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Making sense of context in integrated care: a comparative analysis of frameworks for implementation in complex health and social care systems

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Abstract

Purpose – Context is increasingly recognised as a central determinant of whether integrated care interventions succeed or fail. Yet the proliferation of contextual analysis frameworks with different epistemological perspectives and empirical applications has created uncertainty about how to make sense of context in complex health and social care systems. This paper critically compares thirteen influential frameworks to examine how they conceptualise, assess and operationalise context for integrated care implementation.

Design/methodology/approach – A structured and theory-informed comparative analysis was undertaken. Frameworks were purposively selected based on relevance to health and social care, conceptual clarity, empirical use and applicability to complex or multi-level settings. Each framework was examined across five analytical dimensions: epistemological foundations, conceptual structure, methodological guidance, empirical application and relevance to integrated care. An interpretive synthesis approach enabled cross-framework comparison without collapsing diverse paradigms into a single model.

Findings – Frameworks varied substantially in their assumptions about knowledge, causality, and system behaviour. While tools such as CFIR and Theoretical Domains Framework offer structured and widely used taxonomies, newer frameworks; including ICON, CICI, NASSS and the Context Coding Framework, better reflect the dynamic, relational and cross-boundary nature of integrated care. Participatory and realist approaches add value through attention to mechanisms, reflexivity and power, but often lack procedural guidance. No single framework fully captures the multi-level and emergent properties of integrated care systems highlighting the need for purposeful combination rather than substitution.

Practical implications – The analysis highlights the need for hybrid and adaptive approaches to contextual analysis, supported by greater epistemological awareness and attention to power, equity and inter-organisational dynamics. The paper offers guidance for selecting and combining frameworks depending on purpose, stage of implementation and system context.

Originality/value – To our knowledge, this is the first study to systematically compare contextual frameworks through the lens of integrated care. It provides conceptual orientation and practical sensemaking to support more context-sensitive, adaptive and relational approaches to integrated care implementation.

Keywords Integrated care, Context, Implementation science, Complexity, Contextual analysis, Frameworks, Health and social care systems, Integrated care implementation, Realist evaluation, Participatory approaches, Inter-organisational dynamics, Health system transformation

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Introduction

Despite decades of reform efforts, most health and social care systems remain structurally fragmented and slow to change. While integrated care has gained international traction as a policy ideal, promising more coordinated, person-centred services and improved outcomes, implementation efforts have often been disappointing. The persistence of implementation failure, despite strong evidence and apparent consensus, points to a fundamental disconnect between intervention design and the systems into which they are introduced (Hughes *et al*., 2020).

One widely acknowledged but poorly addressed explanation is the role of context. In implementation research, context refers to the constellation of factors that surround, influence, and are influenced by an intervention. These include organisational structures, professional norms, resource constraints, policy environments, historical legacies, ways of making sense and inter-organisational relationships. As Rogers, De Brún and McAuliffe note in their systematic review of healthcare implementation studies, context is frequently mentioned but rarely theorised or systematically assessed (Rogers *et al*., 2020a). They define context as a "dynamic, multi-dimensional and interacting construct" that shapes the processes and outcomes of implementation, and yet it is too often treated as a static background condition.

This gap is particularly problematic in integrated care, where interventions must operate across organisational boundaries, sectors and professional groups. Integrated care relies on relational work, shared purpose, distributed leadership and adaptive capacity. Outcomes emerge from interactions among multiple agents operating within complex adaptive systems. As Hawe *et al*. (2009) argue, interventions should be understood as "events in systems," whose effects are contingent on the features and responsiveness of those systems (Hawe *et al*., 2009). Similarly, Preiser *et al*. (2018) emphasise that in complex systems, context is not fixed but emergent, relational, and deeply entangled with system behaviour (Preiser *et al*., 2018).

Traditional implementation frameworks, grounded in linear or positivist paradigms, often fail to account for this dynamic nature. As May *et al*. (2016) explain, context is not just a backdrop for implementation; it is produced and reproduced in everyday interactions and practices (May *et al*., 2016). Nilsen (2015) likewise notes that many popular models offer limited guidance on how to understand or assess context beyond listing domains or variables (Nilsen, 2015). Squires *et al*. (2023) highlight that even when context is recognised as important, it is inconsistently defined and rarely integrated into the design of implementation studies (Squires *et al*., 2023).

