Knowledge Management in Health and Social Care: Insights from Finland's Public Sector Reform

Paula Pusenius[1,2], Harri Laihonen[1], Tuomas Hujala[1] and Pia Seppänen[1]
[1]University of Eastern Finland, Kuopio, Finland
[2]LAB University of Applied Sciences, Lappeenranta, Finland

paula.pusenius@lab.fi
harri.laihonen@uef.fi
tuomhu@uef.fi
piasep@uef.fi

Abstract: Public health and social care systems operate in increasingly knowledge-intensive, resource-constrained and politically steered environments, heightening the strategic importance of knowledge management (KM). While KM has received growing attention in healthcare research, prior studies have largely focused on organization-level practices, leaving the governance of multi-actor public service systems and the development of KM capabilities underexplored. This study examines KM in Finland following a major health and social care reform that transferred service-organizing responsibility from over 300 municipalities to 22 regional organizations, requiring a shift from fragmented reporting toward system-level, more strategic KM. Drawing on qualitative interviews with KM leads from all 22 regional organizations, the analysis combines inductive and theory-driven content analysis to explore how the reform affected KM, what benefits emerged, and how KM capabilities are being developed. The findings provide new insights into KM as an evolving capability in politically steered and resource-limited public service systems and highlight pathways for strengthening KM during large-scale organizational transformation. The study contributes to KM research in the public sector and offers practical implications for similar reform contexts.

Keywords: Knowledge management, Dynamic capabilities, Public sector, Healthcare reform, Finland

1. Introduction

Despite national variation, healthcare is widely recognized as a knowledge-intensive domain (Bohmer, 2009), in which information increasingly shapes managerial practices and professionals' everyday decision-making (Davenport and Prusak, 1998; Alavi and Leidner, 2001). Previous knowledge management (KM) research in healthcare has predominantly focused on individual organizations, processes or tools (Kosklin, Lammintakanen and Kivinen, 2023; Pereira and Fernandes, 2025). As a result, KM has largely remained disconnected from research on service integration and the governance of networked health systems (Kodner, 2009; Goodwin, 2016), as well as from broader public governance literature addressing issues of coordination, steering, and collective decision-making (Osborne, 2006; Ansell and Gash, 2008). Thus, there is a need for research examining how KM is governed in multifaceted public service systems and what this implies for KM practices.

Public healthcare systems are further characterized by several sector-specific conditions that complicate KM, including scarce resources, competing political priorities and cyclical decision-making (Pollitt and Bouckaert, 2017). These dynamics contribute to institutional volatility and shape how knowledge is produced, mobilized and valued. Together, they underscore the importance of examining KM in politically steered, multi-actor public service systems shaped by public governance dynamics (Klijn and Koppenjan, 2016; Laihonen, Kork and Sinervo, 2023).

In Finland, system-level KM has become salient following a major structural reform transferring responsibility for organizing health and social care from over 300 municipalities to 22 regional organizations, 21 *wellbeing services counties* and the City of Helsinki (Paatela, Huhtakangas and Tynkkynen, 2025; Tynkkynen et al, 2023). The reform required extensive re-organization of KM practices, which have since evolved in diverse ways across the new regional entities. This study examines how this system-wide transformation has reshaped KM in practice and what broader insights it offers for understanding KM in large-scale public sector reforms.

This study addresses the following research questions:

1. How do regional actors describe the effects of the reform on KM?
2. What expected and realized benefits were associated with KM during the reform?
3. How have KM capabilities been developed following the reform?

The analysis is based on qualitative interviews with KM leads from all 22 regional organizations. Inductive thematic analysis was used to examine the reform's effects (RQ1), while theory-driven content analysis guided

the examination of benefits and KM capability development (RQ2-RQ3) (Schreier, 2012). The discussion draws on knowledge-based and capability perspectives (Grant, 1996; Teece, Pisano and Shuen, 1997) to situate the findings within a broader theoretical context.

