



## CRITICAL REVIEW OF STRATEGIES AND TRENDS IN HEALTH SERVICES AND HOSPITAL MANAGEMENT

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### Abstract

In response to the changing nature of healthcare education, healthcare, and healing center administration are constantly changing. This comprehensive audit assesses various thoughts and improvements in this field. From vital arranging and optimization, the investigation grows to execution change, taking a toll on administration, innovation integration, authority, administration healthcare, and population healthcare. Through a cautious investigation of accessible information, this investigation distinguishes the qualities and shortcomings of the field, giving knowledge to utilization supervisors, healthcare, and approach producers. This audit aims to educate decision-makers by distinguishing regions for improvement and advancing best practices to improve healthcare and healing center management's effectiveness, adequacy, and maintainability.

**Keywords:** Health services, hospital management, strategic planning, quality improvement, cost containment, technology integration, leadership, regulatory compliance, population health management.

### Introduction

Healthcare and healing center administration are essential to the conveyance of quality healthcare. This article also analyzes techniques and designs reacting to innovative progress, changing socioeconomics, and changing arrangements. Whereas key arranging guarantees compliance with the organization's objectives, execution enhancement methodologies guarantee successful



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observation. Fetched administration and budgetary administration optimize the allotment of assets when healthcare costs increase. Joining innovation from electronic therapeutic records to AI increases proficiency and persistent results. Compliance administration is critical, and public healthcare administration centers on preventive care and ongoing infection administration. This investigation gives knowledge into current issues and their future bearings. It is outlined to assist healthcare supervisors and producers in understanding the complexities of healthcare administration to get better cared for and open up the benefits of consumption (Husereau et., al 2022).

### *Planning and Operations*

Planning is an imperative ability that's imperative in making strides in mindfulness in treatment and administration in healing centers, ensuring asset allotment, and accomplishing long-term objectives. The therapeutic center employs numerous procedures; each program is planned to address the particular needs and challenges community organizations face. One of the most commonly utilized strategies is the SWOT analysis which includes exploring relationship contrasts, threats, and qualities and shortcomings. This investigation suggests how healthcare organizations recognize the difference between created and immature ranges. Another concept is possibility arranging, which includes the method of considering distinctive future scenarios and making a great exchange with each scenario (Riera et., al 2021).

**Figure 1: Strategic Management for Health Care**



(Wynants et., al 2020).

Optimizing treatment in dentistry is regularly difficult and time-consuming. It requires the collaboration of numerous accomplices with diverse needs and crossing points. Issues with permission to take an interest may emerge, resulting in delays in determination and implementation. But indeed, on the off chance that plans are imperative, their standard operation can cause genuine issues for recharging. One of the challenges is the control of treatment,

characterized by quick advances in development, changing needs for quiet, and changes in administration (Monaghesh & Hajizadeh 2020). This dynamic environment can make it troublesome for organizations to foresee future patterns and create the proper processes (Lee & Lee 2021).

Despite these issues, the parental arrangement is significant to accomplishing treatment objectives. By locking in basic plans, organizations can adjust to changes within the healthcare environment, seize altered openings, and address risks. Some things could be improved concerning basic arrangements in healthcare education. For illustration, one therapeutic center confronting continuous stuns, and budgetary challenges attempted a basic arrangement that included inquiring about the writing, collaborating with accomplices, and making strides in the intervention preparation. Therapeutic offices can increase calm fulfillment, operational effectiveness, and budgetary impact. Key arranging is an imperative portion of healthcare and healing center administration, and authority is significant to choose-making and administration. Long-term victory. Despite the challenges in usage, organizations that contribute to vital arranging frameworks are way better able to meet healthcare challenges and accomplish their important goals (Churruca et., al 2021).

### ***Quality Change and Understanding Safety***

quality improvement (QI) and persistent security are imperative in healthcare and point to secure, successful conveyance and understanding of care. This chapter gives a comprehensive assessment of quality improvement forms and methods looks at persistent security measures and their effect on healthcare, analyzes the role of healthcare offices in advancing quality enhancement, and distinguishes obstructions to the execution of quality improvement programs. Quality change frameworks and forms incorporate numerous strategies outlined to assess and improve quality care. A commonly utilized strategy is the Plan-Do-Study-Act (PDSA) cycle, which includes arranging, making changes, analyzing impacts, and acting on them. Another acknowledged strategy is the Six Sigma technique, which centers on reducing changes and defects within the process to attain better results (Usak et., al 2020).

