Journal of Economics and Social Sciences (JESS)
Vol. 4, 2 (July-December, 2025), pp. 671-680
EISSN: 2808-5094, DOI: 10.59525/jess.v4i2.897

Hospital Management Strategy in Improving Adaptive and Innovative Human Resources

Maulana Adjie Nugroho[1], Purwadhi[2], Dadang Kusnadi[3]

[1] Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; maulananugroho17@gmail.com
[2] Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; purwadhi@ars.ac.id
[3] Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; dadangkusnadi@ymail.com

ARTICLE INFO

Keywords:

Human Resource Management;
Hospital;
Innovation;
Adaptability

Article history:

Received 2025-05-08
Revised 2025-06-06
Accepted 2025-08-10

ABSTRACT

This study aims to explore hospital HRM strategies through a narrative review approach with thematic analysis of academic literature and policy documents published between 2016 and 2025. The review reveals that effective HRM strategies include the implementation of transformational leadership, an organizational culture that supports continuous learning, digitalization of HR processes, and incentive systems that foster innovation. Key instruments in enhancing healthcare workers' adaptive capacity include reskilling and multiskilling programs, online learning platforms, and Human Resource Information Systems (HRIS). However, challenges such as resistance to change, limited resources, structural bureaucracy, and weak evaluation systems hinder effective implementation. This study concludes that strengthening the integration of structural, cultural, and technological aspects is crucial to building hospital human resources that are resilient, responsive, and highly competitive. The practical implications provide strategic guidance for hospital management, policymakers, and educational institutions in designing more contextual and sustainable HR development programs.

Corresponding Author:
Nadya Ayu Saraswati
Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; nadya.ayuisha@gmail.com

1. INTRODUCTION

Increasingly fierce global competition and rapid technological developments encourage hospitals to build human resources (HR) that are not only technically superior, but also able to adapt quickly to changes in the work environment and have a high innovative capacity. The evolution of medical technology, changes in health policies, and the complexity of patient expectations demand an adaptive, innovation-based, and responsive HR management strategy to the demands of the modern healthcare sector. The ability of health workers to deal with structural and technological changes is a key factor to improve the operational efficiency and competitiveness of health service institutions (Raoush, 2023). Phenomena such as the pandemic, changes in patient demographics, and the acceleration of the

digitalization of health services are driving the use of artificial intelligence and automation systems that change the paradigm of work for medical personnel. Strengthening the capacity of a workforce that is able to collaborate synergistically with technology is a strategic need.

The normative framework in Indonesia emphasizes the urgency of strengthening health human resources. Law Number 17 of 2023 concerning Health underlines the development of human resource competencies through continuous education, improving the quality of health workers, and equitable distribution of human resources that are adaptive to service challenges. Permenkes No. 26 of 2020 concerning Health Human Resources Information System (SISDMK) emphasizes data integration and strengthening technology-based HR management strategies. The Strategic Human Resource Management (SHRM) approach according to Storey et al. (2019) combines organizational goals with adaptive and innovative human resource development. The Dynamic Capabilities theory highlights the ability of institutions to adapt through organizational learning and innovation based on internal resource optimization, which in hospitals is realized through adaptive training, transformational leadership, and digitization of HR processes (Alhassani and Al-Somali, 2022).

The results of the research of Purwadi et al. (2024) show a positive correlation between innovative HR management strategies and improving hospital performance. Technology-based strategies, continuous learning, and cross-disciplinary collaboration have been proven to improve service efficiency as well as patient satisfaction levels. Evaluation of the performance of health workers who utilize big data and analytical intelligence, as stated by Alsharani (2023), allows for a precise analysis of training needs, labor productivity, and effective retention policies. Digital transformation in the healthcare sector is driving the integration of technology in all aspects of HR management, including the implementation of electronic medical records, telemedicine, and artificial intelligence-based platforms. The concept of smart hospitals is a strategic instrument to improve operational efficiency, patient safety, and global competitiveness.

Organizational culture plays a central role in shaping adaptive and innovative health workers. A supportive work environment is created through policies that encourage innovation, performance-based incentives, and continuous training programs (Alsaqqa, 2024). An effective and transparent internal communication system allows healthcare workers to access the latest information and feel supported by management when facing changes. Visionary leadership plays a role in shaping a collaborative and innovative work culture and providing space for new ideas that suit the needs of the workforce and patients (Seljemo et al., 2020). Cross-disciplinary collaboration accelerates knowledge exchange, encourages innovation, and improves service quality, thereby creating resilient, adaptive, and innovative human resources to support hospital competitiveness in the era of global health transformation (Alsaqqa, 2024).