The paper is structured as follows. Section 2 presents the theoretical background, Section 3 describes the research context and methods, Section 4 reports the empirical findings, Section 5 discusses the theoretical implications, and Section 6 concludes the paper.

2. Theoretical Background

2.1 The Effects and Benefits of KM in Healthcare

In health and social care, KM is increasingly expected to support not only internal efficiency but also broader system-level aims, including service integration, quality, safety, and citizens' well-being. However, KM outcomes are often indirect, multi-level, and shaped by public value considerations, which makes their assessment challenging in public sector contexts (Hujala and Laihonen, 2021). Financial indicators are therefore insufficient, underscoring the need for evaluation approaches that capture both tangible and intangible forms of value.

Prior research has identified a wide range of KM-related effects in healthcare, including improved understanding of the operating environment, enhanced organizational performance, better-targeted decision-making, improved service quality and safety, cultural and behavioural change, and improved risk management (Hujala and Laihonen, 2021; Kosklin, Lammintakanen & Kivinen, 2023). Empirical studies further associate KM with efficiency gains through the diffusion of best practices, more informed managerial decision-making, and quality improvements enabled by knowledge sharing and reliable information bases (Massingham, Massingham and Pomering, 2018; Parast and Golmohammadi, 2019). Nevertheless, a recurring gap remains between anticipated and empirically verified benefits, particularly in large-scale reform contexts where causal relationships are complex and unfold over time. Taken together, these insights suggest that KM benefits in healthcare should be assessed through a multi-level lens encompassing professional-, organizational-, and system-level outcomes. In integrated service systems, KM also creates value across organizational boundaries by supporting coordination and system-wide planning (Caputo et al, 2019). Drawing on evidence from the Finnish reform, KM benefits can thus be understood not merely as isolated outcomes but as manifestations of underlying KM capabilities that enable organizations to respond to changing institutional and operational demands (Hujala and Laihonen, 2023).

2.2 KM Capabilities

Within the resource-based view, organizational capabilities denote an organization's ability to coordinate and apply resources through established routines shaped by skills, processes, structures, and decision-making logics (Grant, 1996; Helfat and Peteraf, 2003). Intangible assets—captured within the intellectual capital (IC) framework as human, structural, and relational capital (Petty and Guthrie, 2000)—form the foundation for these capabilities and drive innovation, renewal, and performance in knowledge-intensive sectors (Hsu and Wang, 2012). Such assets enable both incremental improvement and more fundamental transformation by embedding expertise, organizational structures, and collaborative networks into everyday practice (Subramaniam and Youndt, 2005).

Capabilities are typically understood along a continuum from ordinary capabilities to dynamic capabilities (DCs). Ordinary capabilities support efficiency-oriented, stable operations, whereas DCs enable adaptation to changing environments by allowing organizations to sense emerging opportunities and risks, seize them through informed decision-making, and transform existing structures and practices in response (Helfat and Peteraf, 2003; Teece, 2014). DCs therefore differ from ordinary capabilities not only in strategic intent but also in complexity and forward-looking orientation (Teece, Pisano and Shuen, 1997; Teece, 2014). Although the DCs framework originated in private-sector research, it has become increasingly relevant in public organizations facing volatility driven by political cycles, regulatory change, and system-level reforms (Boyne, 2002; Piening, 2013). In the healthcare sector, DCs have been linked to environmental scanning, innovation implementation, strategic decision-making, and improved care outcomes (Evans, Brown and Baker, 2017), although their empirical application remains fragmented and conceptually underdeveloped (Pusenius and Laihonen, 2026).

