

Innovation and Performance in Public vs. Private Healthcare Institutions: A Bibliometric Exploration of Bureaucratic and Political Influence

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Abstract. *Healthcare organizations are under raising pressure to improve organizational performance through innovation as a reaction to rising costs, technological advancements, and growing societal expectations regarding the quality and accessibility of care. Although innovation is a key component of healthcare reforms and management discourse, there are still conflicting empirical results about the relationship between innovation and organizational performance, especially when contrasting public and private healthcare institutions. This discrepancy implies that the relationship between innovation and performance is heavily context-dependent and influenced by institutional factors that haven't gotten much rigorous study.*

This study, which is based on bibliometric and systematic literature review (B-SLR), looks at how political context and bureaucracy influence the connection between organizational performance and innovation in public and private healthcare organizations. The paper synthesizes peer-reviewed research on bureaucracy, political influence, performance results, and innovation management in healthcare organizations. The review finds patterns in the relationship between various forms of innovation and performance outcomes under various macro settings by doing a thematic analysis of literature. According to the analysis, bureaucratic and political considerations significantly impact the effectiveness of innovation, associated with better performance. Better results and more effective delivery service are the results of stronger governance (transparency, cogent policy, and coordinated decision-making). By incorporating political and bureaucratic aspects into the innovation–performance discussion in healthcare, this research adds to the body of literature. The paper highlights the weaknesses in research on innovation and performance in the public vs. private healthcare sector and suggests new areas of research.

Keywords: Innovation, Organizational Performance, Healthcare Institutions, Bureaucracy, Political Context.

Introduction

Healthcare systems are one of the most pressing areas to enhance performance and innovation, due to the increasing demand for quality and accessibility of care, technological advancements, and the rising costs of healthcare worldwide.

Although innovation is frequently advocated as a critical factor in performance enhancement (Flessa & Huebner, 2021), empirical results in healthcare are inconsistent, particularly when contrasting public and private institutions (Manent et al., 2023).

This discrepancy involves the relationship between innovation and performance is not universal or context-free, necessitating a more profound comprehension of the institutional and,

even more, healthcare sector conditions under which innovation contributes to societal improvement and organizational effectiveness.

Existing research has examined innovation and performance as a direct relationship (Cleven et al., 2016), frequently neglect the role of bureaucratic structures and political context that shape managerial freedom of action and organizational wisdom processes in healthcare institutions.

Public healthcare organizations are subject to political oversight, and they are embedded in complex bureaucratic systems, which may alter or constrain their performance outcomes and innovative efforts. Therefore, a critical lacuna persists in the description of how official factors, particularly bureaucracy and political influence, impact the innovation-performance relationship in both public and private healthcare organizations. Addressing this gap is necessary for improving theory and academic research on innovation management in healthcare and for informing more context-sensitive methods to performance progress. In addition, particularly objective of this paper is to find out the status potential modeling that can be used to evaluate innovation and performance in both the private and public healthcare system.

Theoretical background

Both private and public healthcare sectors are under constant pressure to provide high-quality services, economical care, and improved patient satisfaction (Nawanir et al., 2024; Thomas & Suresh, 2024). Therefore, healthcare providers should effectively coordinate strategic innovation with market and societal needs and improve the overall return on investment by managing resources and providing services that are simultaneously higher quality, accessible, and approachable (Mu et al., 2019).

It is not surprising that the performance of public versus private healthcare systems is affected differently by innovation strategy due to differences in finance, organizational structure, and policy constraints (Mason & Araujo, 2021). Unfortunately, rather than being based on methodical comparisons of healthcare demands, resource allocation in healthcare institutions is frequently determined on an as-needed basis (Seixas et al., 2021). One explanation for this is that establishing clear priorities for the use of healthcare resources is a delicate and intricate process that is influenced by governance and political decisions (Friebel & Wallenburg, 2024). Therefore, bureaucracy and political context are two challenges that both public and private healthcare institutions may confront, which can impede innovative efforts and performance.

"Bureaucracy" refers to "a form of government in which the majority of critical decisions are made by state officials rather than by elected representatives."

The American Society for Public Administration and Federation of State Medical Boards have reported that the number of healthcare administrators in the United States has exceeded the growth of physicians over the past 15 years. According to data from 2019, there were approximately ten bureaucrats per clinician: compliance officers, invoicing assistants, CEOs, and other IT professionals (Mason, 2025). The number of bureaucratic documents and policies is on the rise, and as a result, the time available for patient care and treatment is decreasing (Prætorius & Hasle, 2025).

For visualization the bureaucratic impact in healthcare, we propose the metaphor "bureaucratic iceberg" that illustrates the powerful, concealed 90% of structural, cultural, and political forces that drive visible administrative actions (the 10% top). Only formal rules and procedures are visible, while the "sank", critical mass encompasses power dynamics, organizational culture, strategic planning, and deeply ingrained habits (Woolhandler &

Himmelstein, 2014). Understanding of this paradigm is needed for the identification of the reasons why healthcare organizations resist change or fail to implement reform.

Healthcare operations, more than other domains, may be affected by the unreasonable amount of bureaucracy, reducing access to treatment and obstructing medical staff from prioritizing patient needs, successfully managing risks, and adjusting to changing environments (Department of Health & Social Care UK, 2020). Furthermore, this can negatively impact professionals' knowledge growth, well-being, confidence, and retention (Sinsky et al., 2013).

Bureaucratic complexities like prioritizing protocols, paperwork, and acquiring numerous authorizations, can disturb professionals' healthcare from their main objective: to achieve the best patient outcomes (Woolhandler et al., 2014). There is an indirect proportional link between focus on administrative duties and the time allocated for direct patient care (Moy et al., 2023), by this means necessitating innovative solutions to improve healthcare management responsibility (Emanuel et al., 2017).

On the other hand, a lot of what we define as 'bureaucracy' is an essential part of any effective health and social care system. For instance, the recording, reporting and collection of information allows the healthcare system to constantly improve the services and support it offers to the population. Regulations, coupled with assurance and accountability measures, have an important place in maintaining safe, high standards of care (Goiana-da-Silva et al., 2025).

Regulation that balances the pace of innovation with the potential for harm, alongside thoughtful post-market surveillance, is mandatory to ensure that patients are not exposed to dangerous interventions nor deprived of access to beneficial innovations (Kelly et al., 2019). Furthermore, vigilant post-market monitoring is mandatory.

