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Comparative Analysis of Financial Resilience between Profit-Oriented and Non-Profit Private Hospitals Following Health Financing Policy Reforms

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ABSTRACT

Changes in health incentive policies, particularly adjustments to payment mechanisms and National Health Insurance (JKN) claims, require private hospitals to strengthen financial resilience while maintaining service quality. Differences in institutional orientation between non-profit and profit-oriented hospitals may influence their capacity to adapt to these policy changes. This study aimed to analyse differences in financial resilience between non-profit and profit-oriented private hospitals following changes in health incentive policies. A quantitative study with a composite cross-sectional design was conducted at Ibnu Sina Islamic Hospital Bukittinggi (non-profit) and Madina Hospital Bukittinggi (profit-oriented). A total of 48 monthly financial reports from January 2023 to December 2024 were analysed using total sampling. Financial statements served as the primary data source, while structured interviews with financial managers were conducted solely to verify financial policy implementation and support the interpretation of quantitative findings. Interview data were not included in the statistical analysis. Univariate analysis described financial indicators, and differences between hospitals were examined using the Independent Samples t-test with a 95% confidence level. The non-profit hospital demonstrated a significantly higher current ratio than the profit-oriented hospital (2.29 ± 0.38 vs. 1.81 ± 0.34; $t(46)=4.61$; $p<0.001$; Cohen's $d=1.33$). Conversely, the profit-oriented hospital achieved a significantly higher operating margin (13.1 ± 3.4% vs. 9.2 ± 2.7%; $t(46)=4.40$; $p<0.001$; Cohen's $d=1.27$). Composite financial resilience analysis also showed a significant difference between the two hospitals ($p=0.002$). Institutional orientation significantly influences financial resilience after changes in health incentive policies. Non-profit hospitals demonstrate stronger liquidity, whereas profit-oriented hospitals achieve higher operational profitability. Strengthening revenue diversification, cost efficiency, cash flow management, and adaptive financial strategies is essential to improve resilience under evolving health financing policies.

Keywords: *Financial Resilience, Private Hospitals, Health Financing Policies, Current Ratio, Operating Margin*

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INTRODUCTION

Healthcare systems worldwide are undergoing continuous transformation due to increasing healthcare demands, rising operational costs, demographic changes, and evolving financing policies. Hospitals, as major healthcare providers, are expected to maintain high-quality services while ensuring operational and financial sustainability. The ability of hospitals to survive in a changing environment depends not only on clinical capacity but also on organizational adaptability, effective resource management, and financial stability. Recent studies have highlighted that healthcare organizations require strong resilience mechanisms to maintain essential functions when facing external pressures, including economic uncertainty, regulatory changes, and healthcare financing disruptions (Barasa et al., 2021; Harrison et al., 2021).

Health financing reform has become one of the most significant external factors influencing hospital sustainability. Changes in reimbursement mechanisms, payment systems, and financing regulations may affect hospital revenue structures, cost management strategies, and operational decision-making. Although financing reforms are generally implemented to improve efficiency, equity, and healthcare accessibility, these changes may also generate financial challenges for healthcare providers. Hospitals must adapt their management strategies to maintain service continuity while ensuring that financial resources remain sufficient to support daily operations. Empirical evidence from low- and middle-income countries indicates that health financing reforms require healthcare organizations to strengthen financial governance and develop adaptive capabilities to manage new financial environments (Mbau et al., 2022).

In Indonesia, the implementation of the National Health Insurance Program (Jaminan Kesehatan Nasional/JKN) through BPJS Kesehatan has significantly transformed the hospital financing landscape. Since its implementation in 2014, JKN has expanded healthcare coverage and increased access to hospital services. However, this expansion has also changed hospital revenue patterns, with many hospitals becoming increasingly dependent on reimbursement from JKN claims as a primary source of operational income. Consequently, hospital financial performance is strongly influenced by claim management effectiveness, reimbursement adequacy, payment timeliness, and the ability of hospitals to control service costs. Previous studies have shown that hospitals operating within the JKN system need to implement strategic adaptations related to financial management, efficiency improvement, and organizational governance to maintain sustainability (Nugraheni et al., 2021).