2. METHOD

This study uses a descriptive qualitative approach with a narrative review method that provides flexibility to explore and present an in-depth understanding of adaptive and innovative human resource development strategies in hospitals. Narrative review is used to identify relevant patterns, concepts, and conceptual frameworks from various academic literatures, as well as integrate information from various sources to form a comprehensive scientific narrative. This method facilitates the preparation of a comprehensive picture of HR management practices in hospitals both at the local and international levels, as well as evaluating theories and policies that have been implemented through exploratory and reflective analysis.

Data sources are derived from secondary literature that includes scientific journal articles, reference books, policy reports, seminar articles, and other academic documents relevant to the research

topic. The search focus is directed at publications published in the period 2016 to 2025 and meets the criteria of relevance to the development of hospital human resources, accountable science, availability of full access, and geographical and institutional variations. Literature searches were conducted through online databases such as Google Scholar, Scopus, and PubMed using keywords such as "hospital human resource management," "health human resource innovation," "adaptability of medical personnel," and "human resource strategy in the health sector."

Data analysis was carried out using a thematic approach that involved the process of reading all sources thoroughly, identifying key issues, and grouping the literature into themes such as leadership strategies, organizational culture, training and development, incentives, and digitization of HR management. The results of the grouping are synthesized into a systematic narrative to produce a structured understanding of the challenges, strategies, and best practices of human resource management in hospitals.

3. FINDINGS AND DISCUSSION

HR Management Strategies that Encourage Innovation

Managerial strategies that encourage innovative culture in hospitals are needed to build an ecosystem that supports learning, creativity, and the courage to take risks simultaneously. In the era of digital transformation and medical technology disruption, hospitals face demands to provide quality healthcare services while being able to respond quickly to changes through continuous innovation. Hospital management innovations include the development of medical technology, improving the efficiency of service flows, innovating financing models, and improving the HR management system. This comprehensive approach can refer to *the theory of Dynamic Capabilities* which emphasizes the ability of organizations to sens, seize *opportunities,* and transform internal resources to align with changes in the environment. The provision of incentives is designed not only as a form of appreciation for operational achievements, but also as a trigger for the exploration of new ideas. Li and Evan (2022) emphasized that creative incentive schemes, both financial and non-monetary such as *international fellowships*, scientific publications, or access to professional development platforms, are able to increase a sense of ownership of innovation because health workers feel their contributions are directly recognized.

Adaptive training to the development of medical technology is an important pillar in forming a workforce that is ready to innovate. Progressive hospitals utilize modern learning technologies such as *e-learning*, virtual reality-based digital simulations, and personalized adaptive learning modules according to individual needs. This training program includes technical skills, such as the operation of advanced medical devices, as well as the development of *soft skills* such as cross-functional collaboration, effective communication, and creative problem-solving. San Juan et al. (2022) show that the participation of health workers in national and international forums, including medical innovation workshops, encourages *knowledge sharing* and accelerates the adoption of *best practices* across institutions. Continuous training functions as a catalyst for *knowledge management*, which is the process of collecting, managing, and distributing knowledge so that it can be used in the development of relevant and sustainable innovations in the hospital environment.

Transformational leadership is a central factor in creating a work culture that supports renewal. Transformational leaders inspire team members through a clear strategic vision, remove communication barriers, and create *psychological safety* that allows staff to experiment without fear of making mistakes. The implementation of this concept is reflected in the cross-departmental *job rotation* policy , the formation of *cross-functional teams*, and the implementation of participatory decision-making involving medical personnel and administrative staff. Bektas et al. (2025) revealed that the strategy can

increase staff adaptability and foster confidence to provide innovative inputs at the operational level. The multidisciplinary team consisting of doctors, nurses, managers, quality analysts, and administrative staff produces comprehensive solutions because they are able to integrate diverse perspectives on healthcare problems. The establishment of the *Research & Development* unit acts as an idea incubator that facilitates *pilot projects* while providing *data-driven analysis* to evaluate the success of innovation on an ongoing basis.