Political context refers to the environment where „power” is used to make decisions regarding the allocation of scarce resources to meet or accomplish certain objectives. (Mercer, 2017). Contemporary academic literature defines political context through various perspectives, focusing on the interplay between socio-political dynamics, institutional influences, historical circumstances, and cultural narratives. These themes highlight how political contexts form and are formed by larger collective factors, institutional contexts, and cultural insights (Goswami et al., 2025). Understanding political context aids in evaluating how various political players and institutions interact within a given setting, which directly impacts legislation, governance, and societal well-being.

Innovation and performance in healthcare is very connected with the political context, but even Europeans mostly agree that healthcare is a political issue and government's obligation to guarantee optimal healthcare, there is regional considerably variation when it comes to fulfillment with healthcare structures, and their political projection (Burlacu & Roescu, 2021). Administrative procedures continue to be burdensome, which serves to reinforce a focus on compliance rather than patient outcomes and discourages innovation. Constant informal practices corrode trust and accountability, while political instability and short-term budget pressures further detract from the continuity of reform efforts (OECD, 2025).

Therefore, this study aims to discover what are the positive and negative impact of bureaucracy and political context in performance and innovation in healthcare system, and what is the gap in the current literature that could be addressed further.

Methodology

In order to achieve the goal of this article, we investigate the literature through the bibliometric and systematic literature review (B-SLR) framework, concluded with the research trends and gaps

(Marzi et al., 2025). These themes map academic literature across healthcare innovation and performance, revealing insights into research trends, influential contributors, and developing research areas.

In order to make meaningful and pertinent contributions that facilitate both the theoretical development and the synthesis of a research field, Marzi et al. (2025) recommend that the B-SLR be implemented through the execution of ten methodological steps. The B-SLR process utilized in this investigation is summarized in Table 1.

Table 1. B-SLR process in the study on the influence of bureaucratic structures and political context in healthcare institutions

B-SLR steps	Application to this study
Step 1. Research question and boundaries of the study	Topic: innovation and performance healthcare Research questions: What is the impact of bureaucracy and political context on the relationship between innovation and performance in public and private healthcare organizations? Is there a research modeling in innovation and performance in the public vs. private sector? What are the latest research directions in the described field?
Step 2. Search query definition	Search string 1: bureaucracy AND (performance OR innovat) AND (healthcare or hospital) Search string 2: (politic or governance) AND (performance OR innovat) AND (healthcare or hospital)
Step 3. Database selection	Database: Web of Science core Collection (WoS) Search date: February 6, 2026 Search in: title, abstract and keywords Raw dataset (n1 = 178; n2 = 1604)
Step 4. Data screening and data crosschecks	Inclusion/exclusion criteria Document type: article and proceeding paper Language: English Research Areas: Health Care Sciences Services or Business Economics or Public Environmental Occupational Health or Public Administration. Years of publication: after 2015 (included) 1 st Refined dataset (n1 = 67; n2 = 675 → total n = 742)
Step 5. Data cleaning and export	The manual selection following the boundaries of the selected topic and the inclusion/exclusion criteria (n = 725) Export of the refined dataset: February 5, 2026
Step 6. Bibliometric approach	Co-occurrence analysis (VOSviewer) Bibliographic coupling analysis (VOSviewer)
Step 7. Clusters' topic identification	Refining key parameters for bibliometric analysis Five thematic clusters identified with VOSviewer Visual representation of the results
Step 8. Sample ordering and selection	Selected documents represent the most cited 15 papers (n=15) and Selected the relevant articles from the most recent papers from 2026 (n=14).
Step 9. Systematic literature review	Holistic analysis of the dataset Specific analysis of the documents in the clusters
Step 10. Developing a theoretical contribution	Conceptual framework and research plan

Source: Author own creation, based on Marzi et al. (2025).

Selection of database

As a first step, we scanned the literature on innovation and performance healthcare to develop an overview of the research field and establish a set of representative keywords for database research. According to the B-SLR framework, we defined our inclusion/exclusion criteria before approaching the data collection process. In doing so, we relied on theoretical background research to better understand the diverse perspective on bureaucracy and political context. As a result, we defined two search queries as follows: Search string 1: bureaucracy AND (performance OR innovat) AND (healthcare or hospital) and search string 2: (politic or governance) AND (performance OR innovat) AND (healthcare or hospital)

The bibliometric analysis was conducted using the Web of Science Core Collection database, noted for its accuracy in data quality, standardization in author names and affiliations, considered one of the best options in backward citation searching, recommended for bibliometric analyses (Bahl & Mahajan, 2025).

In February 2026, we ran the search queries distinctly in WoS in the title, abstract and keywords, limiting the document type to article or proceeding paper, the documents published in English language, dated after 2015 (included), and Research Areas: Health Care Sciences Services or Business Economics or Public Environmental Occupational Health or Public Administration (Kraus et al., 2022). As a result, we extracted two raw databases of sixty-seven documents for the first query and 675 documents for the second one, summing a total of 742 papers (Step 4).

Following that, we conducted a manual assessment to verify that the articles complied with the inclusion/exclusion criteria, eliminating duplicated papers and articles that are not related with our topic (step 5). In this step we decided to conduct a bibliometric analysis on the entire database, and after the image we will have with these analyses to return to step 5 and refine the manual assessment of the publication for the systematic literature review.

Figure 1 illustrates the evolution of the number of publications analyzed in this paper. The earliest article in our sample dates to 2015. From that year on, our examination includes documents published or open to be published until February 2026, the moment of conducting this analysis and writing this manuscript. Even if in the last ten years the number of publications were almost constant, with a deviation of maximum 27%, in 2025 and 2026 we can see a positive trend in number of publications, double the average years' publication in previous years (121 publications in 2025 versus an average of sixty publications per year in 2015-2024), what means that this research direction is desirable for researchers. This evolution could indicate a strong impact of the AI-driven innovation in healthcare with focus on performance and efficiency, which creates pressure to accelerate the policy and regulation in this sector.

