with potential to inform learning within other nations that implement integrated health and social systems. Key learning identified from the review, could support the development of effective leadership within an ICS but given the inherent complexity within such systems, composed of leaders as individuals with relationships this will influence the context and mechanisms, and hence outcomes each ICS demonstrates. Moreover, whilst the CMOCs are presented here positively, in most cases the opposite is likely to apply; for example, a lack of clear governance structures and transparent decision making, within a context of developing a culture of accountability, can reduce partner accountability for quality, value for money, and effective services provision, limiting the achievement of system outcomes. Table 2 offers Programme Theories as guidelines for ICS leadership development.

Table 2: Theories of effective ICS leadership utilising Doing Things Differently: Rethinking Leadership Behaviours as an organising framework (NHS North West Leadership Academy, 2021).

Delivering	Effective ICS leaders hold themselves and others to account for improving outcomes for the local population. They utilise available intelligence to take actions that support targeting and prioritisation of local communities. Effective ICS leaders support and encourage learning, curiosity, and calculated risk-taking enabling innovative approaches that lead to service improvements.
Being	Effective ICS Leaders communicate a clear vision, fostering a sense of purpose across the system regarding the achievement of agreed ICS outcomes.
Leading & Visioning	Effective ICS leaders have a clear vision that promotes a sense of mutual accountability, providing opportunities for others to develop, make decisions, and take ownership of problem solving through the engagement of all partners in the reduction of health and social care inequalities
Relating & Communicating	Effective ICS leaders build relationships at all levels of the system, they promote partnership and collaboration. Leaders encourage a collective agreement about what needs to be achieved and communicate openly about how and why decisions are made

Further research is required to further build, test, and refine these theories. We suggest this can be achieved through a case study of ICS leadership to test these Programme Theories and CMOCs in a larger real-world case study. Therefore, the next stage of this research will entail further testing and refining these theories through a realist evaluation.

Strengths and limitations

This rapid realist review, adhering to RAMESES guidelines, offers a detailed and transparent process report. Key stakeholder engagement, a recommended aspect in realist reviews (Wong, Greenhalgh, *et al.*, 2013; Wong, Westhorp, *et al.*, 2013), informed the development and refinement of findings. Despite being a rigorous and comprehensive investigation, stakeholder input was limited to one ICS, potentially restricting insights from varied geographical contexts. Additionally, the recent establishment of ICSs meant limited literature availability, with few empirical studies conducted. Although this emphasises the importance and originality of the research, this scarcity posed challenges in extracting and applying certain programme theory elements, particularly context. Finally, whilst the focus of this review was ICSs within the English NHS, findings may be relevant to integrated health and care systems within other geographical contexts.

References

Alderwick, H., Hutchings, A., Briggs, A.D.M. and Mays, N. (2021), "The impacts of collaboration between local health care and non-health care organizations and factors shaping how they work: a systematic review of reviews", *BMC Public Health*, Vol. 21 No. 1, pp. 753–753, doi: 10.1186/s12889-021-10630-1.

Alonso, J.M. and Andrews, R. (2022), "Does vertical integration of health and social care organizations work? Evidence from Scotland", *Social Science & Medicine*, Vol. 307, p. 115188, doi: 10.1016/j.socscimed.2022.115188.

Asthana, S., Gradinger, F., Elston, J., Martin, S. and Byng, R. (2020), "Capturing the Role of Context in Complex System Change: An Application of the Canadian Context and Capabilities for Integrating Care (CCIC) Framework to an Integrated Care Organisation in the UK", *International Journal of Integrated Care*, Vol. 20 No. 1, p. 4, doi: 10.5334/ijic.5196.

Aufegger, L., Alabi, M., Darzi, A. and Bicknell, C. (2020), "Sharing leadership: current attitudes, barriers and needs of clinical and non-clinical managers in UK's integrated care system", *BMJ Leader*, Vol. 4 No. 3, pp. 128–134, doi: 10.1136/leader-2020-000228.

Aunger, J.A., Millar, R. and Greenhalgh, J. (2021), "When trust, confidence, and faith collide: refining a realist theory of how and why inter-organisational collaborations in healthcare work", *BMC Health Services Research*, Vol. 21 No. 1, p. 602, doi: 10.1186/s12913-021-06630-x.

Aunger, J.A., Millar, R., Greenhalgh, J., Mannion, R., Rafferty, A.-M. and McLeod, H. (2021a), "Why do some inter-organisational collaborations in healthcare work when

others do not? A realist review", *Systematic Reviews*, Vol. 10 No. 1, p. 82, doi: 10.1186/s13643-021-01630-8.