The application of cutting-edge information technology, such as *big data analytics*, artificial intelligence (*AI),* and cloud-based management systems, is an integral part of HR innovation strategies. This technology not only optimizes the management of patient data, but also supports predictive analytics to improve operational efficiency. Future-oriented hospitals are starting to leverage *the concept of digital twins*, i.e. digital simulations of clinical processes, to test new ideas without disrupting real operations. Saeed et al. (2023) emphasized that the success of the adoption of this technology depends on the readiness of human resources, both in terms of digital competence and a mindset that is open to change. An organizational culture that encourages openness to new ideas, cross-functional collaboration, and measured risk-taking increases the intrinsic motivation of medical personnel to learn and innovate. Positive psychological approaches in HR management, such as constructive feedback, *mentoring*, and *coaching*, help increase employee *engagement*, which has direct implications for innovative performance.

External collaboration is an additional strategy to strengthen hospital innovation. Partnerships with universities, medical technology companies, and research institutions open up opportunities for access to cutting-edge ideas as well as technology transfer. Benchmarking against international hospitals that successfully implement innovation can be a valuable source of learning. Saeed et al. (2023) stated that activities such as *innovation days*, idea clinics, and *internal hackathons* encourage the participation of all hospital human resources in creating new ideas. A systematic *monitoring and evaluation (M&E)* mechanism with *Key Performance Indicators (KPIs*) is needed to measure the impact of innovation on service quality, patient satisfaction, and cost efficiency. Data-driven evaluation makes it easier for management to determine the feasibility of widespread implementation of ideas or the need for modifications before full implementation.

Efforts to Increase Human Resources Adaptability in Hospitals

The adaptability of health workers in hospitals is a crucial factor to maintain the continuity of effective services in the midst of the dynamics of the changing health environment. Adaptability includes not only the ability to adapt to new situations, but also the ability to respond to change quickly, creatively, and data-driven. In a modern health system that is colored by challenges such as digitalization, service quality demands, global pandemics, and policy changes, hospitals are required to have human resources who are not only technically competent but also mentally and socially resilient. HR development strategies that support adaptability include three main pillars, namely *reskilling*, *multiskilling*, and the formation of adaptive leadership in a systematic and sustainable manner. *Reskilling* functions to adjust the competence of medical personnel to the development of medical technology, changes in national and international regulations, and a paradigm shift in healthcare that is increasingly *patient-centered care*. This training includes mastery of the latest medical technology devices, an understanding of *Electronic Health Records* (EHR), and security- and privacy-based patient data management, as well as strengthening *soft skills* such as effective communication, conflict management, and stress management.

The *reskilling* approach in progressive hospitals also prioritizes evidence-based learning, where healthcare workers are trained to solve problems through precise clinical data analysis. *Case-based learning* and *simulation training* are effective methods to ensure optimal knowledge transfer (Sott &

Bender, 2025). In addition, hospitals implement *continuous professional development* (CPD) in the form of *micro-learning* and *modular training*, which allows health workers to learn flexibly as needed so that learning can take place in parallel with their routine tasks. This approach makes *reskilling* not only reactive to change, but also proactive in preparing health workers to face future challenges. In line with that, *multiskilling* or mastery of cross-functional skills is an important strategy, because it expands the capacity of health workers to be able to carry out various roles across units, especially in crisis situations such as the COVID-19 pandemic or natural disasters.

The implementation of *multiskilling* in hospitals is carried out through cross-departmental training, periodic rotation of positions, and staff involvement in collaborative projects between units. The advantage of this approach is not only efficiency, but also increased job satisfaction, as the diverse variety of tasks reduces routine burnout. *Multiskilling* strengthens teamwork through cross-functional understanding and reduces dependence on specific individuals, thereby increasing organizational resilience in the face of unforeseen challenges (Sott & Bender, 2025). This strategy is in line with the principles *of agile workforce*, where the workforce moves quickly, adapts, and makes maximum contributions in various areas. To support this, hospitals can use *competency matrices* to map employee skills, identify competency gaps, and design appropriate training programs. Meanwhile, adaptive leadership is a strategic competency that allows a leader to lead in the midst of uncertainty with reflective capacity, organizational empathy, and the ability to make data-based and ethical decisions.