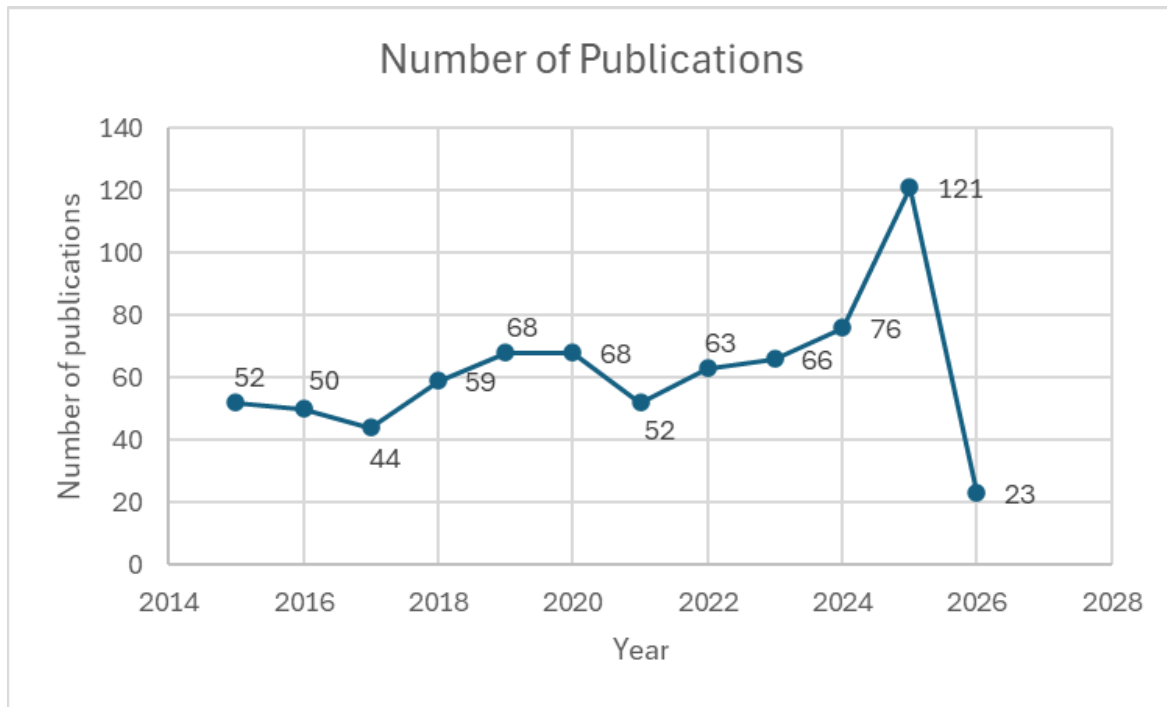


Figure 1. Documents evolution by year

Source: Authors' own research.

In Table 2 we present the fifteen most-cited contributions based on the number of total citations, all databases. The average number of total citations of articles in the sample is 16.06. The most cited article is Bloom et al. (2015) which received almost twenty-four times more global citations (378 citations) than the average. The second most cited article is Park and Mithas (2020), with 240 citations, being in the top citation per year (40), together with Hu and Zhang (2021). About 42% of the articles in our study were cited more than ten times, 40% of papers were cited less than ten times and 18% of the sample have not received citations yet, majority (14% from total number of articles) being from 2025 and 2026.

Table 2. Most globally cited articles in healthcare performance and innovation influenced by bureaucracy and political context.

Authors, Publication Year, Article Title	Journal	Total Citation, (all databases)	Total Citations per year
Bloom et al. (2015) The Impact of Competition on Management Quality: Evidence from Public Hospitals	Review of Economic Studies	378	34
Park and Mithas (2020) Organized Complexity Of Digital Business Strategy: A Configurational Perspective	Mis Quarterly	240	40
Caldwell et al. (2017) Social Value Creation and Relational Coordination in Public-Private Collaborations	Journal of Management Studie	221	25
Hu and Zhang (2021) COVID-19 pandemic and firm performance: Cross-country evidence	International Review of Economics & Finance	200	40

Authors, Publication Year, Article Title	Journal	Total Citation, (all databases)	Total Citations per year
Tsai et al. (2015) Hospital Board And Management Practices Are Strongly Related To Hospital Performance On Clinical Quality Metrics	Health Affairs	188	17
Uyar et al. (2021) Board structure, financial performance, corporate social responsibility performance, CSR committee, and CEO duality: Disentangling the connection in healthcare	Corporate Social Responsibility And Environmental Management	183	37
Malakoane et al. (2020) Public health system challenges in the Free State, South Africa: a situation appraisal to inform health system strengthening	Bmc Health Services Research	179	30
Bishu and Kennedy (2020) Trends and Gaps: A Meta-Review of Representative Bureaucracy	Review of Public Personnel Administration	163	27
Manyazewal (2017) Using the World Health Organization health system building blocks through survey of healthcare professionals to determine the performance of public healthcare facilities	Archives of Public Health	162	18
Sarto and Veronesi (2016) Clinical leadership and hospital performance: assessing the evidence base	Bmc Health Services Research	138	14
Erin et al. (2022) Sustainable development goals (SDG) reporting: an analysis of disclosure	Journal of Accounting in Emerging Economies	133	33
Sorensen et al. (2021) Building health literacy system capacity: a framework for health literate systems	Health Promotion International	129	26
Bhaskar et al. (2020) At the Epicenter of COVID-19-the Tragic Failure of the Global Supply Chain for Medical Supplies	Frontiers in Public Health	117	20
Jakovljevic et al. (2020) Predictors of (in)efficiencies of Healthcare Expenditure Among the Leading Asian Economies - Comparison of OECD and Non-OECD Nations	Risk Management and Healthcare Policy	115	19
Nisar et al. (2021) Big data management and environmental performance role of big data decision-making capabilities and decision-making quality	Journal of Enterprise Information Management	114	23

Source: Authors' own research.

After that, we performed a bibliometric analysis, including keyword co-occurrence analysis, and bibliographic coupling analysis, in that way presenting an in-depth understanding of the study domain (Step 6). This method reveals patterns and trends that may be overlooked by manual techniques when addressing extensive reviews and vast datasets.

This study conducted a bibliometric network analysis utilizing version 1.6.20 of the VOSviewer program, as outlined by Van Eck and Waltman (2017, 2023). This instrument was employed to conduct a thorough analysis of the final sample, comprising 738 selected articles,

facilitating the examination of correlations between authors and key words considering the aim of this study.

The domain of technological and strategic innovation, including AI, digital transformation, integration challenges, and the governance mechanisms required to manage complexity, is represented by cluster 3 (in blue color).

Cluster 4 (yellow color) is a direct speaking cluster centers on “quality improvement”, regulatory “oversight”, “clinical governance” systems, and “incentive” mechanisms—the “performance management” architecture of “healthcare”. “Quality” and “patient safety” are the key elements of this cluster and a reminder that all the performance and innovation in healthcare is mandatory to be linked with the patients’ needs and safeties.

The last cluster represented by purple color centralized the “human” behind the performance and innovation in healthcare. This cluster indicates that culture and leadership side of healthcare organizations emphasize professional identity, safety, motivation, and contextual dynamics in both public and private healthcare sectors.

