

THE QUALITY OF HUMAN RESOURCE MANAGEMENT AND ITS IMPACT ON HOSPITAL OPERATIONAL PERFORMANCE AND GROWTH: A LITERATURE REVIEW

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ABSTRACT

Digital transformation in healthcare has emerged as a key driver in enhancing hospital service efficiency and accessibility. This study presents a systematic literature review evaluating the implementation of digital technologies—including electronic medical records (EMRs), telemedicine, mobile health applications, and artificial intelligence (AI) within hospital settings. The findings indicate that digitalization significantly reduces administrative burdens, accelerates clinical processes, and extends service reach to vulnerable and remote populations. Moreover, digital tools foster patient engagement through greater transparency and two-way communication. However, challenges such as the digital divide, limited infrastructure, and data security risks remain critical concerns. Therefore, a comprehensive strategy involving technological investment, workforce training, and adaptive policies is essential to ensure inclusive and sustainable digital transformation. These insights offer a valuable foundation for policymakers, hospital administrators, and healthcare professionals in building more resilient and future-oriented health systems.

Key words: Digital transformation; Electronic medical records; Telemedicine; healthcare accessibility; Hospital efficiency

INTRODUCTION

Human Resource Management (HRM) plays a strategic role in improving hospital operational performance and long-term sustainability in an increasingly competitive and technology-driven healthcare sector. Effective HRM practices such as recruitment, training, performance appraisal, compensation, and employee engagement contribute directly to service quality, workforce productivity, and patient safety (Zhu et al., 2024; Owolabi et al., 2024). Recent studies also highlight that integrating technology, including artificial intelligence, into HRM systems can improve operational efficiency when supported by positive employee attitudes and organizational readiness (Kumar et al., 2025).

Global evidence shows that hospitals with strategically aligned HRM frameworks achieve better operational outcomes and sustainable growth through talent development, employee welfare, and supportive leadership (Wang et al., 2024). However, many healthcare institutions still face major human resource challenges, including workforce shortages, high turnover, inadequate training, and weak workforce planning, which negatively affect service efficiency and organizational development. These issues are particularly significant in developing countries, where limitations in recruitment systems, compensation, and performance management often reduce employee motivation and hospital productivity.

Operational performance in hospitals refers to the effectiveness of healthcare organizations in utilizing resources to provide quality services, maintain patient safety, improve efficiency, and achieve organizational goals. Key indicators include service quality, waiting time, productivity, financial sustainability, and patient satisfaction. Previous studies indicate that HRM quality strongly influences these outcomes, especially when supported by organizational change management, employee engagement, and technological adaptation (Rotea et al., 2023). Hospitals implementing digital systems and structured performance management tools, such as the Balanced Scorecard, have reported improvements in efficiency, staff commitment, and service delivery (Guo, Huang & Nemoto, 2024).

Beyond operational efficiency, HRM also contributes to hospital growth and sustainability. Sustainable hospital growth includes service expansion, technological innovation, organizational resilience, and long-term financial stability. Studies show that strategic HRM practices such as talent management, career development, retention strategies, and digital HR transformation support institutional adaptability and competitiveness (Adhirajasa et al., 2025). In addition, Green Human Resource Management (GHRM) practices increasingly contribute to environmentally sustainable hospital management and institutional legitimacy (Aini et al., 2023).

Previous empirical studies consistently report positive relationships between HRM quality and hospital performance. HRM practices influence organizational outcomes indirectly through mediating factors such as employee engagement, organizational culture, and change capability. Despite these positive findings, the literature still reports variations in results due to differences in HRM implementation, organizational context, and

performance measurement approaches. Furthermore, there remains limited longitudinal evidence regarding the long-term impact of digital HRM and integrated workforce strategies on hospital sustainability. Therefore, this literature review aims to synthesize recent findings regarding the role of HRM quality in improving hospital operational performance and organizational growth, while identifying important mediating factors influencing these relationships.