Patient security measures are designed to anticipate therapeutic mistakes, decrease wounds, and progress in understanding results. These measures grow on thoughts such as handling modeling, actualizing security strategies, and creating a security culture in healthcare organizations. For illustration, pharmaceutical organization, hand cleanliness, and security checklists have been shown to diminish antagonistic occasions and increase persistent safety. Healthcare organizations such as the American Joint Commission or the Canadian Accreditation Organization are imperative in moving quality forward by setting benchmarks and executing intermittent clinic assessment methods. Accreditation measures frequently incorporate data concerning quiet security, clinical quality, and organizational execution, giving a premise for ceaseless improvement (Upadhyay, 2020).

### ***Figure 2: Tools and Strategies for Quality Improvement and Patient Safety***



*(Marra entail 2020).*

Despite the significance of quality change and understanding security measures, there are numerous boundaries to actualizing compelling QI programs. These challenges incorporate resistance to change, the need for assets, moo worker engagement, and competition within the healthcare organization. Progressing in the quality and security of care is the most important result of the treatment and points to making strides in the quality and security of care for patients. By utilizing proven strategies, executing persistent security measures, collaborating with certifying bodies, and disposing of obstructions to QI implementation, organizations can accept healthcare reviews and work to progress proficiency and guarantee quality, security, and patient-centered administration (LoBiondo-Wood & Haber 2021).

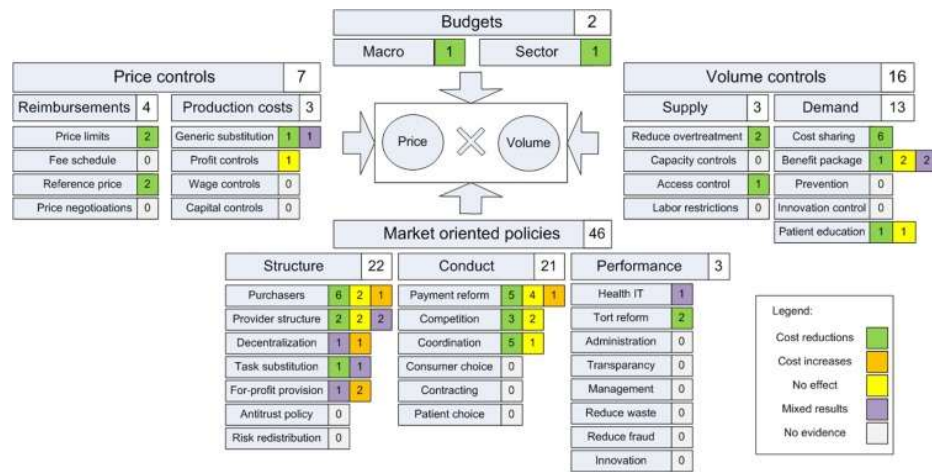
### ***Cost Containment and Financial Management***

Cost Containment and Financial Management are important aspects of healthcare administration to progress the assignment of assets while maintaining the quality of persistent care. This chapter analyzes toll control techniques in healthcare organizations, looks at budgeting forms and asset assignment, assesses the effects of fetched control on caring for patients and results, and investigates modern budgetary models in healthcare management.

A healthcare organization's approach to fetched administration combines various techniques planned to diminish costs while improving the quality of care. This handle may incorporate contracting with providers for great work, creating documentation to play down changes, executing progressed controls to extend effectiveness, and executing unused changes frequently. Also, advances such as cost-based acquisition and responsible care organizations (ACOs) have demonstrated competitiveness in supporting capital to realize the great survey and esteem vision (LoBiondo-Wood & Haber 2021). The allocation of funds and resources is critical for healthcare organizations to attain their monetary objectives. Settled costs, such as overhead, incorporate genuine budgetary changes based on past utilization. These techniques may not pay for changes in other components, such as calm volume, sharpness, or payback rates. That's why healthcare organizations utilize more inventive investing methodologies, such as zero-based investing or

productivity, which requires organizations to pay all expenses each cycle based on the current requirements and significance of sex.