Aunger, J.A., Millar, R., Greenhalgh, J., Mannion, R., Rafferty, A.M. and McLeod, H. (2021b), "Building an initial realist theory of partnering across National Health Service providers", *Journal of Integrated Care*, Emerald Group Publishing Limited, Brighton, United Kingdom, Vol. 29 No. 2, pp. 111–125, doi: https://doi.org/10.1108/JICA-05-2020-0026.

Aunger, J.A., Millar, R., Rafferty, A.M. and Mannion, R. (2022), "Collaboration over competition? Regulatory reform and inter-organisational relations in the NHS amidst the COVID-19 pandemic: a qualitative study", *BMC Health Services Research*, Aunger, Justin Avery. School of Health Sciences, University of Surrey, Guildford, GU2 7YH, UK. j.aunger@surrey.ac.uk. Aunger, Justin Avery. Health Services Management Centre, Park House, University of Birmingham, Birmingham, B15 2RT, UK. j.aunger@surrey.ac.uk. Millar, Ross. School of Health Sciences, University of Surrey, Guildford, GU2 7YH, UK. Millar, Ross. Health Services Management Centre, Park House, University of Birmingham, Birmingham, B15 2RT, UK. Rafferty, Anne Marie. Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care, King's College London, London, SE1 8WA, UK. Mannion, Russell. Health Services Management Centre, Park House, University of Birmingham, Birmingham, B15 2RT, UK., Vol. 22 No. 1, p. 640, doi: 10.1186/s12913-022-08059-2.

Aunger, J.A., Millar, R., Rafferty, A.M., Mannion, R., Greenhalgh, J., Faulks, D. and McLeod, H. (2022), "How, when, and why do inter-organisational collaborations in healthcare work? A realist evaluation", edited by Mahmoud, A.B.*PLOS ONE*, Vol. 17 No. 4, p. e0266899, doi: 10.1371/journal.pone.0266899.

Barker, K. (2014), *A New Settlement for Health and Social Care: Final Report*, The King's Fund, London.

Baylis, A. and Trimble, A. (2018), *Leading across Health and Social Care in Scotland: Learning from Chief Officers' Experiences, Planning next Steps*, London.

Bell, L., Whelan, M. and Lycett, D. (2022), "Role of an Integrated Care System during COVID-19 and beyond: a qualitative study with recommendations to inform future development", *Integrated Healthcare Journal*, Vol. 4 No. 1, doi: 10.1136/ihj-2021-000112.

Bhat, K., Easwarathasan, R., Jacob, M., Poole, W., Sapaetharan, V., Sidhu, M. and Thomas, A. (2022), "Identifying and understanding the factors that influence the functioning of integrated healthcare systems in the NHS: a systematic literature review", *BMJ Open*, Vol. 12 No. 4.

Booth, A., Harris, J., Croot, E., Springett, J., Campbell, F. and Wilkins, E. (2013), "Towards a methodology for cluster searching to provide conceptual and contextual 'richness' for systematic reviews of complex interventions: case study (CLUSTER)", *BMC Medical Research Methodology*, Vol. 13 No. 1, p. 118, doi: 10.1186/1471-2288-13-118.

Booth, A., Wright, J. and Briscoe, S. (2018), "Scoping and Searching to Support Realist Approaches", in Emmel, N., Greenhalgh, J., Manzano, A., Monaghan, M. and Dalkin, S. (Eds.), *Doing Realist Research*, SAGE Publications Ltd, 1 Oliver's Yard, 55 City Road London EC1Y 1SP, doi: 10.4135/9781526451729.

Booth-Smith, L. (2017), *Health and Social Care Coordination: Integration in an Accountable Care System*, Localis, London.

Care Act 2014. (2014), , Queen's Printer of Acts of Parliament.

Chambers, N., Taylor, J., Sachikonye, C., Sweeney, D., Bevington, J. and West, T. (2020), *Evaluation of the Health Care Services Well Led Framework*.

Chang, M-F. (2021), "Challenges and chances for local health and social care integration – Lessons from Greater Manchester, England", *Journal of Integrated Care*, doi: 10.1108/jica-07-2021-0040.

Charles, A., Wenzel, L., Kershaw, M., Ham, C. and Walsh, N. (2018), *A Year of Integrated Care Systems: Reviewing the Journey so Far*, The Kings Fund.

Charlesworth, A. and Johnson, P. (2018), *Securing the Future: Funding Health and Social Care to the 2030s*, Institute for Fiscal Studies, doi: 10.1920/re.ifs.2019.0143.

Cheng, S.M. and Catallo, C. (2019), "Case definition for health and social care services integrated initiatives: Managing Community Care", *Journal of Integrated Care*, Vol. 27 No. 4, pp. 264–275, doi: 10.1108/JICA-09-2018-0057.