Meier and Dopson (2019) take this argument further, defining context as a relational construct that specifies what is at any given point considered the background for understanding a phenomenon or event (Meier and Dopson, 2019). This background/foreground relationship is continually constructed by people as they make sense of their experiences and the social worlds in which they engage. They propose a framework for studying "context in action," centred on three questions: what constitutes context for a phenomenon or event? How do actors understand, experience, or engage with context? and how do contexts change, and what is the role of actors in such processes? These questions bring power, positionality, and agency to the fore, reframing context as an active and contested terrain rather than a neutral setting.

The challenge is particularly acute in integrated care, which requires coordination across organisational boundaries, professional groups, and sectors. These interventions often target not just individuals but relationships, workflows, governance mechanisms, and shared cultures of practice. To plan, implement, or evaluate such interventions without serious contextual analysis is to risk misalignment, resistance, and failure.

In response, a wide array of contextual analysis tools and frameworks have been developed. Over the past 2 decades, these approaches have grown in number and diversity, drawing on behavioural science, systems thinking, critical realism, and action research. Some frameworks offer structured, domain-based taxonomies (e.g. CFIR, ICON, CCIC); others focus on identifying generative mechanisms (e.g. Realist Evaluation), complexity-informed (e.g.

NASSS), or grounded in participatory inquiry (e.g. CAPA, Shani and Pasmore). While this proliferation reflects growing awareness of context's centrality, it also challenges researchers and practitioners to understand how the different epistemological groundings of the frameworks influence a conceptualisation of context. This understanding is necessary to enable intentional, modular combination of frameworks to make sense of context for a purpose, setting or phase of implementation.

To date, there has been no comparative analysis of contextual frameworks explicitly through the lens of integrated care. Yet the stakes are high: without a robust understanding of context, integrated care programmes risk misalignment, resistance, limited spread, or superficial adoption. For integrated care to fulfil its transformative potential, contextual analysis must be as rigorous and intentional as intervention design.

This paper addresses this gap by critically comparing thirteen influential contextual analysis frameworks. We examine their epistemological foundations, conceptual structures, methodological guidance, empirical application and relevance to integrated care. Through this analysis, we aim to clarify how context is conceptualised across paradigms, identify strengths and limitations, and provide practical guidance for selecting and combining frameworks in integrated care implementation. Importantly, this comparison does not treat frameworks as competitors or substitutes. Rather, it examines how different frameworks reveal distinct dimensions of context and how they may be combined in modular ways depending on the purpose, level, and phase of integrated care implementation. The intent is not to identify a "best" framework, but to support informed selection and purposeful combination across paradigms.

Methods

This study took a structured, interpretive, and theory-informed comparative analysis of how leading frameworks conceptualise and operationalise context in health and social care implementation. Comparative analysis is a recognised approach for synthesising diverse implementation theories and frameworks, allowing systematic examination while respecting epistemological differences (Nilsen, 2015; Squires *et al*., 2023). Given the epistemological and methodological diversity of contextual tools, an interpretive synthesis was required to integrate insights across paradigms without collapsing them into a single model. (Popay *et al*., 2006; Dixon-Woods *et al*., 2005). It was theory-informed, drawing on prior meta-framework analyses and complexity theory to guide both the selection of frameworks and the interpretation of their features (Pfadenhauer *et al*., 2017; Carroll *et al*., 2023; Greenhalgh and Papoutsi, 2018).

Framework selection

Frameworks were selected using purposive sampling informed by both conceptual and practical relevance to integrated care. Inclusion criteria were:

(1) the framework was explicitly developed or widely used to support contextual analysis in health or social care implementation.

(2) it had a clearly articulated conceptual structure and was supported by peer-reviewed literature.

(3) it has been cited or applied in empirical studies published in the last decade; and

(4) it engages with complex, multi-level, or system-level dynamics relevant to integrated care.

We excluded frameworks focused primarily on outcome evaluation (e.g. RE-AIM (Glasgow *et al*., 1999)), implementation fidelity (e.g. Conceptual Framework for Implementation Fidelity (CFIF) (Palmer *et al*., 2019), or adaptation tracking (e.g. FRAME (Mui *et al*., 2024)),

as these, while valuable, do not offer robust guidance on the broader contextual dynamics under review. This will be discussed in more detail later.