**Figure: Effective healthcare cost-containment policies: A Systematic Review**



(Poon entail 2022)

Measuring persistent care costs and results is fervently discussed within the healthcare industry. Even though fetched control is essential to guaranteeing the monetary steadiness of healthcare organizations, there are concerns that illegal budget cuts might lead to negative results, such as diminished access to care, quiet security, or destitute quality of care. In this manner, healthcare organizations ought to carefully consider the effects of measuring the toll taken and the results of quiet care and provide methodologies to diminish the moo impact. New monetary models are developing as an alternative to conventional costs in healthcare administration. A repayment show is outlined for back-fetched observation and back-fetched control. Illustrations of modern financing models incorporate fee-for-service (i.e., specialists are repaid for a single treatment) and capitation (i.e., specialists are charged a level charge per understanding each month, notwithstanding the plan). This demonstration enables healthcare suppliers to convey quality care, collaborate, and accomplish better results while controlling costs.

Withdrawal and budgetary administration are critical in therapeutic and healthcare administration and should be treated cautiously, similar to withdrawal administration, withdrawal, and investing. Whereas it is essential to have controls in place to guarantee the budgetary stability of healthcare organizations, it is vital to assess the effect of these measures on quiet checking and results and to survey schedule investing designs that bolster cost-effective care. Using proven techniques and cutting-edge money-related models, healthcare organizations can work to extend resource allocation while still providing successful care for patients (Parida entail 2021).

**Technology Integration and Innovation**

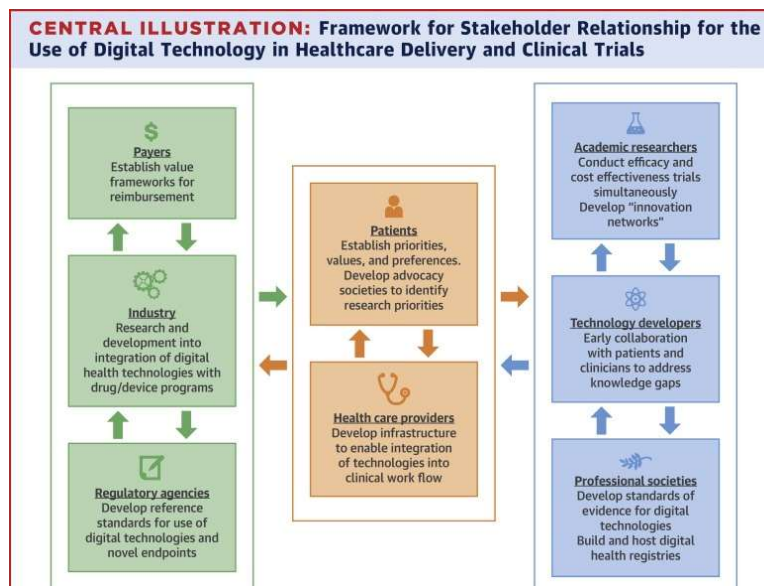
Technology integration and development play a transformative role in forming healthcare administration, giving extended openings, making a difference, realizing benefits, and driving



growth. This chapter presents technology-based healthcare administration, electronic healthcare records (EHRs), telemedicine, and other modern directions. The Computer Wellbeing Appraisal covers the benefits and challenges of development in healthcare and looks at the capabilities of counterfeit insights (AI). Information analytics and information investigation are important in clinical choice-making. Technology patterns in healthcare administration incorporate numerous improvements that alter how healthcare communicates and provides care. One of the foremost critical of these is the broad utilization of electronic healthcare records (EHRs), which permit specialists to get to and share understanding data effortlessly, moving forward collaboration and progressing clinical decision-making. In expansion, telemedicine and telemedicine arrangements are becoming more common, permitting patients to get care remotely and specialists to supply administrations outside the treatment center (Gerry entail 2020).

Adopting advanced healthcare arrangements gives numerous benefits to healthcare organizations and patients. Electronic therapeutic records disentangle authoritative forms, decrease printed material, and provide precise and available data for patients. Telemedicine increases access to care for patients, particularly in provincial or underserved zones, while diminishing travel time and costs. Furthermore, advanced healthcare arrangements can remotely screen patients' healthcare and support early intervention and constant malady management. However, the integration of innovation into the healthcare environment brings with it a few issues. One challenge is interoperability since diverse EHR stages may need to be communicated, resulting in ineffective care (Charlson entail 2022). Moreover, information protection and security issues pose genuine challenges, particularly as healthcare organizations rely on such arrangements and delicate, quiet data is shared over the Internet.