Analyzing the weight of the keywords, in all five clusters, represented by the measure of the dots, we can interpret the link between performance and innovation in healthcare influenced by bureaucracy and political context. Together, the clusters demonstrate that healthcare innovation and performance are multi-level governance challenges, simultaneously influenced by organizational governance (Cluster 2), policy structures (Cluster 1), strategic and technological capabilities (Cluster 3), regulatory oversight (Cluster 4), and professional culture (Cluster 5). Bureaucracy can be both a facilitator (through leadership, governance, and cooperation) and an obstacle (via rigidity, fragmentation, risk management). The political context dictates, in the end, whether healthcare systems develop, stagnate, or fail by determining which bureaucratic elements are empowered. Each cluster represents a phase or layer of the operation of health systems and organizations, represented in Table 3.

Table 3. Bureaucracy and Political context role in Performance and Innovation Healthcare, based on keywords analyses

Cluster	Topic	Bureaucracy’s Influence	Political Context’s influence
1	Health system governance and policy	Creates rules, allocates power, coordinates decision-making	Determines reforms, centralization, funding, coherent policy
2	Clinical governance & performance	Frames managerial capabilities, board agency, and accountability	Shapes ownership, regulation, and oversight
3	Innovation, AI, strategic complexity	Controls integration, risk, governance boundaries	Sets national innovation priorities and influence the efficiency
4	Clinical governance & quality control	Regulations, performance standards & incentives	Defines competition and reforms frames
5	Culture, leadership & professional dynamic forces	Mediates implementation and change acceptance	Shapes workforce policies, norms

Source: Authors’ own research

We can improve the outcomes of the previous clustering by adding a time-based heatmap (Figure 3). The time scale used is a color-coded representation of the typical year where works of literature pertaining to the specific keywords displayed were published. We can conclude from the visualization results that the recently published paper's keyword collection is really weak. Only Cluster 3 has nodes that have been published within the last two years: "corporate-social responsibility," "artificial intelligence," and "sustainability." Therefore, it is safer to conclude that this analyze points to a brief conceptual hold in the field when researchers might be strengthening and expanding on existing themes rather than producing new ones. However, a structural obstacle

rather than a conceptual plateau may be the cause when a research area, like health performance and innovation, does not provide new keywords for two years. As a result, revolutionary ideas may not acquire traction or visibility in academic metadata. This suggests that rather than exploring new conceptual frontiers, academic research is still firmly rooted in conventional domains, perhaps improving frameworks or expanding empirical data.

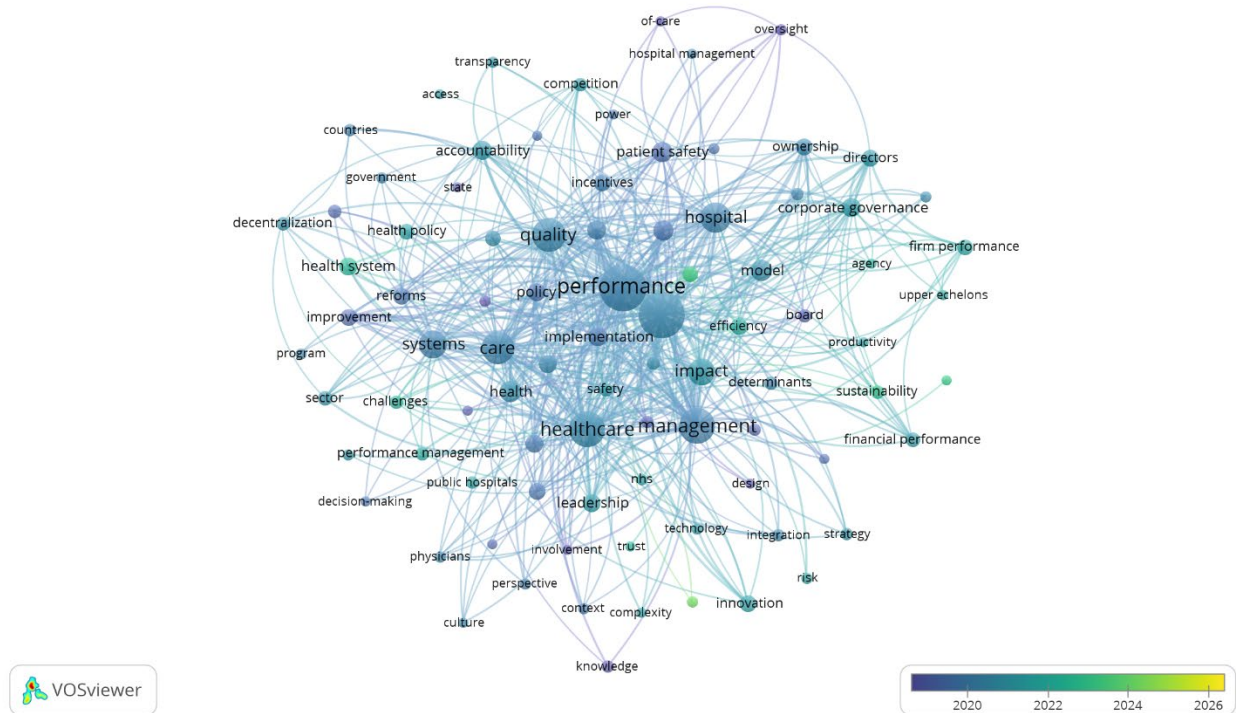


Figure 3. Key word co-occurrence with timescale

Source: Authors' own research results using VOSviewer.

Bibliographic coupling analysis was conducted to have a larger perspective and identify inspiring works within the research domain of performance and innovation in healthcare influenced by bureaucracy and political context. To perform this analysis, we return to step 5 from table 1 and refine the most cited documents included in the file (over 20 citations per document). The analysis was made multiple times to ensure correctness and consistency, aligning with the guidelines provided by Donthu et al. (2021). From the 725 papers, 126 met the goals, and 110 documents were connected to each other.

The weights clusters visualization was made by citations, considering a minimum cluster size of ten and merging small clusters into larger clusters to have a macro view of the publications. The documents were split into 7 clusters, distinguished by color and the bibliographic coupling network was displayed in a cluster view, as shown in Figure 4.