KM is central to capability development. In healthcare, KM has often been equated with information systems and data management (Lunden et al, 2017), thereby overshadowing the role of intangible knowledge assets and strategic alignment. However, transforming knowledge into organizational value requires more than efficient information handling: it demands the integration of expertise, networks, and cultural norms that enable collective knowledge formation, learning and strategic action (Teece, Pisano and Shuen 1997; Laihonen, Kork

and Sinervo, 2023). Dynamic knowledge management (DKM) extends this perspective by conceptualizing KM as an adaptive, strategically guided activity aligned with the logic of DCs (Li et al, 2025). Whereas ordinary KM emphasizes efficient information processing, DKM focuses on delivering relevant knowledge to the right actors at the right time and reconfiguring knowledge resources to support sensing, seizing, and transforming activities. Together, these perspectives frame KM capabilities as a combination of structures, skills, and relational mechanisms that enable organizations to mobilize knowledge strategically—an essential prerequisite for managing the complexity of integrated, politically steered public healthcare systems.

3. Context and Methods of the Empirical Study

3.1 Context of the Empirical Study

In Finland's healthcare reform, the responsibility for organizing healthcare, social welfare, and rescue services was shifted from 309 municipalities to 22 new autonomous regional organizations—21 wellbeing services counties and the City of Helsinki—at the beginning of 2023 (Paatela, Huhtakangas and Tynkkynen, 2025; Tynkkynen et al, 2023). Larger organizational structures aim to achieve more consistent and equal public services and savings, especially in administration. In addition, the Ministry of Social Affairs and Health is advocating the shift towards value-based healthcare (VBHC) through various steering mechanisms. The considerably increased size of the organizations, the integration of functions and the objective of moving towards VBHC bring new opportunities and challenges for KM. In addition, these regional organizations have a dual leadership model with civil servant and political leadership (Paatela, Huhtakangas and Tynkkynen, 2025).

3.2 Methods and Empirical Data

The study adopts a qualitative research design to examine the development and role of KM in the context of a large-scale public sector reform, as such context-dependent and processual phenomena are best captured through qualitative inquiry (Eisenhardt, 1989; Yin, 2009). The empirical data consist of semi-structured interviews conducted between August and December 2025 with 22 KM leads—one from each regional organization—selected due to their comprehensive oversight of regional KM practices and development efforts.

Interviews were conducted online via Microsoft Teams (up to 60 minutes), audio-recorded with consent, and transcribed for analysis, following organizational research permits. The interview protocol was organized around three thematic areas: (1) regional development of KM, (2) benefits of KM, and (3) formation of KM capabilities. Data analysis combined inductive coding for RQ1 with deductive coding for RQ2 and RQ3, drawing on prior literature. Analysis was conducted in three successive phases: (1) first-cycle open coding of all interview transcripts to identify empirically grounded themes related to KM practices and impacts; (2) aggregation and refinement of themes through team-based comparison and discussion; and (3) theory-informed categorization, in which themes related to RQ2 and RQ3 were mapped onto an a priori framework derived from the KM and DCs literature. Although the study was based on a population census, thematic saturation was considered, and no substantially new themes emerged in the later stages of analysis (Braun & Clarke, 2006).

4. Results

4.1 Effects of the Reform on KM

To address RQ1, we examined KM activities within regional organizations since the reform. The interview data revealed three factors that have captured and concentrated the field's focus in KM development: (1) state steering, (2) fragmented information systems and dispersed data, and (3) the creation of regional-level KM structures and the allocation of necessary resources. The interviews emphasized the state's central role as the authority steering regional organizations. Particular attention was given to issues relevant to securing funding, which is distributed based on need-based indicators defined in the national funding model. At the same time, state steering was viewed as a prerequisite for building a nationally coherent information base that enables comparisons between regional organizations. However, variations in data quality were identified, resulting from differences in documentation practices.

"*There are considerable challenges in obtaining harmonized information.*" (R17)

During the first years of operation, most regional organizations have harmonized their fragmented information systems and made additional technology investments, including data-lake solutions. This has partly shifted the focus of KM development toward basic information technology (IT) infrastructure, leaving less attention for data utilization. Although data is abundant, it is not used sufficiently, and a shared understanding of the role of information in decision-making has not yet emerged.