**Figure 4: Using Digital Health Technology to Better Generate Evidence and Deliver Evidence-Based Care**



(Khanra entail 2020).

(AI) and information analytics can revolutionize healthcare decision-making by leveraging huge sums of information to gain understanding and give treatment suggestions. Preemptive confirmation of visual computing can recognize altered pictures, distinguish plans, and offer assistance in analyzing mistakes. Developments in information investigation empower healthcare organizations to find patterns, see what comes about, and make advances in resource allocation (Machia entail 2022).

Although cognitive impedance and information investigation hold awesome guarantees, their commonsense applications and possibilities remain risky. Clinics must comply with information assurance directions and morals to guarantee that their insights are included reasonably, reasonably, and impartially. Moreover, doctors may utilize the wrong positives and information investigation apparatuses and be concerned about their effect on self-management and continuous care. As a result, collaboration isn't utilized, and utilizing apparatuses brings extraordinary control to healthcare administration, giving a tremendous opportunity for long-term growth and upgraded development. Even though electronic information recovery, telemedicine, and other conveyance strategies have numerous focal points, they also show challenges concerning collaboration, security profiles, and choices. Moreover, examining negative feelings and data in choice-making is promising but requires cautious consideration of moral, administrative, and viable issues. By overcoming these challenges and utilizing advanced improvements, restorative organizations can endeavor to provide quality care and support in a globalized world (Kessler entail 2020).

### ***Leadership and leadership***

Management and administration within the organization play a vital part in the improvement and potential of the organization. Therapeutic offices. This chapter depicts the legitimate structure and its suggestions for administration, investigates ways to move the healthcare industry forward, analyzes a few organizational societies that drive the improvement and alteration of these apparatuses, and inquiries about suitable strategies within the region. Leadership influences organizational culture, worker engagement, and victory in healthcare. Changing administration behavior through vision, motivation, and inspiration has been demonstrated to fortify organizational culture, drive victory, and cultivate organizational change. Laws concerning rewards and teaching constrain inventiveness and anticipate specialists to stay steady in healthcare (Merbabies entail 2021).

Effective restorative staffing techniques are the foundation for developing greatness and making the organization fruitful. Approach improvement programs, readiness plans, and administration plans can assist therapeutic front liners in sharpening their capacities, moving forward in their states of mind, and creating the aptitudes required to investigate complex circumstances. Also, creating a ceaseless learning and study culture permits Pioneers to adjust, alter, and take their groups to the next level (Viero entail 2021). Organizational culture is fundamental to driving improvement and alteration in healthcare organizations. A straightforwardness, collaboration, and risk-taking culture will enable agents to back inventive thoughts, drive change, and cultivate

development. On the other hand, a culture absents from alter, level differences, or risk-taking will ensure the advancement and maintain the organization's victory. So, pioneers must create a culture that empowers victory, learns from disappointment, and energizes experimentation (Ibn-Mohammed entail 2021).