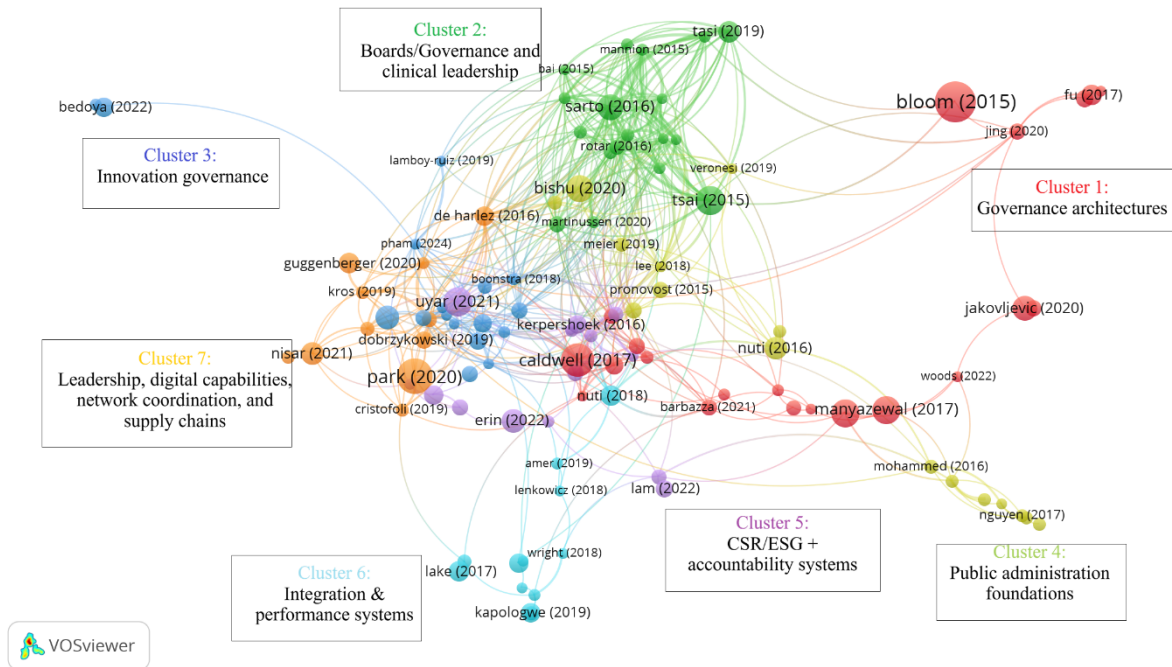


Figure 4. VOSviewer network visualization of the bibliographic coupling

Source: Authors' own research results using VOSviewer.

The literature clusters show complementing healthcare governance–performance systems. Cluster 1 focuses on how governance quality affects system performance through structural deficiencies (fragmentation, workforce, finance, accountability) and political settings influencing reform and crisis responses. Cluster 2 shows how boards, managerial practices, and front-line leadership influence quality, innovation, and organizational results (Tasi et al., 2019).

Cluster 3 views innovation and performance as emergent qualities of collaboration caused by bureaucratic and political rules rather than human talent, stress networking and cross-boundary governance as systemic enhancers. Cluster 4 shows how administrative norms, identities, and incentives affect legitimacy, equity, and service delivery through political–bureaucratic connections.

Cluster 5 investigates clinical micro-bureaucracies to illustrate how culture, leadership, and procedures affect hospital innovation, safety, and quality. Cluster 6 analyzes how technology adoption and data quality impact organizational and system performance, linking political priorities, bureaucratic capability, and data governance to digital transformation. Finally, Cluster 7 views healthcare organizations as corporate governance systems where board composition, incentives, ownership structures, and strategic control mechanisms affect performance and innovation under political regulation.

Systematic literature review. Following investigating the bibliometric results and independently reviewing the collected papers, we determined the main topic within each cluster in the field. We utilized a curated sample of documents for the systematic literature review, comprising the highly cited papers (the top 15 cited papers presented in Table 2) with representation in every cluster analyzed in bibliographic coupling and a distinct cluster of the most recent publications from 2026 with 14 articles (Step 8). All the 38 papers have been examined by delineating the state of knowledge and comprehending the literature's content (Step 9). The

theoretical perimeter has been defined via a conceptual structure and a plan of research, providing deep insights into the subject of inquiry and bringing original theoretical progress to the discipline (Step 10).

The results from the most cited papers show that one of the primary factors influencing performance is the quality of governance. Whether at the board or manager level (Bloom et al., 2015; Tsai et al., 2015; Uyar et al., 2021; Sarto & Veronesi, 2016) or system level (Malakoane et al., 2020; Manyazewal, 2017; Sorensen et al., 2021; Jakovljevic et al., 2020), numerous studies agree that the way bureaucracies are set up and run has a significant impact on social, economic, clinical, and environmental consequences. Furthermore, allowing competition through political governance can indirectly improve management performance and quality and protects competition laws from short-term political temptations to maintain benefits (Bloom et al., 2015).

The institutional and political environment influences management and innovation returns, increasing or decreasing the efficacy of innovative capabilities and bureaucratic changes through the policy or leadership commitment (Sorensen et al., 2021), national institutions (Hu & Zhang, 2021; Jakovljevic et al., 2020), and political restrictions (Bloom et al., 2015).

Therefore, the ability to coordinate healthcare system is essential. While relational coordination and data governance facilitate value creation and innovation (Caldwell et al., 2017; Sorensen et al., 2021; Nisar et al., 2021), integration and information flow failures impair performance (Malakoane et al., 2020; Manyazewal, 2017).

One of the key results that we need to pay attention to in further research is that innovation is not equal only technology. Digital or analytics performance benefits depend on governance and capacity configurations (Park & Mithas, 2020; Nisar et al., 2021). Then, technology alone may be insufficient or detrimental if organizational design is not complemented (Park & Mithas, 2020).

In healthcare system, both private and public, governance stress test is the crisis management. Resilient governance and institutional quality slow down performance reductions and promote adaptive innovation (e.g., supply chain redesign), according to COVID 19 outcomes (Hu & Zhang, 2021; Bhaskar et al., 2020). One of the recommendations is to create regulated assets, make data-driven visibility possible (blockchain, advanced analytics), and provide public health organizations with the legal authority to manage markets during emergencies (Bhaskar et al., 2020).

Further, we highlighted the results from the second cluster analyzed in the systematic literature review, connecting innovation and performance with the role of bureaucracy and political context. The first conclusion shows that only when standards, incentives, governance frameworks, and decision-making authority are in harmony, can innovation enhance healthcare performance. For example, AI, prescription systems, and healthcare platforms are examples of digital advances that only produce system-level performance when integrated into governance architecture (rules, standards, accountability). Gains remain latent or become erratic in the absence of this alignment, as detailed in Table 4.