Adaptive leadership not only relies on *top-down instruction*, but also accommodates horizontal dialogue as well as *reverse mentoring*, where senior leaders learn from junior staff regarding new technologies or service trends. The mentoring and *coaching system* in progressive hospitals is designed to create spaces for dialogue across generations, positions, and disciplines. This approach strengthens organizational values while accelerating the transformation of work culture, making it easier for health workers to accept external changes both in terms of technology and policy (Sott & Bender, 2025). Access to digital media is also an important pillar in accelerating human resource adaptability. The hospital provides *a Learning Management System* (LMS) that is integrated with a personal career development plan, equipped with an electronic library, certified online courses, and technology-based simulations. Learning is reinforced through reflective forums, internal case discussions, and *experiential learning* that allows staff to learn directly from real-life situations (Lineberry et al., 2018).

The adaptability of health workers is also greatly influenced by psychological conditions. Modern hospitals are developing flexible working environments, including adaptive schedules and hybrid work schemes for non-clinical staff, to maintain *work-life balance* and reduce the risk of *burnout*. A healthy work environment increases the *affective commitment* of health workers to the institution, which has an impact on the intrinsic motivation to thrive (Lineberry et al., 2018). Collaboration between departments is facilitated through digital platforms for synchronous and asynchronous interactions, integrated information systems, and collaborative dashboards that facilitate data exchange and coordination between units. Joint case discussions, interprofessional simulations, and cross-unit forums strengthen *collective intelligence* (Bouchez et al., 2024). In the end, the formation of flexible, participatory, and data-based learning and work structures creates *organizational agility* that is in line with *the theory of learning organization* (Senge, 1990), where hospitals are not only able to survive in the midst of change but also excel in creating added value for patients, health workers, and stakeholders.

Obstacles and Challenges in the Implementation of HR Strategy

The implementation of HR development strategies in hospitals often faces various structural, cultural, and operational challenges. One of the main obstacles is resistance to change, especially from senior health workers who are used to conventional working methods. According to Greenhalgh et al. (2017), changes that are not effectively communicated can trigger a sense of threat and decrease staff

engagement. The comfort zone that has been formed makes new initiatives often seen as a disruption to routine. The lack of staff participation in strategy planning further strengthens this resistance, which in the long run can hinder successful implementation.

Another challenge is limited resources, both in terms of budget and digital infrastructure. Simulation-based training, AI-based software, and *e-learning* require significant investments, but are often not available in hospitals with limited funds. Thijssen et al. (2023) note that infrastructure inequalities, such as inadequate internet networks or unintegrated health information systems, hinder digital transformation. As a result, the digital capabilities of health workers are not balanced with the demands of modern medical technology, especially in areas with limited facilities.

Excessive workload is also a significant obstacle. The limited number of medical personnel forces staff to perform dual functions, so training is often considered an additional burden. Chapman et al. (2025) show that this condition increases the risk of *burnout*, which has an impact on a decrease in innovation motivation and service quality. *Prolonged burnout* can lead to *turnover intention*, which ultimately disrupts the stability of hospital human resources.

Structurally, rigid and hierarchical bureaucracy slows down the decision-making process. According to Alshwayat et al. (2022), the lack of autonomy at the unit level makes it difficult for local innovation to develop. Lengthy administrative processes often hinder quick responses to training or cooperation opportunities. This reduces the sense of ownership of staff in the development of the organization, making them only play the role of implementers, not contributors.

In addition, an organizational culture that does not support collaboration, experimentation, and appreciation for innovation is an important barrier. A *culture of silence* arises when employees' ideas are not recognized, resulting in decreased participation. Bak & Bak (2024) assert that without a fair reward system, staff motivation to engage in organizational development will be low. The weak data-based monitoring and evaluation system also makes it difficult for management to measure the effectiveness of strategies (Chapman et al., 2025). Thus, cultural transformation, technology investment, and *consistent implementation of change management* are the keys so that HR development strategies can have a real impact.

The Role of Digital Technology in Strengthening Human Resources

The implementation of digital technology in hospitals is the main foundation for the transformation of human resource management (HR) to be responsive to the challenges of the modern health ecosystem. The use *of Human Resource Information Systems* (HRIS), shift management applications based on artificial intelligence, and adaptive online learning platforms is changing the way hospitals manage competencies, measure performance, and facilitate professional development of medical and non-medical personnel. Tursunbayeva et al. (2017) emphasized that the integration of HRIS with *Hospital Management Information Systems* (SIMRS) provides evidence-based information for quick and precise strategic decision-making.