> "We have now observed that, *in several areas of operational reporting, managers and supervisors often encounter difficulties in combining operational data with financial information."* (R1)

Some regional organizations already had unified healthcare structures and uniform information systems before the reform, which placed them in a more advanced position in KM and resulted in a less steep development curve. The study also found that regional organizations have made independent decisions on how to organize KM, leading to two main models: *KM as an independent unit* or *KM integrated into a larger organizational entity*. The amount of resources allocated to KM varied across regional organizations, as did perceptions of their adequacy. The data further revealed that KM in regional organizations emerges in a multi-actor environment involving, in addition to KM specialists, general management and several supporting functions such as finance, human resources, and IT.

Overall, the findings indicate that KM in the newly formed regional organizations is shaped within a multi-actor environment, where KM resources can be interpreted broadly. All regional organizations have undertaken, or are in the process of undertaking, the harmonization of their information systems, thereby supporting the establishment of a unified information base and improving data quality. State steering and the related funding framework set the overall boundaries for KM. Following the reform, there is a growing policy and organizational aspiration to move toward value-based steering, where activities aim to improve people's wellbeing, health, and quality of life. However, this shift is still emerging, and economic considerations currently continue to play a strong role in guiding decision-making.

4.2 The Benefits of KM

Regarding RQ2, the interview data revealed a broadly similar pattern across the cases: the benefits of KM were recognized, but they were described more often in terms of improved managerial and operational capability than as directly verifiable downstream impacts on service outcomes or population wellbeing. Interviewees thus distinguished between anticipated benefits and those that had already materialized in practice. While the former included broad expectations of stronger integration, improved effectiveness and more strategic steering, the latter were framed in more immediate and pragmatic terms.

A first recurring benefit concerned managerial decision-making. Respondents consistently described KM as improving the basis for preparing, justifying, and communicating decisions. In the context of structural reform, financial pressure, and political steering, this was considered valuable in its own right. As one interviewee noted, "decision-makers can now lean on information rather than gut feeling […] it gives a backbone for decisions" (R9). The findings therefore suggest that one of the earliest realized benefits of KM is making decision-making more robust, traceable, and defensible.

A second benefit related to improved operational visibility. Interviewees reported that reporting solutions, dashboards and shared information structures had made service flows, bottlenecks, queues and patterns of resource use more visible across organizational boundaries. In practice, benefits appeared to materialize first through improved visibility, more structured decision preparation and better comparability of organizational information. This, in turn, enabled more targeted changes in service organization and planning. As one respondent explained, "we have been able to use operational steering information on how clients and patients flow through services […] and that has been useful when planning changes" (R1). In this sense, KM was often experienced less as a stand-alone technical function and more as an enabling infrastructure for practical service redesign.

A third, more tangible category of benefit was expressed in explicitly measurable and administrative terms. In the early reform phase, KM benefits were often easiest to verify when they appeared as harmonized reporting structures, reduced duplication and greater comparability of figures. One respondent summarized this by noting that "the first benefit visible directly in the income statement is that we have been able to get rid of several reporting systems" (R6). Such accounts are important because they indicate that KM investments can generate demonstrable value even before broader effects on service quality or effectiveness can be systematically shown.

Overall, the findings suggest that the most clearly realized KM benefits in the reform phase relate to improved decision support, enhanced operational transparency and greater organizational coherence.

4.3 The Development of KM Capabilities

Regarding RQ3, most respondents perceived KM capabilities to have improved either significantly (n=14/22) or to some extent (n=7/22), while one respondent reported deterioration. However, views on how and to what extent these capabilities had evolved varied:

> *"Progress has been made, but in small steps. The importance of knowledge management is increasingly recognized. The capability has grown, but slowly." (R19)*

> *"This is a truly significant development. Previously, much of this existed only as tacit knowledge. Although all hospital districts already had reporting systems, none had data warehouse-type solutions like these." (R14)*

These responses reflect both the different starting conditions across the predecessor organizations prior to reform and the variation in the interpretation and implementation of KM. While some regional organizations are already relatively advanced in their KM use, others are still establishing the basic foundations. In addition, the responses spanned multiple organizational layers, ranging from individual KM units to the national system, thereby providing a comprehensive empirical perspective on the development of KM capabilities.