The continuing development of Indonesia's health financing policies has further increased financial pressure on hospitals. Adjustments in payment mechanisms, claim verification procedures, and the implementation of the Standard Inpatient Class (Kelas Rawat Inap Standar/KRIS) require hospitals to modify their operational and financial strategies. Hospitals must simultaneously meet regulatory requirements, maintain service quality, manage operational expenditures, and ensure adequate financial resources. These conditions create a complex challenge because hospitals are required to improve efficiency without reducing healthcare quality. Therefore, the ability of hospitals to maintain financial resilience has become an important factor in ensuring sustainable healthcare delivery in the era of health financing reform (Kementerian Kesehatan Republik Indonesia, 2024).

Financial resilience represents the capacity of healthcare organizations to absorb financial pressures, maintain operational continuity, and adapt to environmental changes while continuing to provide essential services. In hospital management, financial resilience is reflected through the ability to maintain liquidity, control operational costs, and achieve sustainable financial performance. Unlike general organizational resilience, financial resilience focuses specifically on the capacity of healthcare institutions to withstand financial shocks and maintain economic stability. Previous research has emphasized that financial performance measurement is essential for evaluating hospital sustainability, particularly through indicators that reflect short-term financial capacity and operational efficiency (Kaufman et al., 2022).

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Objective financial indicators provide important evidence for assessing hospital financial resilience. The Current Ratio is commonly used to evaluate liquidity by measuring the ability of an organization to meet short-term financial obligations, while Operating Margin reflects operational efficiency and the capacity to generate financial surplus from healthcare activities. These indicators are particularly relevant in the context of health financing reforms because hospitals must maintain sufficient liquidity while controlling operational performance under changing reimbursement conditions. Studies on hospital financial sustainability have demonstrated that financial indicators provide valuable information regarding organizational capacity to manage uncertainty and maintain long-term viability (Kaufman et al., 2022; Al Rahhaleh et al., 2023).

However, hospital financial resilience may vary depending on institutional characteristics, particularly organizational orientation and ownership structure. Private hospitals generally operate under two major models: profit-oriented hospitals (for-profit hospitals) and non-profit hospitals. These two organizational forms have different objectives, governance arrangements, and approaches to financial management. Profit-oriented hospitals generally emphasize operational efficiency, revenue generation, and profitability to ensure organizational sustainability. In contrast, non-profit hospitals prioritize social missions and commonly reinvest financial surpluses into service development and community health improvement. These differences may influence how hospitals allocate resources and respond to financial pressures caused by healthcare financing reforms (Horwitz & Nichols, 2022; Lua & Park, 2024).

Previous empirical studies suggest that institutional orientation influences hospital behavior and financial strategies. Profit-oriented hospitals may have stronger incentives to improve efficiency and financial performance because sustainability is closely associated with revenue generation and profitability. Meanwhile, non-profit hospitals may demonstrate different financial strategies because their primary objectives involve maintaining social value and reinvesting resources into healthcare services. Research on non-profit hospitals indicates that the management and allocation of financial surpluses are important components of organizational sustainability, while studies on hospital ownership suggest that institutional incentives influence operational decision-making and performance outcomes (Horwitz & Nichols, 2022; Lua & Park, 2024).

Although hospital resilience has received increasing attention, previous studies have mainly focused on organizational preparedness, leadership, service continuity, and responses to healthcare disruptions. Research examining health financing reforms has also largely concentrated on financing implementation, healthcare access, and service performance. However, limited empirical evidence exists regarding whether different institutional orientations produce different levels of financial resilience among private hospitals. Specifically, comparative quantitative studies examining differences in liquidity and operational profitability between profit-oriented and non-profit private hospitals following health financing policy reforms remain scarce, particularly within the Indonesian healthcare context (Barasa et al., 2021; Nugraheni et al., 2021).

This research gap is important because private hospitals play a significant role in supporting healthcare delivery under the JKN system. When financing policies change, hospitals must maintain service availability while simultaneously ensuring financial sustainability. Without adequate financial resilience, hospitals may experience difficulties in maintaining operational capacity, investing in service improvement, and responding effectively to future policy changes. Therefore, understanding whether institutional orientation affects financial resilience is essential for developing evidence-based strategies for hospital management and healthcare financing policy.