Modern HRIS facilitates *real-time* monitoring of Key Performance Indicators *(KPIs*), *competency mapping*, and identification of skills gaps. The analytics feature provides training recommendations and simulations of labor allocation according to the actual workload, so that management can be more proactive in dealing with crisis situations. Shift management applications that leverage *machine learning* optimize scheduling based on staff preferences, availability, and historical workloads. Sahraeian (2022) and Ganesh et al. (2024) show that the use of this technology increases productivity, reduces medical errors, and improves the work-life balance of health workers.

Online learning platforms are evolving into adaptive learning ecosystems that leverage *artificial intelligence* (AI) and *learning analytics*. This system develops personalized learning paths based on individual performance and needs, for example special modules for nurses who handle critical patients.

Yulianah (2024) explained that *learning analytics* monitors progress, evaluates achievements, and produces digital certificates that are recognized nationally and internationally. The integration of training data, performance achievements, and competency needs creates *a continuous learning ecosystem* that is sustainable.

Digital transformation in the field of human resources strengthens the hospital's institutional strategy. The integration *of HR analytics* in the recruitment process, performance appraisal, and career planning increases the organization's resilience to technological disruption and policy changes. Brommeyer and Liang (2022) reveal that digitalization is shaping a flexible, predictive, and progressive organizational architecture. McIsaac et al. (2024) stated that this model changes the role of human resources into *learning actors* who are proactive and adaptive to the development of the health industry.

The success of the use of digital technology in the field of hospital human resources is greatly influenced by the readiness of the organization's culture. Resistance can arise from staff who are not familiar with or feel worried about data-driven supervision. Managerial support, effective communication strategies, and ongoing training are important factors for creating acceptance. The integration of HRIS, *shift applications*, and AI-based learning platforms opens up opportunities for the development *of predictive workforce planning*, enabling precise workforce planning, fatigue risk monitoring, and personalized career paths according to individual potential in the era of industry 4.0 and *society* 5.0.

The Impact of HR Strategy on Hospital Performance

Innovative and adaptive human resource management strategies are the transformational foundation in improving the competitiveness and sustainability of hospitals in the era of health services that are full of disruption. The role of human resources has shifted from just a technical implementer to a strategic actor that contributes to the formation of the future orientation of health institutions. Hospitals that apply a strategic approach to HR management tend to have superior organizational performance, from operational efficiency, job satisfaction, to staff loyalty (Gile et al., 2022).

A work culture that is humanistic, participatory, and respectful of health workers is one of the real impacts of progressive HR strategies. The reward system is not only based on quantitative output, but also considers the contribution of innovation, problem-solving, and collaboration. The value-based incentive model is able to strengthen the sense of belonging to the organization and encourage the emergence of new initiatives from individuals and teams (AlAbri et al., 2022). Clarity of competency-based career paths and intergenerational flexibility increase the intrinsic motivation of the workforce to continue learning and adapting.

The implementation of adaptive HR strategies plays a major role in overcoming the problem *of burnout* in the health sector. Flexible work policies, empathy-based supervision, and mental well-being programs help create an emotionally healthy work environment. *Mentoring programs*, psychosocial mentoring, and periodic reflection spaces have been proven to support personal resilience in the midst of a high workload (Athamneh, 2024). Effective *burnout management* has a direct impact on the quality of patient services, reduces the number of medical errors, and reduces the risk of *brain drain*.

HR-based transformation encourages hospitals to become *learning organizations* through collective learning such as cross-professional discussion forums, interdisciplinary training, and integrated case studies. Collaboration between doctors, nurses, pharmacists, nutritionists, and non-medical personnel improves horizontal and vertical communication, builds mutual respect, and strengthens openness to new ideas. The implementation of an innovation-oriented HR strategy contributes to improving hospital performance indicators, including *patient safety*, operational efficiency, and patient satisfaction (Athamneh, 2024).

The excellence of human resource management also strengthens the achievement of national and international accreditation standards, preparing hospitals to face the challenges of globalization and the industrial revolution 4.0. HR plays a dual role as service providers and agents of change, especially those who have digital competence and systemic thinking skills. Hospitals that are able to mobilize human resources quickly in response to changes in the external environment will have solid institutional resilience (Ayanore et al., 2019). The paradigm shift from a reactive to a proactive management model makes HR the main subject of institutional development, creating a work ecosystem that encourages creativity and cross-functional collaboration.