At the KM unit level, respondents described the growing expertise of KM professionals and the development of collaboration. At the organizational level, responses emphasized technological advancements and the overall strengthening of a data-driven culture. The development of KM capabilities was reflected in expanding opportunities to support service provision within the regional organizations. At the national level, respondents mentioned the development of national KM capabilities in social care.

The respondents also described several barriers to the development of KM capabilities across different levels. At the unit level, capability development is often limited by resource shortages amid ongoing financial pressures. At the organizational level, the diversity of newly established organizations—both in terms of organizational structures and in the heterogeneity of data and decision-making practices—poses significant challenges. At the national level, respondents highlighted legislative constraints and the overall incoherence of national-level guidance as key obstacles to more consistent and effective KM capability development. As one respondent stated:

> *"At the moment, I don't really know whose guidance we are supposed to follow, and some of the instructions can even be contradictory. It is quite unclear to me who is currently steering national-level guidance." (R7)*

Table 1 summarizes the key empirical observations presented across the results section, bringing together the effects of the reform on KM, the observed benefits, and the development of KM capabilities.

Table 1: Key empirical observations on KM-related effects and capability development following the reform

Empirical focus	Observed KM effects	Manifestations of KM capabilities	Level
Steering and governance context	Strengthened coherence and comparability of KM priorities across regions through state-steered funding and reporting requirements	Alignment of KM priorities with national indicators; limited local flexibility	System / national
Information infrastructure and data foundations	Reduced fragmentation of information infrastructures and increased baseline comparability of data, though with still limited analytical utilization	Establishment of data warehouses, reporting standards and shared information bases, accompanied by ongoing data quality issues	Organizational
Organization of KM and resources	Increased organizational experimentation and differentiation in KM arrangements, accompanied by uneven distribution of KM resources and expertise	Emergence of KM units or embedded KM functions with varying levels of expertise and collaboration	KM unit / organizational
Operational and managerial effects of KM	Stronger informational basis for decisions and improved operational visibility	Increased capacity to support decision preparation, monitoring of service flows and operational steering	Organizational / service
Development and constraints of KM capabilities	Gradual strengthening of KM capabilities and cross-organizational collaboration, constrained by resource pressures, technological gaps, and incoherent guidance	More systematic coordination, integration, and application of KM practices across organizational boundaries, though unevenly developed and constrained by resource, technological, and guidance-related factors.	Multi-level

5. Discussion

5.1 Reform as a Catalyst for Reevaluating KM Foundations

The reform acted as a catalyst for reconsidering core KM foundations. Many regions faced fragmented legacy systems, inconsistent data practices, and unclear boundaries—barriers well documented in earlier research (Walshe and Shortell, 2004; Lunden et al, 2017). The transition from over 300 municipalities to 22 regional organizations amplified these challenges, illustrating how large-scale restructuring disrupts established routines and existing knowledge infrastructures (Pollitt and Bouckaert, 2017).

System-wide KM requires the harmonization of data structures, reporting practices and governance arrangements. While such integration is known to support continuity and care quality (Kodner, 2009; Goodwin, 2016), our findings show that it is equally critical for enabling KM in increasingly data-driven environments. The reform thus revealed how foundational KM arrangements condition the possibilities for strategic knowledge use.

5.2 Expected and Realized KM Benefits: Multi-level and Uneven

A key insight is the discrepancy between expected and realized KM benefits in the context of public healthcare reform. While the reform raised expectations for enhanced coordination and more strategic use of data, progress varied markedly across regions, reflecting earlier findings on the indirect, multi-level and uneven nature of KM impacts in public sector settings (Hujala and Laihonen, 2021).