Table 4. Papers linked with governance alignment

Author (2026)	Topic links to papers
Cha et al.	Unless governance is redesigned in tandem with co-production, quality is improved but efficiency is harmed.
José et al.	The effectiveness of vaccine deployment is more dependent on governance ability than political regime.
Hao et al.,	Deep vertical alliances are successful because they incorporate AI oversight, and shared governance

Author (2026)	Topic links to papers
Traverso et al.	Only when formal governance norms (ISO, EU AI Act) are in place do clinical AI function as intended.
Shi et al.	Interoperability and province-level rule engines transform digital innovation into efficiency and safety.
Santos et al.	When local governance is adaptable within national boundaries, commissioning innovation increases results.
Atarati et al.	Innovation in data platforms only enhances decision-making when bureaucratic adoption and capacity building take place.
Saxena and Yao	Dyad leadership is only effective when supported by governance scaffolding, such as shared literacy and role clarity.
Xi et al.	R&D support and green metrics are necessary to control digitalization.
Ambe and Selby	Digital procurement works best when combined with planning and competence frameworks.

Source: Authors' own research.

Many breakthroughs require bureaucratic mitigation (lean redesign, green IT, capability building) since they result in performance trade-offs, such as high quality versus poorer efficiency or high digitalization versus high energy. A traditional governance trade-off in the provision of public services is that while co-production (participatory governance) increases quality, it can also burden administrative procedures and reduce efficiency, claim Cha et al., (2026). Ambe and Selby (2026) show that performance improves only when capability-building and planning integration offset compliance requirements, while Xi et al. (2026) show that if policy-driven digitalization isn't combined with R&D and green expenditures, improving process effectiveness results in an increasing energy consumption.

The place of decision-making authority and the degree of alignment among the system's levels (hospital, region, provincial, and national) determine whether innovation results in improved performance (Hao et al., 2026; Shi et al., 2026). According to Ambe and Selby (2026), and Alarcón Ramírez et al. (2026), innovations fail when they are implemented at the incorrect administrative level.

The bureaucratic architecture of organizational culture (justice, dignity, and trust) allows for leadership-driven and learning-driven innovations that result in performance gains. Innovative leadership models that bridge the gaps between clinical and administrative hierarchies, improve coordination and, consequently, performance (Mohammed & Alhumaid, 2026; Saxena & Yao, 2026).

A review of the body of research on modeling innovation in the public healthcare industry indicates a sizable research deficit. Studies that particularly address the conception or application of innovation processes in public healthcare settings are obviously absent. Furthermore, no academic study has been performed considering the transfer or adoption of best practices from the private healthcare sector to the public one, despite the enormous advantages of such integration. This lack points to a crucial subject for further study, especially when it comes to examining how public healthcare systems could use effective innovative tactics that are frequently seen in the private sector.

Conclusion

This investigation aimed to broaden the frame of knowledge by providing a theoretical framework and research agenda, as well as a thematic investigation and mapping of trends at the intersection of innovation and performance in healthcare, with a role in the bureaucratic and political context.

The Web of Science dataset was analyzed using co-citation analysis, bibliographic coupling analysis, timeline view analysis, and qualitative theme analysis as part of this study's B-SLR (Marzi et al., 2025) aiming to find the response to the research questions mentioned in Table 1.

The impact of bureaucracy and political context: considering B-SLR analysis, we can conclude that healthcare performance and the achievement of innovation benefits are reliably predicted by the quality of bureaucracy (boards, managers, data governance, and coordination procedures). Whether managerial and technological advancements' result is dependent on the political-institutional context, which is shaped by incentives, constraints, and investment commitments. Strong governance, competition/oversight, coordination, and data stewardship all work together to improve quality and resilience, while fragmentation and weak institutions lessen the impact of innovation. A lot of inefficiency is inherited upstream; decentralized or vertically integrated models demonstrate that decision-making authority and incentive structure are important factors for performance and equity.

The main emerging research direction: Examining how particular governance configurations enhance or mitigate the effects of new technologies, organizational models, and data infrastructures is a prospective avenue for future research in healthcare innovation and performance. In order to establish evidence for scalable, highly reliable innovation pathways in health systems and to quantify the ways in which these governance elements regulate innovation results across various institutional and political contexts, more thorough quasi-experimental and longitudinal research are required.

Research modeling in innovation and performance in the public vs. private sector: considering this B-SLR analysis we conclude that there is not enough research on innovation and performance addressing both the public and private healthcare sectors, and innovation in the public healthcare sector received no attention in the last two years. Future study needs to focus on creating a thorough model to assess and improve performance and innovation in public healthcare organizations. The elements that seem to be critical for this modeling start with measures of bureaucracy in healthcare, key elements for governance alignment, organizational design complemented to innovation, the key elements of the organizational culture and leadership, using the best practices from the private healthcare sector. A paradigm like this could help adopt efficient innovative methods and lead to better public health results. Explore further this direction, the research would provide valuable insights into how public institutions can benefit from innovative practices, and, in the end, supporting the advancement of the healthcare sector as a whole.

There were limitations to this study. The first has to do with using a single Web of Science database rather than combining data from several databases. Because differing metadata files offered by databases may cause technical issues, this is also software limitation. Despite covering a large number of management journals, Web of Science does not contain every publication that could be published in the area. Second, because network analysis can yield a variety of outcomes and may not include, for instance, the less cited references, the research approach may present diverse results. Finally, the expertise of other researchers may influence our judgments and recommendations for future study areas (Kraus et al., 2024). Future research directions were centered on performance and innovation from a variety of healthcare viewpoints. Finally, in order to update our knowledge of the effects and contributions of innovation and performance in healthcare, on theory and practice, we advise academics to have a look at a new research direction: a model for innovation and performance in the public health system, especially since it does not exist.