Cheng, S.M. and Catallo, C. (2020), "Conceptual framework: factors enabling collaborative healthcare and social services integration", *Journal of Integrated Care*, Vol. 28 No. 3, pp. 215–229, doi: 10.1108/jica-11-2019-0048.

Dada, S., Dalkin, S., Gilmore, B., Hunter, R. and Mukumbang, F.C. (2023), "Applying and reporting relevance, richness and rigour in realist evidence appraisals: Advancing key concepts in realist reviews", *Research Synthesis Methods*, Vol. n/a No. n/a, doi: 10.1002/jrsm.1630.

Dalkin, S.M., Greenhalgh, J., Jones, D., Cunningham, B. and Lhussier, M. (2015), "What's in a mechanism? Development of a key concept in realist evaluation", *Implementation Science*, Vol. 10 No. 1, p. 49, doi: 10.1186/s13012-015-0237-x.

Deffenbaugh, J. (2018), "Becoming an integrated (accountable) care system", *British Journal of Healthcare Management*, Vol. 24 No. 4, pp. 175–180, doi: 10.12968/bjhc.2018.24.4.175.

Department of Health & Social Care. (2021), *Integration and Innovation: Working Together to Improve Health and Social Care for All*, Stationery Office, London.

Department of Health and Social Care. (2022a), *Health and Social Care Integration: Joining up Care for People, Places and Populations*.

Department of Health and Social Care. (2022b), *Expected Ways of Working between Integrated Care Partnerships and Adult Social Care Providers*.

Dickson, G. and Tholl, B. (Eds.). (2020), *Bringing Leadership to Life in Health: LEADS in a Caring Environment: Putting LEADS to Work*, Springer Link.

Elliott, I., Ian C. Elliott, Sinclair, C., Hesselgreaves, H., and Hannah Hesselgreaves. (2020), "Leadership of Integrated Health and Social Care Services", *Scottish Affairs*, Vol. 29 No. 2, pp. 198–222, doi: 10.3366/scot.2020.0316.

Embuldeniya, G., Kirst, M., Walker, K. and Wodchis, W.P. (2018), "The Generation of Integration: The Early Experience of Implementing Bundled Care in Ontario, Canada", *Milbank Q*, Institute of Health Policy, Management and Evaluation, University of Toronto. Wilfrid Laurier University., Vol. 96 No. 4, pp. 782–813, doi: 10.1111/1468-0009.12357.

Erens, B., Wistow, G., Mounier-Jack, S., Douglas, N., Jones, L., Manacorda, T. and Mays, N. (2016), *Early Evaluation of the Integrated Care and Support Pioneers Programme*, Policy Innovation Research Unit, p. 183.

Evans, J.M., Daub, S., Goldhar, J., Wojtak, A. and Purbhoo, D. (2016), "Leading Integrated Health and Social Care Systems: Perspectives from Research and Practice", *Healthcare Quarterly*, Vol. 18 No. 4, pp. 30–35, doi: 10.12927/hcq.2016.24553.

Exworthy, M., Powell, M. and Glasby, J. (2017), "The governance of integrated health and social care in England since 2010: great expectations not met once again?", *Health Policy*, Vol. 121 No. 11, pp. 1124–1130, doi: 10.1016/j.healthpol.2017.07.009.

Gilmore, B., McAuliffe, E., Power, J. and Vallières, F. (2019), "Data Analysis and Synthesis Within a Realist Evaluation: Toward More Transparent Methodological Approaches", *International Journal of Qualitative Methods*, SAGE Publications Inc, Vol. 18, p. 1609406919859754, doi: 10.1177/1609406919859754.

González-Ortiz, L.G., Calciolari, S., Goodwin, N. and Stein, V. (2018), "The Core Dimensions of Integrated Care: A Literature Review to Support the Development of a Comprehensive Framework for Implementing Integrated Care", *International Journal of Integrated Care*, Vol. 18 No. 3, p. 10, doi: 10.5334/ijic.4198.

Good Governance Institute and Coventry University. (2022), *Developing and Leading ICSs*, Good Governance Institute, London.

Goodwin, N. and Smith, J. (2011), "The evidence base for integrated care".

Gordon, D., McKay, S., Marchildon, G., Bhatia, R.S. and Shaw, J. (2020), "Collaborative Governance for Integrated Care: Insights from a Policy Stakeholder Dialogue", *Int J Integr Care*, Institute for Health System Solutions and Virtual Care, Women's College Hospital, Toronto, Ontario, CA. Research & Education Department, VHA Home HealthCare, CA. Department of Physical Therapy, Faculty of Medicine, University of Toronto, Toronto, Ontario, CA. North American Observatory on Health Systems and Policies, CA. Institute of Health Policy, Management and Evaluation, University of

Toronto, Toronto, Ontario, CA. Institute for Clinical Evaluative Sciences, CA. Faculty of Medicine, University of Toronto, Toronto, Ontario, CA., Vol. 20 No. 1, p. 3, doi: 10.5334/ijic.4684.