The findings support viewing KM benefits through a multi-level value logic encompassing organizational, professional, service and system levels. Interviewees highlighted improved reporting structures, increased learning and shared situational awareness, echoing literature on KM's role in safety and evidence-based decision-making (Parast and Golmohammadi, 2019). Persistent technical challenges suggest that benefits materialize only once foundational infrastructures and competencies are in place, making observed KM benefits indicators of capability maturity rather than final outcomes.

5.3 Developing KM Capabilities: Dynamic Interplay of Structures, Skills and Governance

The findings reveal substantial variation in KM capability maturity across regions, reflecting strong path dependency in organizational capability development following the reform (Helfat and Peteraf, 2003). Differences in the starting conditions of predecessor organizations shaped both the pace and direction of KM capability development after the transition.

Consistent with intellectual capital perspectives, KM capability development was underpinned by interlinked human, structural, and relational resources. Growing professional expertise and learning (human), improved data architectures and standardized reporting practices (structural), and strengthened collaboration within and across governance levels (relational) jointly supported the development of KM capabilities. These observations highlight how complementary resources enable organizational adaptability in reform contexts (Subramaniam and Youndt, 2005).

The reform context further accentuated the need for DCs. Newly formed regional organizations were required to respond to political and value-based demands, reorganize KM functions, and realign routines and technologies with the new system logic. This underscores KM capability development as an adaptive and ongoing process shaped by changing governance requirements rather than a one-time technical implementation (Li et al, 2025; Piening, 2013).

5.4 Governance Complexity and the Political Nature of KM

Governance structures and political decision-making significantly shaped KM. Respondents reported contradictory guidance, unclear steering responsibilities and varying interpretations across counties—issues consistent with public sector KM literature (Laihonen and Pusenius, 2025) and collaborative governance theory (Osborne, 2006; Ansell and Gash, 2008; Klijn and Koppenjan, 2016).

Such complexity influences KM priorities, resource allocation, and the ability to support system-wide integration. KM thus emerges as a politically embedded capability, whose development and used are shaped by institutional arrangements and multi-actor coordination rather than organizational decisions alone.

6. Conclusion

The findings show that, in the early phases of large-scale public sector reform, KM benefits materialize primarily as foundational improvements rather than as direct downstream effects on service outcomes or population well-being. Such benefits—related to data foundations, governance clarity and decision support—develop gradually and unevenly across organizations, reflecting differences in initial conditions and path dependency.

The study contributes to KM and dynamic capabilities research by demonstrating how KM capabilities evolve as multi-level and politically embedded capabilities in reform contexts. Empirically, the findings illustrate how organizations respond to changing political and value-based demands by reorganizing KM structures and adjusting routines, technologies and governance practices within institutional constraints. This highlights that KM capability development in public healthcare cannot be understood solely as a technical or managerial process but must be situated within broader governance and system-level dynamics.

Overall, the results underline both the opportunities and persistent constraints associated with developing KM during system reforms. While reforms can mobilize attention and resources toward KM, they also expose structural tensions related to governance coherence, resource scarcity and organizational heterogeneity. Future research should examine how KM capabilities continue to evolve over time and what forms of professional, organizational and societal value they ultimately generate in integrated health and social care systems.

The findings should be interpreted in light of certain limitations, including the early stage of reform implementation, the reliance on a single respondent per organization, and the specific institutional context, which may limit the broader transferability of the results.

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AI Declaration: Microsoft 365 Copilot was used for grammar and spelling checks.

References

Alavi, M. and Leidner, D.E. (2001) "Knowledge management and knowledge management systems: Conceptual foundations and research issues", *MIS Quarterly*, 25(1), pp 107–136. https://doi.org/10.2307/3250961

Ansell, C. and Gash, A. (2008) "Collaborative governance in theory and practice", *Journal of Public Administration Research and Theory*, 18(4), pp 543–571. https://doi.org/10.1093/jopart/mum032

Bohmer, R. (2009) *Designing Care: Aligning the Nature and Management of Health Care.* Boston, Harvard Business Press.