The frameworks included in this analysis are:

(1) Context Coding Framework (Rogers *et al*., 2020b)

(2) Consolidated Framework for Implementation Research (updated) (CFIR) (Damschroder *et al*., 2022)

(3) Theoretical Domains Framework (TDF) (Cane *et al*., 2012)

(4) Integrated-Promoting Action on Research Implementation in Health Services (i-PARIHS) framework (Harvey and Kitson, 2015)

(5) Realist Evaluation/CMO heuristic (Pawson *et al*., 2005)

(6) Non-adoption, Abandonment, Scale-up, Spread and Sustainability (NASSS) (Greenhalgh *et al*., 2017)

(7) Context and Implementation of Complex Interventions (CICI) (Pfadenhauer *et al*., 2017)

(8) Implementation in Context (ICON) Framework (Squires *et al*., 2023)

(9) Basel Approach for coNtextual ANAlysis (BANANA) (Mielke *et al*., 2022)

(10) Context and Capabilities for Integrating Care (CCIC) (Suter *et al*., 2017)

(11) Contextual Analysis for Practical Action (CAPA) (Barry, 2021)

(12) Svensson's Contextual Analysis (Svensson, 2021)

(13) Shani and Pasmore's Complete Theory of Action Research (Shani and Pasmore, 1982)

Frameworks were ordered to reflect a hybrid logic, balancing thematic grouping with temporal development. Meta-frameworks and broadly used implementation models appear early, followed by frameworks rooted in realist, complexity, and participatory traditions. This ordering is intended to support cross-framework comparison and to reflect the diversity of conceptual foundations underpinning contextual analysis in complex systems.

Analytical approach

Each framework was examined across five dimensions adapted from previous comparative analyses of implementation theories (Nilsen, 2015; Pfadenhauer *et al*., 2017; Squires *et al*., 2023) and contextual research methods (Barry, 2021; Svensson, 2021). These dimensions were selected to enable comparison across paradigms without imposing a single epistemological hierarchy. Rather than ranking frameworks, the analysis examines how different assumptions, structures, and methods make frameworks more or less suitable for particular implementation purposes. This approach supports practical sensemaking across diverse implementation contexts, consistent with interpretive synthesis methods:

(1) Epistemological foundations: underlying assumptions about knowledge, causality, and system behaviour

(2) Conceptual structure: organisation of context domains, constructs, and levels

(3) Methodological guidance: clarity and operationalisability of procedures for data collection, analysis, and use

(4) Empirical application: extent and nature of real-world uptake in integrated or complex care settings

(5) Relevance to integrated care and complex systems: how well the framework supports cross-sectoral, multi-level, and adaptive implementation challenges

Framework documents were analysed through a combination of close reading and comparative tabulation. Where available, we reviewed application papers and associated guides to assess methodological support and empirical usage. Although no formal quality scoring was conducted, with emphasis rather placed on interpretive depth and transparency, a structured extraction matrix aligned to the five analytical dimensions was used to ensure consistency of analysis across frameworks.

This approach allowed us to explore both convergences and divergences across frameworks, and to identify strengths, blind spots, and trade-offs relevant to researchers, practitioners, and policy actors working at the interface of health system reform and contextual complexity.

Reflexivity and positionality

The analysis was informed by an epistemologically pluralist stance, recognising the value of multiple paradigms, from post-positivist modelling to participatory inquiry, in understanding context. As the authors work extensively in integrated care implementation and complex systems research, we remained attentive to the influence of our experiential knowledge. Reflexive notes were maintained throughout to support transparency and mitigate interpretive bias.

Results

This section presents the findings of the comparative analysis across five analytical dimensions: epistemological foundations, conceptual structure, methodological guidance, empirical application, and relevance to integrated care and complex systems. As shown in Table 1, the analysis reveals both convergences and divergences among the frameworks, illustrating the diversity of approaches to understanding and engaging with context.