Ham, C. (2022), *Governing the Health and Care System in England: Creating the Conditions for Success*, NHS Confederation, London.

Ham, C., Smith, J. and Eastmure, E. (2011), *Commissioning Integrated Care in a Liberated NHS*, The Nuffield Trust, p. 68.

Harlock, J., Caiels, J., Marczak, J., Peters, M., Fitzpatrick, R., Wistow, G., Forder, J.E., *et al.* (2020), "Challenges in integrating health and social care: the Better Care Fund in England":, *Journal of Health Services Research & Policy*, Vol. 25 No. 2, pp. 86–93, doi: 10.1177/1355819619869745.

Harris, R., Fletcher, S., Sims, S., Ross, F., Brearley, S. and Manthorpe, G. (2022), "Developing programme theories of leadership for integrated health and social care teams and systems: a realist synthesis", *Health and Social Care Delivery Research*, doi: 10.3310/wpng1013.

Hendry, A., Thompson, M., Knight, P., McCallum, E., Taylor, A., Rainey, H. and Strong, A. (2021), "Health and Social Care Reform in Scotland – What Next?", *International Journal of Integrated Care*, Vol. 21 No. 4, doi: 10.5334/ijic.5633.

Hulks, S., Walsh, N., Powell, M., Ham, C. and Alderwick, H. (2017), *Leading across the Health and Care System: Lessons from Experience*, Kings Fund, London.

Hutchison, K. (2015), "An exploration of the integration of health and social care within Scotland: Senior stakeholders' views of the key enablers and barriers", *Journal of Integrated Care*, Vol. 23 No. 3, pp. 129–142, doi: 10.1108/JICA-11-2014-0042.

Kaehne, D.A., Mahon, A., Zubairu, D.K., Moen, C., Maden, D.M. and Ekpenyong, A. (2022), *Rapid Review on System Leadership in Health Care*, p. 42.

King, E. and Mendez-Sawyer, E. (2021), *How Might Leadership Roles Evolve in Integrated Health and Care Systems?*, Social Care Institute for Excellence, London.

Kozlowska, O., Seda, G.G. and Rea, R. (2020), "Leadership for integrated care: a case study", *Leadership in Health Services*, Emerald Publishing Limited, Vol. 33 No. 2, pp. 125–146, doi: 10.1108/LHS-09-2019-0066.

Ling, T., Brereton, L., Conklin, A., Newbould, J. and Roland, M. (2012), "Barriers and facilitators to integrating care: experiences from the English Integrated Care Pilots", *International Journal of Integrated Care*, Vol. 12 No. 5, doi: 10.5334/ijic.982.

MacLeod, M.L.P., Hanlon, N., Reay, T., Snadden, D. and Ulrich, C. (2019), "Partnering for change", *J Health Organ Manag*, School of Nursing, University of Northern British Columbia, Prince George, Canada. Department of Geography, University of Northern British Columbia, Prince George, Canada. Department of Strategic Management and Organization, University of Alberta Alberta School of Business, Edmonton, Canada. Northern Medical Program, University of British Columbia, Vancouver, Canada. Northern Health Authority, Prince George, Canada., pp. 255–72, doi: 10.1108/jhom-02-2019-0032.

Marchal, B., Kegels, G. and Van Belle, S. (2018), "Theory and Realist Methods", in Emmel, N., Greenhalgh, J., Manzano, A., Monaghan, M. and Dalkin, S. (Eds.), *Doing Realist Research*, SAGE Publications Ltd, 1 Oliver's Yard, 55 City Road London EC1Y 1SP, doi: 10.4135/9781526451729.

Martin, L. (2021), "Leadership challenge: lateral systems integration for healthcare", *Journal of Integrated Care*, Emerald Publishing Limited, Vol. 30 No. 1, pp. 77–86, doi: 10.1108/JICA-12-2020-0074.

Martin, L. and Knowles, E.E. (2019), "Model for an integrated health system", *Journal of Integrated Care*, Emerald Publishing Limited, Vol. 28 No. 2, pp. 161–170, doi: 10.1108/JICA-08-2019-0034.

Maruthappu, M., Hasan, A. and Zeltner, T. (2015), "Enablers and Barriers in Implementing Integrated Care", *Health Systems & Reform*, Vol. 1 No. 4, pp. 250–256, doi: 10.1080/23288604.2015.1077301.