4. CONCLUSION

In conclusion, hospital management strategies to improve HR adaptability and innovation include structural flexibility, an open organizational culture, ongoing training, and employee involvement in decision-making. A work ecosystem that supports experimentation, incentivizing creative ideas, integrating digital technology, and collaboration across departments encourages the birth of service solutions based on user needs. The success of this strategy is influenced by policy continuity, leadership commitment, technology support, and capacity to absorb change, while obstacles such as resistance, resource limitations, and weak integration of information systems need to be overcome. This approach increases the competitiveness of hospitals while strengthening the sustainability of responsive and resilient health services.

REFERENCES

AlAbri, I., Siron, R. B., Alzamel, S., Al-Enezi, H., & Cheok, M. Y. (2022). Assessing the employees' efficiency and adaptive performance for sustainable human resource management practices and transactional leadership: HR-centric policies for post COVID-19 era. Frontiers in Energy Research, 10, 959035. https://doi.org/10.3389/fenrg.2022.959035

Alhassani, A., & Al-Somali, S. (2022). The impact of dynamic innovation capabilities on organizational agility and performance in saudi public hospitals. Journal on Innovation and Sustainability RISUS, 13(1), 44-59. https://doi.org/10.23925/2179-3565.2022v13i1p44-59

Alsaqqa, H. H. (2024). Organizational Culture Relation With Innovation: Comment on" Employee-Driven Innovation in Health Organizations: Insights From a Scoping Review". International Journal of Health Policy and Management, 13, 8583. doi:10.34172/ijhpm.8583

Alsharani, I. (2023). Integration of innovative work behavior through transformational leadership in the Saudi healthcare sector: a systematic review. Arab Gulf Journal of Scientific Research, 42(3), 481-497. https://doi.org/10.1108/AGJSR-02-2023-0078

Alshwayat, D., Elrehail, H., Shehadeh, E., Alsalhi, N., Shamout, M. D., & Rehman, S. U. (2023). An exploratory examination of the barriers to innovation and change as perceived by senior management. International Journal of Innovation Studies, 7(2), 159-170. doi:10.1016/j.ijis.2022.12.005

Athamneh, S. (2024). Human resource management practices and their impact on healthcare workers' job satisfaction and burnout in the Jordanian public sector. Problems and Perspectives in Management, 22(1), 634. doi:10.21511/ppm.22(1).2024.50

Ayanore, M. A., Amuna, N., Aviisah, M., Awolu, A., Kipo-Sunyehzi, D. D., Mogre, V., ... & Gyapong, M. (2019). Towards resilient health systems in sub-Saharan Africa: a systematic review of the English language literature on health workforce, surveillance, and health governance issues for health systems strengthening. Annals of global health, 85(1), 113. doi: 10.5334/aogh.2514

Bąk, D., & Bąk, S. (2024). Change management in healthcare – a scoping literature review. E-Mentor, 2. https://doi.org/10.15219/em104.1652

Bektaş, G., Ünal, B. Ö., & Nal, M. (2025). The effect of transformational leadership on nurses' innovative behaviors: the mediating effect of psychological empowerment. BMC nursing, 24(1), 684. doi: 10.1186/s12912-025-03467-1

Bouchez, T., Cagnon, C., Hamouche, G., Majdoub, M., Charlet, J., & Schuers, M. (2024). Interprofessional clinical decision-making process in health: A scoping review. Journal of advanced nursing, 80(3), 884-907. https://doi.org/10.1111/jan.15865

Brommeyer, M., & Liang, Z. (2022). A systematic approach in developing management workforce readiness for digital health transformation in healthcare. International Journal of Environmental Research and Public Health, 19(21), 13843. https://doi.org/10.3390/ijerph192113843

Chapman, A., Buccheri, A., Mohotti, D., Wong Shee, A., Huggins, C. E., Alston, L., ... & Ugalde, A. (2025). Staff-reported barriers and facilitators to the implementation of healthcare interventions within regional and rural areas: a rapid review. BMC Health Services Research, 25(1), 331. https://doi.org/10.1186/s12913-025-12480-8

Ganesh, B. J., Vijayan, P., Vaidehi, V., Murugan, S., Meenakshi, R., & Rajmohan, M. (2024, February). SVM-based Predictive Modeling of Drowsiness in Hospital Staff for Occupational Safety Solution via IoT Infrastructure. In 2024 2nd International Conference on Computer, Communication and Control (IC4) (pp. 1-5). IEEE. doi: 10.1109/IC457434.2024.10486429.