Epistemological foundations

The frameworks vary substantially in their epistemological orientations. Some adopt a primarily positivist or post-positivist stance, aiming to identify discrete contextual domains and variables that can be measured and acted upon. These include CFIR and TDF, which are underpinned by behavioural science and implementation theory traditions. Other frameworks, such as the Context Coding Framework, ICON, and CICI, adopt a more constructivist or interpretivist orientation, emphasising the dynamic, situated, and socially constructed nature of context. Realist Evaluation and NASSS are rooted in a critical realist epistemology, focussing on generative mechanisms and contingent causality. These frameworks seek to explain how and why interventions work (or fail) in particular contexts. The participatory action research (PAR)-oriented frameworks (CAPA, Svensson, and Shani and Pasmore) are underpinned by pragmatist and emancipatory paradigms, positioning knowledge generation as co-constructed and action-oriented.

This epistemological variation reflects the range of purposes these frameworks serve, from standardised implementation to reflexive system transformation.

Conceptual structure

Most frameworks provide a structured categorisation of contextual factors, though the specificity and granularity vary. CFIR and the Context Coding Framework both offer multi-domain models with inner and outer setting constructs, though the former is deductively derived and the latter inductively developed through synthesis. TDF categorises behavioural determinants but does not explicitly distinguish levels of context, limiting its utility in multi-

Table 1. Comparative context frameworks summary table

Tool	Epistemological foundation	Conceptual structure	Methodological guidance	Empirical use	Relevance to integrated care
Context Coding Framework (Rogers *et al.*, 2020)	Constructivist	Inductive, multi-domain	Structured coding guide	Moderate	High
CFIR (Damschroder *et al.*, 2022)	Post-positivist	Structured domains	Extensive tools	High	Moderate
TDF (Cane *et al.*, 2012)	Post-positivist	Behavioural constructs	Validated instruments	High	Moderate
i-PARIHS (Harvey and Kitson, 2015)	Pragmatist	Mid-range theory	Facilitation-focused guidance	High	Moderate
Realist Evaluation/CMO (Pawson *et al.*, 2005)	Critical realist	CMO configurations	Theory-building heuristics	High	High
NASSS (Greenhalgh *et al.*, 2017)	Critical realist	Seven dynamic domains	Heuristics, flexible	Moderate	High
CICI (Pfadenhauer *et al.*, 2017)	Constructivist	Multi-level domains	Conceptual clarity, less procedural	Moderate	High
ICON (Squires *et al.*, 2023)	Constructivist	Nested multi-domain meta-framework	Detailed procedural guide	Moderate	High
BANANA (Mielke *et al.*, 2022)	Pragmatist	Six clusters	Decision support for early scoping	Emerging	Moderate
CCIC (Suter *et al.*, 2017)	Pragmatist	Organisational domains	Moderate guidance	Low	Moderate
CAPA (Barry, 2021)	Participatory	Flexible, iterative inquiry	Minimal procedural detail	Low	High
Svensson's Contextual Analysis (Svensson, 2021)	Participatory	Guided inquiry model	Relational process guidance	Low	High
Shani and Pasmore's Action Research Theory (Shani and Pasmore, 1982)	Pragmatist/ Participatory	Context-content-process	Collaborative, reflexive	Low	Moderate

level system change. CICI and ICON present multi-level, multi-domain structures with an explicit focus on complexity and interactions. ICON, in particular, offers a comprehensive meta-framework with nested levels, domains, and sub-features. NASSS uses a dynamic framework organised around seven domains, while BANANA introduces six clusters and is especially useful for early-stage contextual scoping. Frameworks such as CAPA and Svensson are less prescriptive in their structure, instead promoting iterative inquiry tailored to emergent contextual features. Shani and Pasmore outline broad categories (e.g. context, content, process) but focus on relationships among the categories rather than static taxonomies.

Methodological guidance

A key differentiator among frameworks is the level of methodological guidance provided. CFIR, TDF, and i-PARIHS include published guides, tools, and instruments to support data collection and application in research and practice. ICON and the Context Coding Framework provide structured coding schemes and are suitable for systematic literature reviews or empirical studies. ICON further offers detailed guidance on the application across stages of implementation.

CICI presents a strong conceptual model but limited procedural guidance. NASSS offers heuristics and reflective questions but no standardised methods. CAPA, Svensson, and Shani & Pasmore emphasise process over structure, advocating for contextual inquiry, stakeholder engagement, and iterative learning rather than predefined instruments. BANANA provides a decision support tool but does not prescribe a fixed method. CCIC and Realist Evaluation offer mid-level guidance, particularly around data collection and hypothesis refinement.