Miller, F.A. and Alvarado, K. (2005), "Incorporating Documents Into Qualitative Nursing Research", *Journal of Nursing Scholarship*, Vol. 37 No. 4, pp. 348–353, doi: 10.1111/j.1547-5069.2005.00060.x.

Miller, R. and Glasby, J. (2016), "'Much ado about nothing'? Pursuing the 'holy grail' of health and social care integration under the Coalition", in Mark, E., Russell, M. and Powell, M. (Eds.), *Dismantling the NHS?: Evaluating the Impact of Health Reforms*, Policy Press.

Miller, R., Glasby, J. and Dickinson, H. (2021), "Integrated health and social care in England: ten years on", *International Journal of Integrated Care*, Vol. 21 No. S2, p. 6, doi: 10.5334/ijic.5666.

Miller, R. and Stein, K.V. (2020), "The Odyssey of Integration: Is Management its Achilles' Heel?", *International Journal of Integrated Care*, Vol. 20 No. 1, pp. 7–7, doi: 10.5334/ijic.5440.

Mitchell, C., Tazzyman, A., Howard, S.J. and Hodgson, D. (2020), "More that unites us than divides us? A qualitative study of integration of community health and social care

services", *BMC Family Practice*, Vol. 21 No. 1, p. 96, doi: 10.1186/s12875-020-01168-z.

National Audit Office. (2022), *Introducing Integrated Care Systems: Joining up Local Services to Improve Health Outcomes*.

NHS Confederation. (2018), *Letting Local Systems Lead: How the Long-Term Plan Could Deliver a More Sustainable NHS*, NHS Confederation, London.

NHS Employers. (2022), *NHS Employers: Integrated Workforce Thinking across Systems: Practical Solutions to Support Integrated Care Systems*.

NHS England. (2019), *Breaking down Barriers to Better Health and Care*, Stationery Office, London.

NHS England and NHS Improvement. (2021a), *Integrated Care Systems: Design Framework*.

NHS England and NHS Improvement. (2021b), *Building Strong Integrated Care Systems Everywhere: ICS Implementation Guidance on Working with People and Communities*.

NHS England and NHS Improvement. (2021c), *Building Strong Integrated Care Systems Everywhere: ICS Implementation Guidance on Partnerships with the Voluntary, Community and Social Enterprise Sector*.

NHS England and NHS Improvement. (2022), *System Workforce Improvement Model (SWIM): A Support Tool for ICSs*.

NHS England and NHS Improvement. (2021a), *Building Strong Integrated Care Systems Everywhere: ICS Implementation Guidance on Effective Clinical and Care Professional Leadership*.

NHS England and NHS Improvement. (2021b), *Building Strong Integrated Care Systems Everywhere: Guidance on the ICS People Function*.

NHS Leadership Academy. (2013), *Healthcare Leadership Model*, NHS Leadership Academy.

NHS North West Leadership Academy. (2018), *System Leadership: Collaborative Co-Creation to Explore System Leadership Behaviours for the Future of the Public Sector*.

NHS North West Leadership Academy. (2021), *Doing Things Differently: Rethinking Leadership Behaviours*.

Nicholson, C., Hepworth, J., Burridge, L., Marley, J. and Jackson, C. (2018), "Translating the Elements of Health Governance for Integrated Care from Theory to Practice: A Case Study Approach", *International Journal of Integrated Care*, Vol. 18 No. 1, p. 11, doi: 10.5334/ijic.3106.

Paice, E. and Hasan, S. (2013), "Educating for integrated care", *London Journal of Primary Care*, Vol. 5 No. 1, pp. 52–55, doi: 10.1080/17571472.2013.11493374.

Papoutsi, C., Mattick, K., Pearson, M., Brennan, N., Briscoe, S. and Wong, G. (2018), *Review Methods*, *Interventions to Improve Antimicrobial Prescribing of Doctors in Training (IMPACT): A Realist Review*, NIHR Journals Library.

Parkin, E. (2019), *Health and Social Care Integration*, House of Commons Library, p. 31.

Pawson, R. (2006a), "Digging for Nuggets: How 'Bad' Research Can Yield 'Good' Evidence", *International Journal of Social Research Methodology*, Vol. 9 No. 2, pp. 127–142, doi: 10.1080/13645570600595314.

Pawson, R. (2006b), "Realist Synthesis: New Protocols for Systematic Review", *Evidence-Based Policy*, SAGE Publications Ltd, 1 Oliver's Yard, 55 City Road, London England EC1Y 1SP United Kingdom, doi: 10.4135/9781849209120.