Boyne, G. A. (2002) "Public and private management: What's the difference?", *Journal of Management Studies*, 39(1), pp 97–122. https://doi.org/10.1111/1467-6486.00284

Braun, V., and Clarke, V. (2006) "Using thematic analysis in psychology", *Qualitative research in psychology*, 3(2), pp. 77-101. https://doi.org/10.1191/1478088706qp063oa

Caputo, F., Garcia-Perez, A., Cillo, V. and Giacosa, E. (2019) "A knowledge-based view of people and technology: directions for a value co-creation-based learning organization", *Journal of Knowledge Management*, 23(7), pp 1314–1334. https://doi.org/10.1108/JKM-10-2018-0645

Davenport, T.H. and Prusak, L. (1998) *Working Knowledge: How Organizations Manage What They Know.* Boston. Harvard Business School Press.

Eisenhardt, K.M. (1989) "Building Theories from Case Study Research", *Academy of Management Review*, 14(4), 532-550. https://doi.org/10.2307/258557

Evans, J. M., Brown, A. and Baker, G. R. (2017) "Organizational knowledge and capabilities in healthcare: Deconstructing and integrating diverse perspectives", *SAGE Open Medicine*, 5. https://doi.org/10.1177/2050312117712655

Goodwin, N. (2016) "Understanding integrated care", *International Journal of Integrated Care*, 16(4), p 6. https://doi.org/10.5334/ijic.2530

Grant, R.M. (1996) "Toward a knowledge-based theory of the firm", *Strategic Management Journal*, 17(S2), pp 109–122. https://doi.org/10.1002/smj.4250171110

Helfat, C. E. and Peteraf, M. A. (2003) "The Dynamic Resource-Based View: Capability Lifecycles", *Strategic Management Journal*, 24, pp 997–1010. https://doi.org/10.1002/smj.332

Hsu, L. C. and Wang, C. H. (2012) "Clarifying the effect of intellectual capital on performance: The mediating role of dynamic capability", *British Journal of Management*, 23(2), pp 179–205. https://doi.org/10.1111/j.1467-8551.2010.00718.x

Hujala, T. and Laihonen, H. (2021) “Effects of knowledge management on the management of health and social care: a systematic literature review”, *Journal of Knowledge Management*, 25(11), pp 203–221. https://doi.org/10.1108/JKM-11-2020-0813

Hujala, T. and Laihonen, H. (2023) “Knowledge management in a regional integrated health and social care system”, *Journal of Integrated Care*, 31(5), pp 15–28. https://doi.org/10.1108/JICA-06-2022-0032

Klijn, E.-H. and Koppenjan, J. (2016) *Governance Networks in the Public Sector.* London. Routledge. https://doi.org/10.4324/9781315887098

Kodner, D. (2009) “All together now: A conceptual exploration of integrated care”, *International Journal of Integrated Care*, 9(2), pp 1–10.

Kosklin, R., Lammintakanen, J., and Kivinen, T. (2023) “Knowledge management effects and performance in health care: a systematic literature review”, *Knowledge Management Research & Practice*, *21*(4), 738-748. https://doi.org/10.1080/14778238.2022.2032434

Laihonen, H. and Pusenius, P. (2025) Relevance and the future of intellectual capital management in the public sector. In A. Kianto, S. Čabrilo, and L. Užienė (Eds.), *Futurizing intellectual capital: Insights on navigating knowledge-based value creation* (pp 169–183). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-80197-6_9

Laihonen, H., Kork, A.-A. and Sinervo, L.-M. (2023) “Advancing Public Sector Knowledge Management: Towards an Understanding of Knowledge Formation in Public Administration”, *Knowledge Management Research & Practice*, 22(3), pp 223–233. https://doi.org/10.1080/14778238.2023.2187719