Empirical application

Some frameworks, such as CFIR, TDF, i-PARIHS, and Realist Evaluation (CMO), are widely applied in empirical studies, with substantial literature demonstrating their use in implementation research. CFIR and TDF are particularly prominent in North American health systems. The Context Coding Framework and ICON are newer but have seen growing uptake, especially in studies interested in complexity and context-sensitive implementation.

CICI and NASSS have been used in multiple international settings, particularly in digital health and global health contexts. BANANA and CAPA are relatively recent and have more limited empirical bases, though both offer innovative approaches to early-stage and participatory contextual analysis. Svensson, CCIC, and Shani & Pasmore are less frequently cited in the mainstream implementation science literature but are valued in organisational change, quality improvement, and participatory research contexts.

Relevance to Integrated Care and complex systems

Frameworks vary in their ability to address the multi-level, relational, and adaptive features of integrated care. CICI, ICON, NASSS, and the Context Coding Framework were found to be particularly strong in accommodating complexity, interdependencies, and emergent properties. These frameworks support analysis across system levels and domains, making them suitable for integrated care implementation. i-PARIHS and Realist Evaluation also offer valuable mid-range theories and heuristics for understanding context-mechanism interactions and implementation facilitation.

Frameworks like CFIR and TDF are useful for identifying discrete factors but may require adaptation or supplementation to fully capture cross-boundary dynamics. CAPA, Svensson, and Shani & Pasmore offer approaches for engaging with complexity through participatory inquiry, making them well-suited for learning health systems and collaborative governance contexts. BANANA and CCIC provide pragmatic starting points but may need to be complemented by more dynamic models in large-scale transformation efforts.

In summary, no single framework was sufficient on its own; each offers distinct strengths and blind spots. Their applicability depends on the nature of the intervention, the stage of implementation, and the values and epistemological commitments of the research or practice team.

Discussion

This comparative analysis of thirteen contextual frameworks highlights both the progress and the continuing challenges in conceptualising and operationalising an understanding of context in integrated care implementation research. Although the field has matured, frameworks remain fragmented across disciplinary traditions. Few provide integrated guidance that addresses the complexity, relationality, and practical usability needed for system

transformation in integrated care. The primary contribution of this analysis is therefore not prescriptive guidance on framework use, but orientation: helping readers understand what different frameworks are for, what assumptions they carry, and how they may (or may not) be fit for particular integrated care challenges.

A key advance in newer frameworks (e.g. ICON, Context Coding Framework, BANANA) is their recognition of context as dynamic, emergent, and system-dependent. This represents a shift away from traditional stage-based models towards approaches aligned with complexity theory, which emphasises nonlinearity, feedback, and adaptation (Hawe *et al*., 2009; Preiser *et al*., 2018). Frameworks such as ICON and CICI explicitly model multi-level, nested contexts, enabling analysis of inter-organisational and cross-sectoral dynamics that are central to integrated care (Greenhalgh and Papoutsi, 2018).

However, the proliferation of frameworks introduces conceptual fragmentation and confusion. As Nilsen (2015)and Squires *et al*., (2023) note, the sheer diversity of tools can overwhelm implementers. Many frameworks are tied to specific settings or logics, limiting transferability. This highlights the importance of epistemological fit, alignment between the assumptions of a framework and the methodological stance of a project. Without such fit, frameworks risk being misapplied or stripped of meaning (Breckenridge and Jones, 2009).

We also observed a tension between structure and flexibility. CFIR and TDF offer structured domains that facilitate consistency but risk underrepresenting emergence and relationality. By contrast, participatory approaches (CAPA, Svensson, Shani and Pasmore) embrace responsiveness and reflexivity but provide less procedural guidance, limiting adoption in more conventional research environments (Barry, 2021; Svensson, 2021). Hybrid or modular approaches may offer a way forward, combining stable scaffolding with space for contextual adaptation. Frameworks focused primarily on outcome evaluation, implementation fidelity, or adaptation tracking (e.g. RE-AIM, CFIF, FRAME) were excluded from this review, not due to lack of value, but because they operate downstream of contextual diagnosis and are best understood as complementary analytic layers rather than contextual frameworks *per se*.