Pawson, R. (2006c), *Evidence-Based Policy: A Realist Perspective*, SAGE, London ; Thousand Oaks, Calif.

Pawson, R. and Tilley, N. (1997), *Realistic Evaluation*, Sage, London ; Thousand Oaks, Calif.

Pearson, C. and Watson, N. (2018), "Implementing health and social care integration in Scotland: Renegotiating new partnerships in changing cultures of care", *Health & Social Care in the Community*, Vol. 26 No. 3, pp. e396–e403, doi: 10.1111/hsc.12537.

RAMESES II. (2017), *Developing Realist Programme Theories*.

Robert, E., Zongo, S., Rajan, D. and Ridde, V. (2022), "Contributing to collaborative health governance in Africa: a realist evaluation of the Universal Health Coverage Partnership", *BMC Health Serv Res*, École de santé publique de l'Université de Montréal, 7101 Avenue du Parc, Montreal, QC, H3N 1X9, Canada. emilie.robert.3@umontreal.ca. ICARES, Montreal, QC, Canada. emilie.robert.3@umontreal.ca. Centre de Recherche SHERPA, Montreal, QC, Canada. emilie.robert.3@umontreal.ca. Institut des Sciences des Sociétés (INSS), Centre National de la Recherche Scientifique et Technologique du Burkina Faso, Ouagadougou, Burkina Faso. Department of Health Systems Governance and Financing, World Health Organization, Geneva, Switzerland. Institut de recherche pour le développement (IRD), Paris, France., Vol. 22 No. 1, p. 753, doi: 10.1186/s12913-022-08120-0.

Round, T., Ashworth, M., Crilly, T., Ferlie, E. and Wolfe, C. (2018), "An integrated care programme in London: qualitative evaluation: Managing Community Care", *Journal of Integrated Care*, Vol. 26 No. 4, pp. 296–308, doi: 10.1108/JICA-02-2018-0020.

Rycroft-Malone, J., McCormack, B., Hutchinson, A.M., DeCorby, K., Bucknall, T.K., Kent, B., Schultz, A., *et al.* (2012), "Realist synthesis: illustrating the method for implementation research", *Implementation Science*, Vol. 7 No. 1, p. 33, doi: 10.1186/1748-5908-7-33.

Shand, J. and Turner, S. (2019), "System wide collaboration? Health and social care leaders' perspectives on working across boundaries", *Journal of Integrated Care*, Vol. 27 No. 1, pp. 83–94, doi: 10.1108/JICA-06-2018-0042.

Shearn, K., Allmark, P., Piercy, H. and Hirst, J. (2017), "Building realist programme theory for large complex and messy interventions", *International Journal of Qualitative Methods*, p. 49.

Sims, S., Fletcher, S., Brearley, S., Ross, F., Manthorpe, J. and Harris, R. (2021), "What does Success Look Like for Leaders of Integrated Health and Social Care Systems? a Realist Review", *International Journal of Integrated Care*, Vol. 21 No. 4, p. 26, doi: 10.5334/ijic.5936.

Social Care Institute for Excellence. (2018), *Leadership in Integrated Care Systems: Report Prepared for the NHS Leadership Academy*, Social Care Institute for Excellence.

Stein, K.V., Goodwin, N., Aldasoro, E. and Miller, R. (2023), "The Integrated Care Workforce: What does it Need? Who does it Take?", *International Journal of Integrated Care*, Vol. 23 No. 3, doi: 10.5334/ijic.7686.

Sullivan-Taylor, P., Suter, E., Laxton, S., Oelke, N.D. and Park, E. (2022), "Integrated People-Centred Care in Canada - Policies, Standards, and Implementation Tools to Improve Outcomes", *Int J Integr Care*, Strategic Policy and Partner Engagement, Health Standards Organization (HSO), Canada. Faculty of Social Work, University of Calgary, Canada. Health Standards Organization (HSO), Canada. School of Nursing, University of British Columbia, and Scientific Director, Rural Coordination Centre of British Columbia, Adjunct Faculty, Department of Community Health Sciences, Cumming School of Medicine, University of Calgary, Canada., Vol. 22 No. 1, p. 8, doi: 10.5334/ijic.5943.

Thakrar, S.V. and Bell, D. (2017), "Sustainability and transformation plans: translating the perspectives", *British Journal of Hospital Medicine*, Vol. 78 No. 10, pp. 580–583, doi: 10.12968/hmed.2017.78.10.580.

Turner, A., Mulla, A., Booth, A., Aldridge, S., Stevens, S., Begum, M. and Malik, A. (2018), "The international knowledge base for new care models relevant to primary care-led integrated models: a realist synthesis", *Health and Social Care Delivery Research*, Vol. 6 No. 25, doi: 10.3310/hsdr06250.