Gile, P. P., van de Klundert, J., & Buljac-Samardzic, M. (2022). Strategic human resource management and performance in public hospitals in Ethiopia. Frontiers in Public Health, 10, 915317. https://doi.org/10.3389/fpubh.2022.915317

Greenhalgh, T., Wherton, J., Papoutsi, C., Lynch, J., Hughes, G., Hinder, S., ... & Shaw, S. (2017). Beyond adoption: a new framework for theorizing and evaluating nonadoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies. Journal of medical Internet research, 19(11), e8775. doi:10.2196/jmir.8775

Li, X., & Evans, J. M. (2022). Incentivizing performance in health care: a rapid review, typology and qualitative study of unintended consequences. BMC health services research, 22(1), 690. https://doi.org/10.1186/s12913-022-08032-z

Lineberry, M., Dev, P., Lane, H. C., & Talbot, T. B. (2018). Learner-adaptive educational technology for simulation in healthcare: foundations and opportunities. Simulation in Healthcare, 13(3S), S21-S27. doi: 10.1097/SIH.0000000000000274

McIsaac, M., Buchan, J., Abu-Agla, A., Kawar, R., & Campbell, J. (2024). Global Strategy on Human Resources for Health: Workforce 2030 A Five-Year Check-In. Human Resources for Health, 22(1), 68. https://doi.org/10.1186/s12960-024-00940-x

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. doi:10.52970/grdis.v4i2.540

Putri, R. D. ., Fuadi, F. ., & Selvina, M. . (2025). The Effect of Implementing Online Presence With Selfi Application and Work Discipline on Employee Performance. *Indonesian Journal of Islamic Economics and Finance*, *5*(2), 343–366. https://doi.org/10.37680/ijief.v5i2.7118

Raoush, A. (2023). Transformational leadership impact on innovative behaviour as perceived by healthcare workers in private hospitals in Jordan. Cogent Business & Management, 10(3), 2265606. https://doi.org/10.1080/23311975.2023.2265606

Saeed, H., Som, H. M., & Rosli Mahmood, D. H. H. (2023). Hospital innovation and its relationship with transformational and ambidextrous leadership. Hospital, 31(1). doi:10.57030/23364890.cemj.31.1.17

San Juan, N. V., Clark, S. E., Camilleri, M., Jeans, J. P., Monkhouse, A., Chisnall, G., & Vindrola-Padros, C. (2022). Training and redeployment of healthcare workers to intensive care units (ICUs) during the COVID-19 pandemic: a systematic review. BMJ open, 12(1), e050038. https://doi.org/10.1136/bmjopen-2021-050038

Seljemo, C., Viksveen, P., & Ree, E. (2020). The role of transformational leadership, job demands and job resources for patient safety culture in Norwegian nursing homes: a cross-sectional study. BMC Health Services Research, 20, 1-8. https://doi.org/10.1186/s12913-020-05671-y

Sott, M. K., & Bender, M. S. (2025). The Role of Adaptive Leadership in Times of Crisis: A Systematic Review and Conceptual Framework. Merits, 5(1), 2. doi:10.3390/merits5010002

Storey, J., Ulrich, D., & Wright, P. M. (2019). Strategic human resource management: A research overview. Routledge. doi:10.4324/9781003364276

Thijssen, S. V., Jacobs, M. J., Swart, R. R., Heising, L., Ou, C. X., & Roumen, C. (2023). The barriers and facilitators of radical innovation implementation in secondary healthcare: a systematic review. Journal of health organization and management, 37(3), 289-312. doi: 10.1108/JHOM-12-2020-0493

Tursunbayeva, A., Bunduchi, R., Franco, M., & Pagliari, C. (2017). Human resource information systems in health care: a systematic evidence review. Journal of the American Medical Informatics Association, 24(3), 633-654. https://doi.org/10.1093/jamia/ocw141

Yulianah, Y. (2024). Digital Transformation In Human Resource Management: Strategy And Implementation. Jurnal Ekonomi, 13(02), 1502-1512. Retrieved from https://ejournal.seaninstitute.or.id/index.php/Ekonomi/article/view/5078