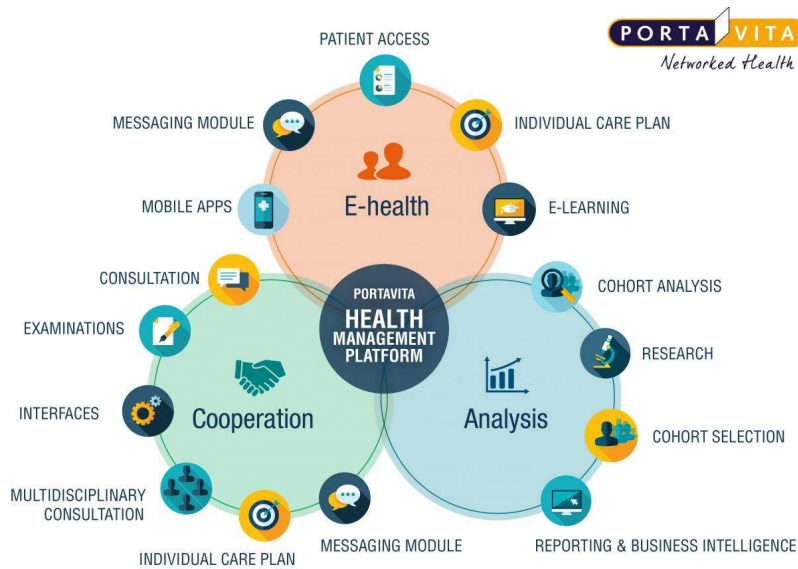
Health arrangement work gives data approximately indicating regulatory accomplishments and their effects on execution. For illustration, one healing center confronting the misfortune of its senior staff and Moo agents embraced elective administration strategies emphasizing collaboration, open communication, and back. As a result, clinics are encountering a move in regulation representation, understanding of victory, and organization performance. Another thought is the viability of permitting the improvement of plans for therapeutic bunches confronting monetary challenges and understanding the advanced economy. Through administration, arranging, instruction, and preparation, the organization makes paramedics who can coordinate exercises, contribute to improvement, and alter within the affiliation. That's why treatment can be exceptionally advantageous in cash and is an enormous step towards mending and proceeding to be satisfied. Culture and arrangements in common are the keys to success in healthcare administration (Khan entail 2021). The proper arrangements—an innovation that makes extraordinary individuals and culture that bolsters improvement and alteration—are the establishments that bolster work and victory. Healthcare organizations can accomplish this normal alter by actualizing alter administration, supporting administrative improvement, and creating a culture of innovation.

### ***Health Administration and Healthcare Management***

Health Administration and Wellbeing Administration Wellbeing administration is a vital organization in guaranteeing that wellbeing administration complies with the measures and controls decided by the reviewers. This chapter gives a picture of the healthcare care and administration framework, looks at compliance issues confronting healthcare organizations, audits framework measures for administrative compliance and empowering adherence to guidelines, and analyzes the effects of changes in clinical practices on behavioral outcomes. Health care planning and administration incorporate laws, directions, and policies outlined to oversee well-being care and guarantee the security and quality of care. This scope will incorporate laws ensuring protection and security, such as the Wellbeing and Security Act (HIPAA), and plans created by important or authorized organizations, such as the Centers for Medicare and Medicaid (CMS) (Pereira & Bamel 2021). Guarantee security, solicitations, and arrangements; create compelling repair processes; and comply with work rules. In their assessments, healthcare organizations must quickly move on to overseeing complex zones that should be observed, analyzed, upgraded, and overhauled to be steady. Complying with the law would be a great thing.

### ***Figure 5: Healthcare Management Software – Care Continuum Alliance***





*(Kashani et., al 2021).*

Strategies to meet with supervisors, to begin with and empower compliance with the Act to incorporate reviews, guaranteeing compliance, conducting reviews and benchmarks, giving direction and arranging for conventional representatives, and creating strategies and strategies. Also, modern frameworks such as electronic healthcare records (EHRs) and compliance administration frameworks can increase proficiency and efficiency (Khan et., al 2020). The administrative effects of changes in healthcare can be critical and require healthcare organizations to rapidly adjust to obsolete plans, orders, and installment models. For illustration, changes in repayment or repayment designs may require changes in budgetary administration, whereas changes in healthcare frameworks may require organizational changes, treatment, or care. Also, changes may affect the organization's approach, budgetary allotment, and collaboration with accomplices. healthcare arrangements and compliance administration are imperative to guarantee that healthcare organizations work well, securely, and legitimately. Laws and labor benchmarks. Organizations can control their healthcare through direction and back-quality understanding of care by understanding the administrative environment, recognizing compliance issues, executing compliance administration procedures, and adjusting to arrangement changes.

### ***Population Health Management***

Population healthcare administration may be a way to improve the healthcare results of society by meeting the healthcare needs of distinctive groups of individuals. This chapter analyzes open healthcare administration procedures and plans, looks at strategies for tending to healthcare choices, analyzes the part of the agreeable community in advancing open healthcare, and discusses challenges and openings in population healthcare management (Pan & Zhang 2021). Public healthcare techniques and measures incorporate an assortment of mediations outlined to move forward populace healthcare. These may include avoidance programs, constant malady administration, healthcare improvement, and community mediation. Population healthcare

administration points to decreasing well-being and moving forward in general open well-being results by focusing on the determinants of well-being and tending to the root causes of disease.