Tweed, A., Singfield, A., Taylor, J.R.A., Gilbert, L. and Mount, P. (2018), "Creating allegiance: leading transformational change within the NHS", *BMJ Leader*, Vol. 2 No. 3, pp. 110–114, doi: 10.1136/leader-2018-000088.

Urtaran-Laresgoiti, M., Álvarez-Rosete, A. and Nuño-Solinís, R. (2018), "A system-wide transformation towards integrated care in the Basque Country: A realist evaluation", *International Journal of Care Coordination*, SAGE Publications, Vol. 21 No. 3, pp. 98–108, doi: 10.1177/2053434518800884.

Wistow, G., Gaskins, M., Holder, H. and Smith, J. (2016), "Why Implementing Integrated Care is so much harder than designing it: experience in North West London. England", *International Journal of Integrated Care*, Vol. 16 No. 6, p. 308, doi: 10.5334/ijic.2856.

Wong, G. (2018), "Data Gathering in Realist Reviews: Looking for needles in haystacks", in Emmel, N., Greenhalgh, J., Manzano, A., Monaghan, M. and Dalkin, S. (Eds.), *Doing Realist Research*, First edition., Sage, Los Angeles.

Wong, G., Greenhalgh, T., Westhorp, G., Buckingham, J. and Pawson, R. (2013), "RAMESES publication standards: realist syntheses", *BMC Medicine*, Vol. 11, p. 21, doi: 10.1186/1741-7015-11-21.

Wong, G., Westhorp, G., Greenhalgh, J., Manzano, A., Jagosh, J. and Greenhalgh, T. (2017), "Quality and reporting standards, resources, training materials and information for realist evaluation: the RAMESES II project", *Health Services and Delivery Research*, Vol. 5 No. 28, pp. 1–108, doi: 10.3310/hsdr05280.

Wong, G., Westhorp, G., Pawson, R. and Greenhalgh, T. (2013), *Realist Synthesis: RAMESES Training Materials*.

Contribution of included papers to final CMOCs

Source	CMOC 1:	CMOC 2:	CMOC 3:	CMOC 4:	CMOC: 5	CMOC: 6
(Aufegger et al., 2020)	x					
(Aunger et al., 2022)	x		x			x
(Bell et al., 2022)		x	x		x	x
(Embuldeniya et al., 2018)			x		x	
(Harlock et al., 2020)	x	x	x			
(Gordon et al., 2020)		x	x	x	x	x
(Kozlowska et al., 2020)	x					
(MacLeod et al., 2019)	x	x	x	x		x
(Martin, 2022)	x	x	x	x		
(Miller and Stein, 2020)	x	x	x	x		x
(Ming-Fang Chang, 2021)			x			
(Mitchell et al., 2020)		x		x	x	x
(Nicholson et al., 2018)		x	x		x	x
(Pearson and Watson, 2018)					x	x
(Round et al., 2018)	x	x		x		
(Shand and Turner, 2019)			x			
(Sims et al., 2021)	x	x	x	x		x
(Urtaran-Laresgoiti et al., 2018)	x	x	x			x

IRPT: *Being*

Effective ICS Leaders communicate a clear sense of purpose, encourage learning, curiosity, and calculated risk-taking. They are aware of how their behaviour influences an organisation and others, and support both reflection and learning from success and failures.

CMOC 1:	*In the context of ICS leaders having a clear sense of purpose (C) they communicate clarity of intent and purpose (M - Res) which is motivating for others (M- Rea) and helps them to see how their work contributes to the achievement of the ICSs strategic objectives (O).*
Linked Quotations:	"knowing what's right is one thing but being able to communicate what is right and therefore bringing people with you as a leader, I think is the other really important bit" [1] "we need to be consistent with the messages…we've got to be really clear about what we are doing and what we're not doing" [3]

CMOC 2:	*In the context of a shared learning culture (C) leaders acting in an open and honest manner (M-Res) supports others to feel safe and supported to reflect on both success and failure (M-Rea), and are therefore better able to identify learning that leads to continuous improvement (O)*
Linked Quotations:	"as leaders we've got to be able to say 'these are the parameters, but you've got flexibility to do and be creative'" [3]"it doesn't matter what the strategy looks like if we haven't got people motivated and doing the right things and feeling empowered to do it then it won't work" [3]

IRPT: *Leading & Visioning*

Effective ICS leaders prioritize community needs and system outcomes, breaking down barriers and empowering others in decision-making and problem-solving. This aligns with literature themes on culture alignment and a shared vision for improved population health.