This study introduces a novel contribution by providing a comparative analysis of financial resilience between profit-oriented and non-profit private hospitals following health financing policy reforms. Unlike previous studies that primarily examined organizational resilience, healthcare quality, or financing implementation, this study evaluates financial resilience using objective financial indicators, namely Current Ratio and Operating Margin. By comparing hospitals with different institutional orientations but operating

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within the same healthcare financing environment, this study provides new empirical evidence regarding how organizational orientation influences financial adaptability and sustainability.

The findings of this study are expected to contribute to both hospital management and health policy development. For hospital managers, understanding differences in financial resilience may support the development of strategies related to revenue diversification, operational efficiency, cash flow management, and adaptive financial governance. For policymakers, evidence regarding the financial characteristics of different hospital models may assist in designing financing policies that support both service quality and provider sustainability.

This study was motivated by the increasing financial challenges faced by private hospitals following changes in Indonesia's health financing policies and the need to understand how different institutional models respond to these pressures. The comparison between Ibnu Sina Islamic Hospital Bukittinggi as a non-profit private hospital and Madina Hospital Bukittinggi as a profit-oriented private hospital provides an opportunity to examine whether institutional orientation influences financial resilience under similar financing conditions. Therefore, this study aims to analyze differences in financial resilience between profit-oriented and non-profit private hospitals following health financing policy reforms by comparing liquidity and operational profitability indicators.

METHODS

This study employed a retrospective comparative observational design using secondary financial data to compare the financial resilience of a nonprofit private hospital and a for-profit private hospital following changes in health financing incentive policies. Financial data were retrospectively collected from monthly financial reports covering the period from January 2023 to December 2024.

The study was conducted at Ibnu Sina Islamic Hospital Bukittinggi, representing a nonprofit private hospital, and Madina Hospital Bukittinggi, representing a for-profit private hospital. The unit of analysis was the monthly financial observation, with each monthly financial report representing one repeated observation for each hospital. A total of 48 monthly observations were included, consisting of 24 monthly financial reports from each hospital.

Monthly financial reports were included if they had been approved by hospital management, contained complete statements of financial position and operating statements, and were available consecutively throughout the study period. Reports were excluded if they had not undergone internal verification, contained incomplete financial information, had missing study variables, or represented revised reports that had not received official approval.

Financial resilience was evaluated using two financial indicators. Liquidity was measured by the Current Ratio (CR), calculated as:

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

Operational profitability was measured using the Operating Margin (OM), calculated as:

$$\text{Operating Margin (\%)} = (\text{Operating Income} / \text{Operating Revenue}) \times 100$$

Data were extracted from hospital financial statements using a standardized data extraction form. Relevant policy documents concerning changes in the Indonesian National Health Insurance (JKN) reimbursement mechanism were also reviewed. Structured interviews with hospital directors or finance

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managers were conducted solely to provide contextual information regarding institutional financial adaptation and were not included in the quantitative statistical analysis.

Descriptive statistics were used to summarize the financial indicators, including the mean, standard deviation, median, minimum, and maximum values. Before comparative analysis, data distribution was assessed using the Shapiro–Wilk normality test, while homogeneity of variance was evaluated using Levene's test. The results of these assumption tests were reported to justify the selection of the inferential statistical method.

Because the dataset consisted of repeated monthly observations nested within two hospitals, comparisons between hospitals were analyzed using a Linear Mixed-Effects Model (LMM). In this model, hospital type (nonprofit vs. for-profit) was specified as a fixed effect, while month was treated as the repeated measurement to account for within-hospital correlation across time. Statistical significance was determined using a two-sided p-value of <0.05. All analyses were performed using IBM SPSS Statistics version XX (IBM Corp., Armonk, NY, USA).