Li, B., Teece, D. J., Baskaran, A., and Chandran, V. G. R. (2025) “Dynamic Knowledge Management: A dynamic capabilities approach to knowledge management”, *Technovation*, 147, 103316. https://doi.org/10.1016/j.technovation.2025.103316

Lunden, A., Teräs, M., Kvist, T. and Häggman-Laitila, A. (2017) “A systematic review of factors influencing knowledge management and the nurse leaders’ role”, *Journal of Nursing Management*, 25(6), pp 407–420. https://doi.org/10.1111/jonm.12478

Massingham, P., Massingham, R. and Pomering, A. (2018) “Designing a knowledge management system for social services not-for-profit organizations”, *International Journal of Knowledge Management*, Vol. 14 No. 3, pp 69-81. https://doi.org/10.4018/IJKM.2018070105

Osborne, S.P. (2006) “The new public governance?”, *Public Management Review*, 8(3), pp 377–387. https://doi.org/10.1080/14719030600853022

Paatela, S., Huhtakangas, M. and Tynkkynen, L. K. (2025) “Governance of a health and social service system after two years of a large-scale reform: A qualitative study in Finland”, *Journal of Health Organization and Management*, pp 1–17. https://doi.org/10.1108/JHOM-01-2025-0055

Parast, M. and Golmohammadi, D. (2019) “Quality management in healthcare organizations: empirical evidence from the Baldrige data”, *International Journal of Production Economics*, 216, pp 133-144. https://doi.org/10.1016/j.ijpe.2019.04.011

Pereira, N. and Fernandes, C. (2025) “Knowledge management in health organizations: a systematic literature review”, *Journal of the Knowledge Economy*, 1-73. https://doi.org/10.1007/s13132-025-02760-3

Petty, R. and Guthrie, J. (2000) “Intellectual capital literature review: Measurement, reporting and management”, *Journal of Intellectual Capital*, 1(2), pp 155–176. https://doi.org/10.1108/14691930010348731

Piening, E. P. (2013). Dynamic capabilities in public organizations: A literature review and research agenda. *Public management review*, *15*(2), 209-245. https://doi.org/10.1080/14719037.2012.708358

Pollitt, C. and Bouckaert, G. (2017) *Public Management Reform: A Comparative Analysis—Into the Age of Austerity*. Oxford University Press.

Pusenius, P. and Laihonen, H. (2026) “Intellectual capital management in public healthcare: a systematic literature review”, *Journal of Intellectual Capital,* 27(1) pp 1-21. https://doi.org/10.1108/JIC-06-2024-0196

Schreier, M. (2012) *Qualitative Content Analysis in Practice.* London. Sage. https://doi.org/10.4135/9781529682571

Subramaniam, M. and Youndt, M. A. (2005) “The influence of intellectual capital on the types of innovative capabilities”, *Academy of Management Journal*, 48(3), pp 450–463. https://doi.org/10.5465/amj.2005.17407911

Teece, D.J., Pisano, G. and Shuen, A. (1997) “Dynamic capabilities and strategic management”, *Strategic Management Journal*, 18(7), pp 509–533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

Teece, D. (2014) “A dynamic capabilities-based entrepreneurial theory of the multinational enterprise”, *Journal of International Business Studies*, 45, pp 8–37. https://doi.org/10.1057/jibs.2013.54

Tynkkynen, L.-K., Keskimäki, I., Karanikolos, M. and Litvinova, Y. (2023) Finland: Health System Summary, 2023, World Health Organization Regional Office for Europe, available at: https://iris.who.int/handle/10665/366710

Walshe, K. and Shortell, S.M. (2004) “When things go wrong: How health care organizations deal with major failures”, *Health Affairs*, 23(3), pp 103–111. https://doi.org/10.1377/hlthaff.23.3.103

Yin, R. K. (2009) *Case study research - Design and methods*. Thousand Oaks, California: Sage.