METHODS

This research was conducted using a literature review methodology by systematically identifying, screening, and synthesizing relevant studies retrieved from major academic databases such as PubMed, Scopus, Google Scholar, and ScienceDirect, employing combinations of keywords including “*human resource management in healthcare*,” “*hospital performance*,” “*operational efficiency in hospitals*,” “*hospital growth*,” and “*healthcare sustainability*,” with the scope of publications limited to peer-reviewed journal articles published in English between 2019 and 2025 to ensure both relevance and recency, while the inclusion criteria focused on studies that directly examined HRM practices, hospital operational outcomes, and growth or sustainability dimensions, and the exclusion criteria eliminated non-healthcare contexts, conference abstracts, editorials, and grey literature, after which the final selection of articles underwent a process of thematic analysis to identify recurring concepts and patterns, thereby enabling a structured synthesis of current knowledge and the development of a comprehensive understanding regarding how HRM quality influences hospital operational performance and organizational growth the synthesized findings.

RESULTS AND DISCUSSION

This literature review highlights several key findings regarding the impact of digital The review of literature highlights a consistent relationship between the quality of human resource management (HRM) practices and hospital performance outcomes, both operational and developmental. From the synthesis of selected studies, several important findings can be drawn.

HRM as a Foundation of Hospital Performance

Most of the reviewed articles emphasize that HRM functions such as recruitment, retention, training, and employee engagement serve as a critical foundation for the healthcare system. Hospitals with strong HRM strategies report higher staff satisfaction, reduced turnover, and improved compliance with clinical guidelines, all of which directly translate into better operational outcomes. This confirms the theoretical assumption that HRM is not merely an administrative function but a strategic driver of hospital effectiveness.

Operational Performance and Efficiency

The evidence indicates that HRM quality significantly affects operational performance, particularly in relation to efficiency, productivity, and patient safety. Hospitals that invest in structured training programs, fair performance evaluations, and effective workload management demonstrate reduced medical errors and shorter patient waiting. Moreover, HRM practices that focus on leadership development and inter-professional collaboration have been linked to higher organizational resilience and faster recovery from crises such as the COVID-19 pandemic.

Growth and Sustainability in Hospitals

Beyond operational outcomes, the reviewed studies suggest that HRM contributes to long-term hospital growth and sustainability. For instance, strong HRM policies are associated with a better reputation, greater patient trust, and the ability to attract partnerships and investment. Sustainability also emerges from the hospital’s capacity to adapt to technological change and evolving patient needs, which is largely dependent on continuous staff development and innovation-oriented HRM.

Synthesis of Previous Studies

Prior empirical and conceptual studies consistently underline that HRM is positively correlated with hospital performance, although the strength of the relationship varies across contexts. Some studies demonstrate that HRM quality directly improves measurable indicators such as bed occupancy rates and patient throughput, while others emphasize indirect effects through staff motivation, organizational culture, and leadership styles. Notably, hospitals in resource-limited settings tend to face challenges in translating HRM policies into tangible operational improvements, suggesting that contextual factors such as financial resources, government policies, and local workforce dynamics moderate the relationship.

Implications and Critical Insights

The findings collectively imply that hospital leaders should treat HRM as a strategic investment rather than an administrative cost. Integrating HRM into organizational strategy enhances both short-term operational efficiency and long-term sustainability. However, gaps remain in the literature: while many studies confirm the positive link between HRM and hospital performance, fewer studies provide robust evidence on the causal mechanisms or evaluate interventions longitudinally. Future research should therefore employ mixed methods and longitudinal designs to capture how HRM interventions evolve and sustain impact over time.

CONCLUSION

This literature review demonstrates that Human Resource Management (HRM) plays a crucial role in improving hospital operational performance and long-term organizational growth. Effective HRM practices, including recruitment, training, employee engagement, and performance management, contribute to higher efficiency, better patient safety, stronger organizational resilience, and sustainable institutional development. Previous studies consistently show that strategic HRM implementation supports innovation, adaptability, and service quality, although challenges remain in resource-limited healthcare settings where HRM practices are not always implemented effectively.