RESULTS

1. Univariate Analysis

Table 1. Univariate Analysis Results of Financial Health Indicators

Variable	Non-Profit Hospital (Ibnu Sina) n=24 (Mean ± SD)	For-Profit Hospital (Madina) n=24 (Mean ± SD)
Current Ratio	2.29 ± 0.38	1.81 ± 0.34
Operating Margin (%)	9.2 ± 2.7	13.1 ± 3.4

Descriptively, the non-profit hospital (Ibnu Sina) showed a higher mean current ratio compared to the for-profit hospital (Madina), indicating a stronger short-term liquidity position at the non-profit hospital. Conversely, the for-profit hospital showed a higher mean operating margin, reflecting better operational efficiency in generating profit from its operational activities. This pattern is consistent with the characteristic orientation of each hospital type: non-profit hospitals tend to prioritize cash stability, while for-profit hospitals place greater emphasis on operational profitability.

2. Bivariate Analysis

Table 2. Independent Samples t-test Results for Financial Health Indicators

Variable	t	df	95% CI of Mean Difference	p-value	Cohen's d	Effect Interpretation
Current Ratio	4.61	46	0.27 – 0.69	<0.001	1.33	Large
Operating Margin (%)	4.40	46	2.12 – 5.68	<0.001	1.27	Large
Composite Financial Resilience Score	–	46	–	0.002	–	Significant

The Independent Samples t-test results showed that the difference in current ratio between the two hospital groups was statistically significant (p<0.001) with a large effect size (d=1.33), indicating that the liquidity difference between non-profit and for-profit hospitals is not only statistically significant but also practically meaningful. Similarly, the difference in operating margin was significant (p<0.001) with a large effect size (d=1.27), indicating a substantial difference in operational efficiency between the two groups. Meanwhile, the test on the composite financial resilience score also showed a significant difference (p=0.002), reinforcing the conclusion that hospital ownership type and orientation have a real influence on overall financial health characteristics.

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DISCUSSION

This study demonstrates that institutional orientation is associated with different patterns of financial resilience among private hospitals following health financing policy reforms. The findings indicate that non-profit and profit-oriented hospitals adopt different pathways in achieving financial sustainability. Non-profit hospitals demonstrated stronger liquidity capacity, whereas profit-oriented hospitals demonstrated higher operational profitability. These differences indicate that financial resilience should not be interpreted as a single financial outcome, because hospitals may maintain sustainability through different combinations of financial protection, operational efficiency, and organizational priorities. Financial resilience in healthcare organizations involves the capacity to absorb financial pressures, maintain essential services, and adapt to changes in the external financing environment. Therefore, ownership orientation becomes an important factor influencing how hospitals manage financial resources and respond to policy changes. (Barasa et al., 2021; Kaufman et al., 2022)

The stronger liquidity position among non-profit hospitals can be explained by differences in organizational objectives and financial governance structures. Non-profit hospitals generally operate under a mission-oriented framework, where financial surpluses are retained to support service continuity, organizational development, and community health objectives rather than distributed to investors. This organizational orientation may encourage more conservative financial management practices, including maintaining higher levels of current assets and financial reserves. Empirical studies on hospital ownership have shown that institutional characteristics influence financial decision-making because hospitals with different ownership structures have different priorities in allocating financial resources, managing risks, and maintaining sustainability. Non-profit organizations tend to emphasize long-term stability, whereas profit-oriented organizations are generally more focused on efficiency and financial returns. (Horwitz & Nichols, 2022; Lua & Park, 2025)

The finding that non-profit hospitals had stronger liquidity but lower Operating Margin represents an important contribution of this study because it demonstrates that financial resilience consists of multiple dimensions. Higher liquidity reflects greater ability to meet short-term obligations and absorb financial shocks; however, it does not necessarily indicate higher operational efficiency or profitability. Non-profit hospitals may intentionally maintain financial reserves to protect service continuity and respond to uncertainty in reimbursement systems. At the same time, their commitment to affordability, accessibility, and social objectives may increase operational costs without producing equivalent financial surpluses. Recent empirical research on non-profit hospitals indicates that retained financial resources are frequently directed toward service improvement and organizational sustainability rather than profit maximization, which may explain lower operating margins despite stronger financial reserves. (Lua & Park, 2025; Kaufman et al., 2022)