Recognizing community healthcare choices as a vital portion of open well-being administration and recognizing the healthcare sanitation, instruction, lodging, and get-to-sound nourishments can influence well-being. Addressing social determinants of well-being may include:

- Executing arrangements that decrease lack and imbalance.
- Increasing access to reasonable accommodation and transportation.
- Supporting instruction and work.

By tending to these determinants, healthcare organizations can offer assistance, move forward well-being value, and decrease well-being imbalances, benefiting the well-being of different people. Community engagement is imperative in progressing open well-being by empowering collaboration between well-being care suppliers, government offices, community organizations, the constraint, and the community. Others are interested. These organizations empower healthcare organizations to utilize nearby assets, abilities, and community resources to meet the well-being needs of the public (Batko & Ślęzak 2022). By working with community accomplices, healthcare organizations can create a more profound understanding of the unique needs and needs of the populations they serve and generate benefit plans to meet those needs.

Despite the openings advertised by the public well-being administration, numerous challenges still need to be addressed using open well-being measures. These may include restricted assets and financing, dispersion of well-being administrations, commerce data, and avoiding partner changes. Furthermore, tending to open well-being choices requires collaboration over numerous regions, counting well-being care, instruction, housing, and healthcare, which can cause coordination problems. However, open well-being administration contains a significant opportunity to improve well-being results, decrease well-being care costs, and make strides toward the overall well-being of the populace. By employing an open well-being approach, healthcare organizations can move from a scheduled care demonstration centered on progressing with well-being results and tending to the determinants of well-being to a preventive approach. By collaborating with community accomplices and through imaginative approaches to well-being decision-making, well-being organizations can play a vital part in progressing open well-being and making strides toward well-being for all (Khan et al., 2020).

## Conclusion

In summary, this article gives a basic examination of concepts and measures in healthcare and hospital management. The survey recognized openings for change and development in this region by looking at key concepts such as strategic planning, quality change, taking a toll on administration, coordinating innovation, administration, compliance, and open well-being

administration. Healthcare administrators and policymakers can utilize their experiences to progress organizational execution and results for patients and communities.

## Recommendations

Based on the basic examination displayed in this audit, a few proposals are made for healthcare directors and people. Build-up policy:

- Be proactive in meeting the changing needs and challenges of the therapeutic organization's work plan (Vlach Kostas et., al 2021).
- Work on quality improvement programs to progress in understanding security and healthcare.
- Pursue fetched control to adjust budgetary steadiness with tall benefit conveyance—quality care.
- Adopt innovation to extend effectiveness and persistent engagement.
- Create a culture of authority, fabulousness, and development in healthcare organizations.
- Follow changes in restorative laws and administrative necessities and alter your organization's structure accordingly.
- Work with community accomplices to address open well-being issues and progress health.

These suggestions are rules that will help healthcare organizations go through the troublesome process of referral and healing center administration and accomplish brilliance in nursing.

## Reference

- Vlach Kostas, C., Michailidou, A. V., & Achilles, C. (2021). Multi-criteria decision analysis towards promoting waste-to-energy management strategies: a critical review. *Renewable and Sustainable Energy Reviews*, 138, 110563. <https://www.sciencedirect.com/science/article/pii/S1364032120308479>
- Khan, N. A., Khan, S. U., Ahmed, S., Farooqi, I. H., Yousefi, M., Mohammadi, A. A., & Changani, F. (2020). Recent trends in disposal and treatment technologies of emerging-pollutants-A critical review. *TrAC Trends in Analytical Chemistry*, 122, 115744. <https://www.sciencedirect.com/science/article/pii/S0165993619305722>
- Batko, K., & Ślęzak, A. (2022). The use of Big Data Analytics in healthcare. *Journal of big Data*, 9(1), 3. <https://link.springer.com/article/10.1186/s40537-021-00553-4>
- Pan, Y., & Zhang, L. (2021). Roles of artificial intelligence in construction engineering and management: A critical review and future trends. *Automation in Construction*, 122, 103517. <https://www.sciencedirect.com/science/article/pii/S0926580520310979>