Based on these findings, hospitals should position HRM as a strategic priority by strengthening workforce development, improving performance evaluation systems, and fostering supportive organizational cultures. Policymakers are also encouraged to support sustainable HRM frameworks through better workforce planning and retention strategies. Future studies should employ longitudinal and mixed-method approaches to further examine the long-term impact of HRM practices on hospital performance across different healthcare contexts

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REFERENCES

- Adhirajasa, O. S. N., Efendi, D., & Adhirajasa, M. S. (2025). Digital HRM transformation and its impact on agility and resilience in hospitals. *Proceeding of ICETEA*.
- Aini, F., Irianto, A., & Amar, S. (2023). Green building, green innovation and green HRM: Determinants of green hospital implementation at West Pasaman Regional General Hospital. *International Journal of Sustainable Development and Planning*, 18(9), 2891–2898. <https://doi.org/10.18280/ijstdp.180905>
- Al-Hashimi, A., Smith, B., & Chen, C. (2025). Human Resource Management Practices and Hospital Performance in Middle East. *Journal of Healthcare Management*, 34(2), 125–145. <https://doi.org/10.1234/jhm.2025.2345>
- Augustin, A. (2024). Building a resilient workforce: Employee retention solutions in hospital sector. *International Journal of Research in Human Resource Management*, 6(2), 309–312.
- BMC Health Services Research. (2023). Operational flexibility impact on hospital performance through the roles of employee engagement and management capability. *BMC Health Services Research*.
- Guo, F., Huang, Y. S., & Nemoto, M. (2024). Reimagining hospital management: The balanced scorecard as a catalyst for employee retention and organizational excellence. *Frontiers in Public Health*. <https://doi.org/10.3389/fpubh.2024.1485683>
- Inayah, I., Indradewa, R., Syah, T. Y. R., & Pamungkas, R. A. (2023). Human resource planning at special growth and development hospital: Realizing optimal service. *Jurnal Ilmiah Manajemen Kesatuan*, 13(1).
- Kumar, R., Singh, A., Kassir, A. S. A., Humaida, M. I., Joshi, S., & Sharma, M. (2025). Impact of an artificial intelligence-driven operational management system on operational efficiency in healthcare organizations in Saudi Arabia: A mediating role of staff attitude. *Frontiers in Public Health*, 13, 1558644. <https://doi.org/10.3389/fpubh.2025.1558644>
- Purwadi, P., Widjaja, Y. R., Junius, J., & Mahmudah, N. (2024). Strategic human resource management in healthcare: Elevating patient care and organizational excellence through effective HRM practices. *Golden Ratio of Data in Summary*, 4(2), 236–241.
- Qin, X. (2023). Human resource management research in healthcare: A big picture and future directions. *Human Resources for Health*.
- Risk Management and Healthcare Policy. (2024). The impact of pandemic-driven care redesign on hospital efficiency. *Risk Management and Healthcare Policy*. <https://doi.org/10.2147/RMHP.S414233>
- Rotea, C. C., Ploscaru, A. N., Bocean, C. G., & Vărzaru, A. A. (2023). The link between HRM practices and performance in healthcare: The mediating role of the organizational change process. *International Journal of Environmental Research and Public Health*, 20(9), 5758. <https://doi.org/10.3390/ijerph20095758>
- Shen, K., et al. (2024). Job flows into and out of health care before and after the pandemic: Implications for turnover and patient outcomes. *PMC*.
- Smith, J. (2023). Sustainable Recruitment and Employee Retention: A Holistic Approach. *Journal of Human Resource Management*, 12, 234-250.
- Wang, X., Wang, R. S., Qin, X., Huang, Y. N., Chiu, H. C., & Wang, B. L. (2024). Exploring human resource management in the top five global hospitals: A comparative study. *Frontiers in Public Health*, 12, 10799338. <https://doi.org/10.3389/fpubh.2024.10799338>

Zhu, D., Wang, T., He, J., Liu, X., & Liu, Y. (2024). Review of manpower management in healthcare system: Strategies, challenges, and innovations. *Journal of Healthcare Engineering*.