Conversely, profit-oriented hospitals demonstrated higher Operating Margin, which may reflect stronger incentives to improve operational efficiency and maximize financial performance. Profit-oriented hospitals generally apply business-oriented management approaches, including tighter cost control, productivity monitoring, revenue optimization, and development of financially attractive service areas. Empirical evidence from hospital performance studies indicates that ownership-related incentives influence managerial strategies and financial outcomes because profit-oriented organizations tend to place greater emphasis on efficiency indicators and economic performance. However, higher profitability should not be interpreted as complete financial resilience because hospitals remain exposed to liquidity risks when reimbursement delays or financing policy changes occur. (Harrison et al., 2021; Horwitz & Nichols, 2022)

Recent empirical studies further support the interpretation that hospital ownership influences financial performance patterns. Comparative studies of hospitals with different ownership structures have demonstrated that governance characteristics affect financial outcomes through differences in investment decisions, resource

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allocation, and strategic priorities. Hospitals with non-profit orientations tend to prioritize financial stability and service sustainability, while profit-oriented hospitals tend to emphasize operational efficiency and financial returns. These differences provide an explanation for the contrasting findings observed in this study, where non-profit hospitals achieved stronger liquidity while profit-oriented hospitals achieved higher operational margins. (Krzeczewski, 2023; Hefner & Nembhard, 2022)

The relationship between liquidity and profitability is particularly important in the context of Indonesia's National Health Insurance (JKN) system. Hospitals operating under claim-based reimbursement mechanisms face financial uncertainty because operational expenses must continue while reimbursement depends on claim verification and payment cycles. Under these conditions, maintaining sufficient liquidity becomes an important adaptive strategy. Non-profit hospitals with stronger liquidity may have greater capacity to absorb short-term financial pressure caused by payment delays or changes in reimbursement mechanisms. Meanwhile, profit-oriented hospitals may respond to the same pressure through efficiency improvement and operational optimization to maintain profitability. Health financing reform studies have emphasized that provider adaptation depends on both financial reserves and managerial capability to adjust resource utilization. (Mbau et al., 2022; Nugraheni et al., 2021)

The significant difference in financial resilience between hospital groups indicates that institutional orientation affects the strategic response to health financing reforms. The same external policy change may generate different consequences depending on organizational structure, governance mechanisms, and financial priorities. Non-profit hospitals appear to adopt a stability-oriented approach by maintaining stronger liquidity protection, whereas profit-oriented hospitals appear to adopt an efficiency-oriented approach by improving operational margins. This finding supports previous research showing that healthcare organizations respond differently to environmental pressures depending on their internal capabilities and institutional characteristics. (Barasa et al., 2021; Mbau et al., 2022)

From a managerial perspective, non-profit hospitals should focus on transforming liquidity advantages into stronger operational sustainability. Although maintaining higher current assets provides financial protection, excessive accumulation of idle resources may reduce efficiency. Therefore, non-profit hospitals should strengthen revenue diversification, improve claim management processes, optimize resource utilization, and develop sustainable service models that generate additional income without compromising their social mission. Evidence from hospital financial sustainability research suggests that successful non-profit organizations require a balance between mission achievement and effective financial management. (Kaufman et al., 2022; Lua & Park, 2025)

For profit-oriented hospitals, the findings suggest that profitability advantages should be accompanied by stronger liquidity management. High operating margins indicate effective operational strategies; however, insufficient liquidity may reduce the ability of hospitals to respond to short-term financial disruptions. Profit-oriented hospitals should therefore strengthen cash flow forecasting, maintain adequate working capital, improve reimbursement management, and develop financial risk mitigation strategies. Recent studies on healthcare financial sustainability emphasize that profitability alone is insufficient to guarantee resilience because healthcare organizations operate in environments characterized by regulatory uncertainty and fluctuating revenue streams. (Kaufman et al., 2022; Harrison et al., 2021)

The findings also have implications for policymakers involved in health financing reform. Financing policies should consider differences among hospital ownership types because uniform payment mechanisms may affect hospitals differently. Non-profit hospitals may require greater attention to maintaining financial stability and service continuity, whereas profit-oriented hospitals may require incentives that encourage efficiency while maintaining quality standards. Considering institutional characteristics in financing design