- Khan, N. A., Ahmed, S., Farooqi, I. H., Ali, I., Vambol, V., Changani, F., ... & Khan, A. H. (2020). Occurrence, sources and conventional treatment techniques for various antibiotics present in hospital wastewaters: a critical review. *TrAC Trends in Analytical Chemistry*, *129*, 115921. <https://www.sciencedirect.com/science/article/pii/S0165993620301503>
- Kashani, M. H., Madanipour, M., Nikravan, M., Asghari, P., & Mahdipour, E. (2021). A systematic review of IoT in healthcare: Applications, techniques, and trends. *Journal of Network and Computer Applications*, *192*, 103164. <https://www.sciencedirect.com/science/article/pii/S1084804521001764>
- Pereira, V., & Bamel, U. (2021). Extending the resource and knowledge-based view: A critical analysis into its theoretical evolution and future research directions. *Journal of Business Research*, *132*, 557-570. <https://www.sciencedirect.com/science/article/pii/S0148296321002599>
- Khan, N. A., Vambol, V., Vambol, S., Bolibrukh, B., Sillanpaa, M., Changani, F., ... & Yousefi, M. (2021). Hospital effluent guidelines and legislation scenario around the globe: A critical review. *Journal of Environmental Chemical Engineering*, *9*(5), 105874. <https://www.sciencedirect.com/science/article/pii/S2213343721008514>
- Ibn-Mohammed, T., Mustapha, K. B., Godsell, J., Adamu, Z., Babatunde, K. A., Akintade, D. D., ... & Koh, S. C. L. (2021). A critical analysis of the impacts of COVID-19 on the global economy and ecosystems and opportunities for circular economy strategies. *Resources, Conservation and Recycling*, *164*, 105169. <https://www.sciencedirect.com/science/article/pii/S0921344920304869>
- Mirbabaie, M., Stieglitz, S., & Frick, N. R. (2021). Artificial intelligence in disease diagnostics: A critical review and classification on the current state of research guiding future direction. *Health and Technology*, *11*(4), 693-731. <https://link.springer.com/article/10.1007/s12553-021-00555-5>
- Kessler, R. C., Bossarte, R. M., Luedtke, A., Zaslavsky, A. M., & Zubizarreta, J. R. (2020). Suicide prediction models: a critical review of recent research with recommendations for the way forward. *Molecular psychiatry*, *25*(1), 168-179. <https://www.nature.com/articles/s41380-019-0531-0>
- Viero, A., Barbara, G., Montisci, M., Kustermann, K., & Cattaneo, C. (2021). Violence against women in the Covid-19 pandemic: A review of the literature and a call for shared strategies to tackle health and social emergencies. *Forensic science international*, *319*, 110650. <https://www.sciencedirect.com/science/article/pii/S0379073820305120>
- Manchia, M., Gathier, A. W., Yapici-Eser, H., Schmidt, M. V., de Quervain, D., van Amelsvoort, T., ... & Vinkers, C. H. (2022). The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves. *European*

- Neuropsychopharmacology*, 55, 22-83.  
<https://www.sciencedirect.com/science/article/pii/S0924977X21016357>
- Khanra, S., Dhir, A., Islam, A. N., & Mäntymäki, M. (2020). Big data analytics in healthcare: a systematic literature review. *Enterprise Information Systems*, 14(7), 878-912.  
<https://www.tandfonline.com/doi/abs/10.1080/17517575.2020.1812005>
- Luo, B., Lau, R. Y., Li, C., & Si, Y. W. (2022). A critical review of state-of-the-art chatbot designs and applications. *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, 12(1), e1434.  
<https://wires.onlinelibrary.wiley.com/doi/abs/10.1002/widm.1434>
- Charlson, M. E., Carrozzino, D., Guidi, J., & Patierno, C. (2022). Charlson comorbidity index: a critical review of clinimetric properties. *Psychotherapy and psychosomatics*, 91(1), 8-35.  
<https://karger.com/pps/article-abstract/91/1/8/826493>
- Gerry, S., Bonnici, T., Birks, J., Kirtley, S., Virdee, P. S., Watkinson, P. J., & Collins, G. S. (2020). Early warning scores for detecting deterioration in adult hospital patients: systematic review and critical appraisal of methodology. *bmj*, 369.  
<https://www.bmj.com/content/369/bmj.m1501.short>
- Parida, V. K., Saidulu, D., Majumder, A., Srivastava, A., Gupta, B., & Gupta, A. K. (2021). Emerging contaminants in wastewater: A critical review on occurrence, existing legislations, risk assessment, and sustainable treatment alternatives. *Journal of Environmental Chemical Engineering*, 9(5), 105966.  
<https://www.sciencedirect.com/science/article/pii/S221334372100943X>
- Poon, Y. S. R., Lin, Y. P., Griffiths, P., Yong, K. K., Seah, B., & Liaw, S. Y. (2022). A global overview of healthcare workers' turnover intention amid COVID-19 pandemic: a systematic review with future directions. *Human resources for health*, 20(1), 70.  
<https://link.springer.com/article/10.1186/s12960-022-00764-7>
- LoBiondo-Wood, G., & Haber, J. (2021). *Nursing research E-book: methods and critical appraisal for evidence-based practice*. Elsevier Health Sciences.  
<https://books.google.com/books?hl=en&lr=&id=l8M1EAAAQBAJ&oi=fnd&pg=PP1&dq=Critical+review+of+Strategies+and+Trends+in+Health+Services+and+Hospital+Management&ots=NlPvwdqWJe&sig=OpuEqMH2q-0c0n3B1hr-0liBqGU>
- Li, K., Kim, D. J., Lang, K. R., Kauffman, R. J., & Naldi, M. (2020). How should we understand the digital economy in Asia? Critical assessment and research agenda. *Electronic commerce research and applications*, 44, 101004.  
<https://www.sciencedirect.com/science/article/pii/S1567422320300818>
- Marra, D. E., Hamlet, K. M., Bauer, R. M., & Bowers, D. (2020). Validity of teleneuropsychology for older adults in response to COVID-19: A systematic and critical review. *The Clinical*