Selecting and combining contextual frameworks in practice

The findings suggest that the practical value of contextual frameworks lies not in selecting a single model, but in combining frameworks modularly according to purpose, level, and stage of implementation. As illustrated in Table 1, frameworks tend to cluster around particular functions: identifying behavioural determinants (e.g. TDF), structuring implementation domains (e.g. CFIR, ICON), explaining context–mechanism interactions (e.g. Realist Evaluation), addressing system complexity and non-adoption (e.g. NASSS, CICI), or enabling participatory learning and adaptation (e.g. CAPA, Svensson, Shani and Pasmore).In practice, these functions are complementary rather than competing. For example, TDF may be used to identify individual and professional barriers to change, while i-PARIHS can guide facilitation strategies that respond to those barriers within specific organisational and system contexts. ICON or CICI can be used to ensure that wider policy, inter-organisational, and socio-cultural influences are considered, while participatory approaches support ongoing sensemaking and adaptation as contexts evolve.

Based on this analysis, we propose a pragmatic heuristic for framework use in integrated care:

(1) clarify the primary purpose of contextual analysis (e.g. diagnosis, facilitation, explanation, learning);

(2) identify the dominant level(s) of change (individual, organisational, inter-organisational, system);

(3) select frameworks aligned to these purposes and levels; and

(4) combine structured and adaptive approaches to balance consistency with responsiveness.

This approach avoids the false promise of a universal framework while offering practical guidance for selecting and combining existing models in ways that are theoretically coherent and practically useful in complex integrated care settings.

Notably, even when frameworks are combined in modular ways, explicit engagement with power, politics, and equity is limited. While some frameworks rooted in critical realism or action research acknowledge these forces, operational tools remain underdeveloped (Ferlie *et al*., 2013; Harvey and Kitson, 2015). Meier and Dopson (2019) advance this critique by framing context as a relational construct continually produced through discourse and action. Their "context in action" framework asks what constitutes context, how actors engage with it, and how contexts change. These questions foreground positionality and agency. For integrated care, this implies working with context as foreground rather than treating it as background, potentially harnessing a ready but untapped resource for improved integration.

These insights suggest several practical steps. First, tools for epistemological diagnosis (e.g. baseline surveys of assumptions about causality and change) could guide framework selection. Second, consensus processes such as Delphi studies could establish a shared language for context, reducing fragmentation. Third, frameworks should embed methods for analysing power and equity, such as stakeholder mapping and reflexive inquiry. Finally, empirical "head-to-head" studies of frameworks in integrated care settings would clarify how well each captures contextual dynamics and influences adaptation.

In summary, no single framework is sufficient on its own. The future of contextual analysis lies in combinatory and adaptive use, informed by epistemological awareness and oriented towards power-sensitive, relational understandings of context. Hybrid approaches that integrate fidelity, adaptation, and contextual analysis may be particularly valuable. By shifting from treating context as a static backdrop to engaging with it as an evolving foreground, implementation science can better support the realisation of integrated care in complex, interdependent systems.

Conclusion

Implementing integrated care interventions in complex health and social care systems demands more than the technical design of programmes or the accumulation of evidence. It requires sustained and critical engagement with context. This review of thirteen frameworks demonstrates that while the field has advanced considerably, no single framework adequately captures the relational, multi-level, and dynamic character of context.

Frameworks such as ICON, CICI, and the Context Coding Framework offer valuable structures for analysing complexity, while realist and participatory approaches contribute insights into mechanisms, reflexivity, and co-construction. Yet gaps remain: power, politics, and equity are underdeveloped, empirical uptake lags behind conceptual development, and the proliferation of frameworks risks fragmentation and confusion.

Future progress lies not in seeking a universal solution but in developing hybrid, modular, and adaptive approaches. These should combine structured scaffolding with the flexibility to accommodate emergence, and integrate tools for epistemological diagnosis, shared language, and equity-sensitive analysis. By adopting such approaches, researchers and practitioners can move from treating context as background to working with it as foreground: a relational, contested, and evolving construct that actively shapes implementation.

This study contributes a structured comparative analysis that clarifies how contextual frameworks differ in purpose, epistemology, and practical application, and how they can be combined rather than substituted. By making explicit the complementary roles of behavioural, organisational, system-level, realist, and participatory approaches, the paper offers a practical

basis for selecting and combining frameworks in integrated care implementation. In doing so, it shifts the debate from "which framework?" to "which combination, for what purpose, in which context", a reframing that is essential for implementation in complex, adaptive health and social care systems.

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