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References

- Alarcón-Ramirez, D., Oliveros-Romero, J., & Mahn, D. (2026). Performance comparison of public–private partnerships and traditionally procured hospitals. *Construction Management and Economics*, 44(2), 79-97.
- Ali, S., Ciani, O., & Ghislandi, S. (2025). ESG Performance, Debt Financing, and R&D Output: Evidence from the Healthcare Sector. *Business Strategy and the Environment*.
- Ambe, I. M., & Selby, D. (2026). Demand management in public healthcare: an institutional and operational assessment of Gauteng hospitals, South Africa. *Journal of Health Organization and Management*, 1-21.
- Atariata, O., Asangansi, I., Adoghe, A., Alle, O., & Abdulsalam, U. (2026). Consolidation of health data to improve health data governance using the Multi-Source Data Analytics and Triangulation platform. *BMJ Health & Care Informatics*, 33(1), e101837.
- Bahl, G. & Mahajan, P. (2025). Comparison of Citation Tracking in Google Scholar, Scopus and Web of Science: A Case Study of Panjab University, Chandigarh. *DESIDOC Journal of Library & Information Technology*, 45(6), 520–528.
- Bhaskar, S., Tan, J., Bogers, M. L., Minssen, T., Badaruddin, H., Israeli-Korn, S., & Chesbrough, H. (2020). At the epicenter of COVID-19—the tragic failure of the global supply chain for medical supplies. *Frontiers in public health*, 8, 562882.
- Bishu, S. G., & Kennedy, A. R. (2020). Trends and gaps: A meta-review of representative bureaucracy. *Review of Public Personnel Administration*, 40(4), 559-588.
- Bloom, N., Propper, C., Seiler, S., & Van Reenen, J. (2015). The impact of competition on management quality: evidence from public hospitals. *The Review of Economic Studies*, 82(2), 457-489.
- Burlacu, D., & Roescu, A. (2021). Public opinion on healthcare. In *Health politics in Europe*. Oxford University Press.
- Caldwell, N. D., Roehrich, J. K., & George, G. (2017). Social value creation and relational coordination in public-private collaborations. *Journal of management studies*, 54(6), 906-928.
- Cha, J., Lee, K. H., & Choi, D. (2025). Is co-production a silver bullet? Examining the effect of co-production on organizational performance. *Public Performance & Management Review*, 1-32.
- Cleven, A., Mettler, T., Rohner, P., & Winter, R. (2016). Healthcare quality innovation and performance through process orientation: Evidence from general hospitals in Switzerland. *Technological Forecasting and Social Change*, 113, 386-395.
- Department of Health & Social Care UK. (2020). Busting Bureaucracy: Empowering Frontline Staff by Reducing Excess Bureaucracy in the Health and Care System in England—GOV.UK. Available online: <https://www.gov.uk/government/calls-for-evidence/reducing-bureaucracy-in-the-health-and-social-care-system-call-for-evidence/outcome/busting-bureaucracy-empowering-frontline-staff-by-reducing-excess-bureaucracy-in-the-health-and-care-system-in-england#annex-b-call-for-evidence> (accessed on 5th February 2026).

- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296.
- Emanuel, E. J. & Emanuel, J. (2017). Prescription for the future: The twelve transformational practices of highly effective medical organizations. *PublicAffairs*.
- Erin, O. A., Bamigboye, O. A., & Oyewo, B. (2022). Sustainable development goals (SDG) reporting: an analysis of disclosure. *Journal of Accounting in Emerging Economies*, 12(5), 761-789.
- Flessa, S., & Huebner, C. (2021). Innovations in health care - A conceptual framework. *International Journal of Environmental Research and Public Health*, 18(19), 10026.
- Friebel, R., & Wallenburg, I. (2024). Politics in all policies: how healthcare is shaped by political (in) action. *Health Economics, Policy and Law*, 19(3), 289-291.
- FSMB Physician Census Identifies 1,044,734 Licensed Physicians in U.S. (2023). Retrieved from <https://www.fsmb.org/advocacy/news-releases/fsmb-physician-census-identifies--1044734-licensed-physicians-in-u.s/#:~:text=Key%20findings%20of%20the%202022,23%25%20larger%20than%20in%202010>.
- Goiana-da-Silva, F., Guedes, R., Malcata, F., Sá, J., Cabral, M., Vasconcelos, R., Costa, S., Morais-Vilaça, I., Pinheiro-Guedes, L., Sarmiento, J., Costa, F., Moreira, R., Fonseca, F., Alves, J., Miraldo, M., Nunes, A. M., Ashrafi, H., Darzi, A., & Araújo, F. (2025). Addressing Bureaucratic Burdens on the Portuguese National Health Service: A Simplification Experience Aiming for Value-Based Healthcare. *Healthcare*, 13(7), 821.
- Goswami, N., Mehta, A., Murti, A.B., & Rao, S. (2025). Navigating the dynamics of corporate political contributions: a systematic literature review and research agenda. *Cross Cultural & Strategic Management*.
- Hao, Z., Zhu, X., Xu, L., Zhuang, W., & Yan, X. (2025). The impact of a deep vertical medical alliance on enhancing clinical capacity and reversing patient outflow at a Chinese county hospital: a 4-year case study. *Frontiers in Health Services*, 5, 1697264.
- Hu, S., & Zhang, Y. (2021). COVID-19 pandemic and firm performance: Cross-country evidence. *International review of economics & finance*, 74, 365-372.
- Jakovljevic, M., Sugahara, T., Timofeyev, Y., & Rancic, N. (2020). Predictors of (in) efficiencies of healthcare expenditure among the leading asian economies—comparison of OECD and non-OECD nations. *Risk management and healthcare policy*, 2261-2280.
- José, M. C. P., Lorena, M. A., Pablo, P. F., Sara, R. G., & Luis, Z. G. J. (2026). Knowledge and vaccination in COVID-19 management efficiency: a Global Malmquist-Luenberger index analysis. *Journal of Innovation & Knowledge*, 11, 100867.
- Kelly, C. J., Karthikesalingam, A., Suleyman, M., Corrado, G., & King, D. (2019). Key challenges for delivering clinical impact with artificial intelligence. *BMC medicine*, 17(1), 195.
- Kraus, S., Bouncken, R. and Yela Aránega, A. (2024), “The burgeoning role of literature review articles in management research: an introduction and outlook”, *Review of Managerial Science*, Vol. 18 No. 2, pp. 299-314.
- Kraus, S., Breier, M., Lim, W.M., Dabić, M., Kumar, S., Kanbach, D., Mukherjee, D., Corvello, V., Pi-neiro-Chousa, J., Liguori, E. & Palacios-Marqués, D. (2022). Literature reviews as independent studies: guidelines for academic practice. *Review of Managerial Science*, 16(8), 2577-2595.