CMOC 3:	*In the context of a shared and clear shared sense of purpose (C), clarity regarding accountability across the system (M-Res) supports partners to understand who is responsible for delivering what, with which levers and what budgets (M-Rea) and leads to partners working successfully across the system to plan, design, and deliver services (O)*
Linked Quotations:	"so, there's no point [one place] striving forward with integration if somewhere else [in the system] is struggling and cannot get where they need to be. So, I see my role…making sure that we all succeed together and that's really important" [3]

CMOC 4:	*In the context of a focus on population health (C) when partners are given an opportunity to contribute to discussion and decision making (M-Res) they feel that their perspective is understood (M-Rea) and leads to decisions taken closer to, and in consultation with, communities (O)*

Linked Quotations:	"my leadership role in all of that is really important in terms of bringing together our key partners and getting them involved in some of the solutions" [3]

IRPT: *Relating & Communicating*

Effective ICS leaders build relationships at all levels of the system, they promote empathy, care, and collaboration. Leaders encourage a collective agreement about what needs to be achieved and communicate openly about how and why decisions are made.

CMOC 5:	*In the context of attempting to reduce the impact of health inequalities (C) providing citizens with choices about where and how they can access care (M-Res) empowers them to make decisions about their care (M-Rea) and access appropriate, timely support within their communities (O)*
Linked Quotations:	"where we show that these health inequalities are being tackled, where we are improving the outcomes of that core 20 Plus five, then I will see that our job as a system is being done." [1]

CMOC 6:	*In the context of developing relationships that support partnership working (C) regular and open communications about how decisions are made (M-Res) fosters trust and mutual accountability (M-Rea) which supports system partners to focus on tackling the wider socio-economic causes of poor health and inequality (O)*
Linked Quotations:	"Communication is absolutely essential on this. But not just a 'here's the facts', but us actually taking time to think about, what is the implication of this for individual organisations" [2] "if you look at the kind of deprivation levels that we've got in [place], we're not going to deal with this without having all our partners around the table" [3]

IRPT: *Delivering*

Effective ICS leaders are accountable for enhancing local outcomes, optimally utilizing resources, and encouraging innovative methods. This encompasses clear governance, problem-solving, and progress measurement.

CMOC 7:	*In the context of a culture of accountability (C) transparent decision-making, with people and communities involved in governance, meetings held in public, published minutes and regular updates on progress (M-Res) ensures partners feel held to account for quality, effective service provision (M-Rea) and secure value for money service provision (O)*
Linked Quotations:	"and it's a bit about, how do you hold each other to account?" [2] "There needs to be, and particularly because of financial challenges in the NHS as well as local government, a real sort of hold to account" [3]

CMOC 8:	*In the context of population health management and digitalisation (C) the use of shared digital intelligence (M-Res) supports leaders to better understand local population needs (M-Rea) which leads to improved targeting of those with chronic diseases, so they access services (O)*
Linked Quotations:	"digital is such an important one, not just that the population and people are accessing that, but that we are getting that basic level absolutely right." [1]

CMOC 9:	*In the context ICSs doing things differently (C) system partners facilitating and supporting each other to innovate (M-Res) encourages curiosity and innovative thinking (M-Rea) leading to effective service redesign (O)*
Linked Quotations:	"we are not here simply to take over a commissioning role, it has to be about what does this allow us to do differently" [1] "as a big organisation as the ICSs is, there is a risk that you try command and control …, and it stifles innovation and it creates inertia and you just don't get stuff done" [3]

Search Strategy

Search Dates: 15th September to 1st October 2022

Search Terms: Integrat* AND health OR care OR "health care" OR "health servic*" OR healthcare OR social-care OR "social care" OR NHS AND system* AND leader*

Limiters: English language only; Abstract;

Date range: 2017-2022 (In June 2017**,** NHS England selected ten pilot areas to develop the first ICSs)

Databases

- Cumulative Index to Nursing and Allied Health Literature (CINAHL)
- MEDLINE
- PubMed
- ABI Inform
- ProQuest Central
- Business Source Complete
- Wiley
- Emerald

Grey Literature

Grey literature relating to policy and organisational-based material searches on Google Scholar, government and other specialist websites [e.g., NHS Leadership Academy, National Institute for Health Research, Skills for Care, Social Care Institute for Excellence, The King's Fund, Nuffield Trust, The Institute of Healthcare Management, Social Care Online, NHS England and NHS Improvement]. Keywords adapted from the main search strategy will be used including 'leader', 'leadership', 'integrated care' and 'integrated system'.

Hand-searching of Key Journals

Journal of Interprofessional Care, Journal of Integrated Care and International Journal of Integrated Care were searched for the term 'leadership and systems' in the online versions.