- Neuropsychologist*, 34(7-8), 1411-1452.  
<https://www.tandfonline.com/doi/abs/10.1080/13854046.2020.1769192>
- Upadhyay, N. (2020). Demystifying blockchain: A critical analysis of challenges, applications and opportunities. *International Journal of Information Management*, 54, 102120.  
<https://www.sciencedirect.com/science/article/pii/S0268401219303688>
- Lee, S. M., & Lee, D. (2021). Opportunities and challenges for contactless healthcare services in the post-COVID-19 Era. *Technological Forecasting and Social Change*, 167, 120712.  
<https://www.sciencedirect.com/science/article/pii/S004016252100144X>
- Husereau, D., Drummond, M., Augustovski, F., de Bekker-Grob, E., Briggs, A. H., Carswell, C., ... & Staniszewska, S. (2022). Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) statement: updated reporting guidance for health economic evaluations. *MDM Policy & Practice*, 7(1), 23814683211061097.  
<https://journals.sagepub.com/doi/abs/10.1177/23814683211061097>
- Monaghesh, E., & Hajizadeh, A. (2020). The role of telehealth during COVID-19 outbreak: a systematic review based on current evidence. *BMC public health*, 20, 1-9.  
<https://link.springer.com/article/10.1186/s12889-020-09301-4>
- Wynants, L., Van Calster, B., Collins, G. S., Riley, R. D., Heinze, G., Schuit, E., ... & van Smeden, M. (2020). Prediction models for diagnosis and prognosis of covid-19: systematic review and critical appraisal. *bmj*, 369. <https://www.bmj.com/content/369/bmj.m1328.abstract>
- Riera, R., Bagattini, Â. M., Pacheco, R. L., Pachito, D. V., Roitberg, F., & Ilbawi, A. (2021). Delays and disruptions in cancer health care due to COVID-19 pandemic: systematic review. *JCO global oncology*, 7(1), 311-323.  
<https://ascopubs.org/doi/abs/10.1200/GO.20.00639>
- Churruca, K., Pomare, C., Ellis, L. A., Long, J. C., Henderson, S. B., Murphy, L. E., ... & Braithwaite, J. (2021). Patient-reported outcome measures (PROMs): a review of generic and condition-specific measures and a discussion of trends and issues. *Health Expectations*, 24(4), 1015-1024.  
<https://onlinelibrary.wiley.com/doi/abs/10.1111/hex.13254>
- Usak, M., Kubiak, M., Shabbir, M. S., Viktorovna Dudnik, O., Jernsittiparsert, K., & Rajabion, L. (2020). Health care service delivery based on the Internet of things: A systematic and comprehensive study. *International Journal of Communication Systems*, 33(2), e4179.  
<https://onlinelibrary.wiley.com/doi/abs/10.1002/dac.4179>