- Malakoane, B., Heunis, J. C., Chikobvu, P., Kigozi, N. G., & Kruger, W. H. (2020). Public health system challenges in the Free State, South Africa: A situation appraisal to inform health system strengthening. *BMC health services research*, 20(1), 58.
- Manent, M., Cohendet, P., & Simon, L. (2023). Helping start-ups and public organisations to align: Co-producing the co-creation context in a public hospital. *Industry and Innovation*, 31(5), 606–637.
- Manyazewal, T. (2017). Using the World Health Organization health system building blocks through survey of healthcare professionals to determine the performance of public healthcare facilities. *Archives of Public Health*, 75(1), 50.
- Marzi, G., Balzano, M., Caputo, A., & Pellegrini, M. M. (2025). Guidelines for bibliometric-systematic literature reviews: 10 steps to combine analysis, synthesis and theory development. *International Journal of Management Reviews*, 27(1), 81-103.
- Mason C. (2025). Bureaucracy in Healthcare. *American Society for Public Administration*. <https://patimes.org/bureaucracy-in-healthcare/>
- Mason, K., & Araujo, L. (2021). Implementing marketization in public healthcare systems: Performing reform in the English National Health Service. *British Journal of Management*, 32, 473–493.
- Mercer, D. (2015). Imagined in policy, inscribed on bodies: defending an ethic of compassion in a political context: Comment on "Why and how is compassion necessary to provide good quality healthcare?". *International journal of health policy and management*, 4(10), 681.
- Mercer, J. (2017). The illusion of international prestige. *International Security*, 41(4), 133-168.
- Mithas, S., Hofacker, C. F., Bilgihan, A., Dogru, T., Bogicevic, V., & Sharma, A. (2020). Information technology and Baumol's cost disease in healthcare services: a research agenda. *Journal of Service Management*, 31(5), 911-937.
- Mohammed, S. M., & Alhumaid, M. T. (2026). Leading to excellence: how workplace dignity and error management shape the relationship between superior leadership and superior performance in the Saudi healthcare sector. *The Learning Organization*, 1-22.
- Moy, A. J., Hobensack, M., Marshall, K., Vawdrey, D. K., Kim, E. Y., Cato, K. D., & Rossetti, S. C. (2023). Understanding the perceived role of electronic health records and workflow fragmentation on clinician documentation burden in emergency departments. *Journal of the American Medical Informatics Association*, 30(5), 797-808.
- Mu, Y., Bossink, B., & Vinig, T. (2019). Service innovation quality in healthcare: Service innovativeness and organizational renewal as driving forces. *Total Quality Management & Business Excellence*, 30(11–12), 1219–1234.
- Nawanir, G., & Fauzi, M. A. (2025). Lean healthcare: a science mapping of current progress and future research avenues. *Journal of Health Organization and Management*, 39(4), 584-603.
- Nisar, Q. A., Nasir, N., Jamshed, S., Naz, S., Ali, M., & Ali, S. (2021). Big data management and environmental performance: role of big data decision-making capabilities and decision-making quality. *Journal of Enterprise Information Management*, 34(4), 1061-1096.
- OECD Reviews of Health Systems: Romania. (2025) Retrieved from https://www.oecd.org/en/publications/oecd-reviews-of-health-systems-romania-2025_f52e4a98-en/full-report/assessment-and-recommendations_a04e83de.html#chapter-d1e473-6ddbdc010c
- Park, Y., & Mithas, S. (2020). Organized complexity of digital business strategy: A configurational perspective. *MIS quarterly*, 44(1), 85-128.
- Powell, B., & Gibbs, C. (2026). Limb-saving emergent procedural sedation and joint reduction via telehealth. *Journal of Telemedicine and Telecare*, 32(1), 79-81.

- Prætorius, T., & Hasle, P. (2025). Reasoning bureaucracy in professional organisations: Enabling conditions for professional and bureaucratic values to merge in hospitals. *Scandinavian Journal of Management*.
- Santos, P., Nazaré, I., & Sá, L. (2025). Value-centred commissioning in Primary Health Care: reform lessons from the Portuguese experience. *Health Policy and Technology*, 101133.
- Sarto, F., & Veronesi, G. (2016). Clinical leadership and hospital performance: assessing the evidence base. *BMC health services research*, 16(Suppl 2), 169.
- Saxena, A., & Yao, G. (2026). Pitfalls and Mitigation Strategies for Dyad Leadership Practice and Implementation in Healthcare. *Journal of Healthcare Leadership*, 1-16.
- Seixas, B. V., Regier, D. A., Bryan, S., & Mitton, C. (2021). Describing practices of priority setting and resource allocation in publicly funded health care systems of high-income countries. *BMC health services research*, 21(1), 90.
- Shi, J., Sun, D., Kang, J., Hao, W., Huang, G., Wang, F., ... & Cui, F. (2025). Clinical effectiveness of a cloud-based dual-layer prescription review system: provincial integration across internet and outpatient care. *International Journal of Medical Informatics*, 106092.
- Sinsky, C. A., Willard-Grace, R., Schutzbank, A. M., Sinsky, T. A., Margolius, D., & Bodenheimer, T. (2013). In search of joy in practice: a report of 23 high-functioning primary care practices. *The Annals of Family Medicine*, 11(3), 272-278.
- Sørensen, K., Levin-Zamir, D., Duong, T. V., Okan, O., Brasil, V. V., & Nutbeam, D. (2021). Building health literacy system capacity: a framework for health literate systems. *Health promotion international*, 36(Supplement_1), i13-i23.
- Tasi, M. C., Keswani, A., & Bozic, K. J. (2019). Does physician leadership affect hospital quality, operational efficiency, and financial performance?. *Health Care Management Review*, 44(3), 256-262.
- Thomas, A., & Suresh, M. (2024). Readiness of lean sustainability in healthcare organizations. *International Journal of Pharmaceutical and Healthcare Marketing*, 18(1), 1-26.
- Traverso, A., Tiano, D., Corvaglia, A., Dimonte, A., Draetta, E. L., Fabiani, B., ... & Tacchetti, C. (2026). Powering responsible artificial intelligence with high-quality real-world data: the S-RACE platform for scalable, multi-specialty clinical research. *npj Digital Medicine*.
- Tsai, T. C., Jha, A. K., Gawande, A. A., Huckman, R. S., Bloom, N., & Sadun, R. (2015). Hospital board and management practices are strongly related to hospital performance on clinical quality metrics. *Health affairs*, 34(8), 1304-1311.
- Uyar, A., Kuzey, C., Kilic, M., & Karaman, A. S. (2021). Board structure, financial performance, corporate social responsibility performance, CSR committee, and CEO duality: Disentangling the connection in healthcare. *Corporate Social Responsibility and Environmental Management*, 28(6), 1730-1748.
- Van Eck, N. and Waltman, L. (2023). VOSviewer manual. Manual for VOSviewer version 1.6.20. Universiteit Leiden. (n.d.). *VOSviewer Manual*.
- Van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, 111(2), 1053-1070.
- Woolhandler, S., & Himmelstein, D. U. (2014). Administrative work consumes one-sixth of US physicians' working hours and lowers their career satisfaction. *International Journal of Health Services*, 44(4), 635-642.
- Xi, D., Zhang, M., & Veronesi, G. (2026). The digital-environmental tension: Managerial attention to digital transformation and energy consumption in healthcare organizations. *Technological Forecasting and Social Change*, 225, 124519.