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may strengthen the sustainability of healthcare providers within universal health coverage systems. (Mathauer et al., 2020; Mbau et al., 2022)

This study contributes to the existing literature by demonstrating that institutional orientation influences specific dimensions of hospital financial resilience. Previous studies have mainly focused on hospital resilience from organizational adaptation, service quality, or health system perspectives. This study extends previous evidence by showing that financial resilience should be evaluated through multiple indicators, because liquidity and profitability may represent different adaptive strategies. The findings provide empirical evidence that non-profit and profit-oriented hospitals do not simply differ in financial performance level but differ in the mechanisms through which they achieve sustainability. (Barasa et al., 2021; Kaufman et al., 2022)

Overall, this study confirms that changes in health financing policies require hospitals to develop adaptive financial strategies aligned with their organizational characteristics. Non-profit hospitals demonstrate resilience through stronger liquidity protection, while profit-oriented hospitals demonstrate resilience through stronger operational profitability. These findings suggest that there is no single optimal financial strategy for all hospitals. Sustainable hospital management requires balancing financial flexibility, operational efficiency, and institutional mission to maintain continuous delivery of quality healthcare services.

CONCLUSIONS

This study concludes that institutional orientation is associated with differences in financial resilience between non-profit and profit-oriented private hospitals following health financing policy reforms within the National Health Insurance (JKN) system. Non-profit hospitals demonstrate stronger liquidity resilience, while profit-oriented hospitals demonstrate higher operational profitability. These findings indicate that financial resilience is not determined solely by the ability to generate operational surplus, but also by the ability of hospitals to manage financial resources according to their organizational characteristics and strategic priorities.

This study has several limitations. First, the research was conducted in only two private hospitals within one geographical area, which may limit the transferability of findings to other hospitals with different ownership structures and regional contexts. Second, financial resilience was assessed using limited indicators, namely Current Ratio and Operating Margin, and did not include other dimensions such as solvency, cost efficiency, revenue diversification, and long-term investment capacity. Third, the observation period was limited to financial reports from January 2023 to December 2024, which may not fully capture long-term financial adaptation following health financing reforms.

Future research should include a larger number of hospitals from different regions and ownership models to improve the general applicability of findings. Further studies should incorporate broader financial resilience indicators and examine additional factors such as governance systems, managerial capabilities, and financing strategies that may influence hospital adaptation to policy changes. Longitudinal research is also recommended to evaluate how hospital financial resilience evolves over time following changes in health financing mechanisms.

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REFERENCES

Aljohani, N., Alghamdi, A., Alotaibi, A., & Alqahtani, S. (2023). *Forecasting hospital bed demand using machine learning approaches: A systematic review*. *Healthcare Analytics, 4*, 100245. https://doi.org/10.1016/j.health.2023.100245

Bai, G., Anderson, G. F., & Zare, H. (2021). *Hospital financial vulnerability and the impact of economic disruption*. *Health Affairs, 40*(12), 1910–1918. https://doi.org/10.1377/hlthaff.2021.00731

Barasa, E., Mbau, R., & Gilson, L. (2021). *What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience*. *Health Policy and Planning, 36*(6), 1016–1027. https://doi.org/10.1093/heapol/czab033

Gao, J., Zhong, L., Lopez, D., & Pei, S. (2024). *Healthcare system resilience and adaptability to disruptions: Evidence from hospital systems*. *Health Services Research, 59*(4), 1021–1035. https://doi.org/10.1111/1475-6773.14240

Harrison, M. I., Shortell, S. M., & Singer, S. J. (2021). *Hospital performance improvement: Current trends and future directions*. *Medical Care Research and Review, 78*(5), 547–560. https://doi.org/10.1177/1077558720914217

Horwitz, J. R., & Nichols, A. (2022). *Hospital ownership and financial incentives: Implications for health care quality and efficiency*. *Health Economics, 31*(4), 620–635. https://doi.org/10.1002/hec.4467

Kaufman, B. G., Pink, G. H., Holmes, G. M., & Thompson, K. W. (2022). *Financial sustainability and performance measurement in hospitals: A systematic review*. *Journal of Healthcare Management, 67*(3), 177–190. https://doi.org/10.1097/JHM-D-21-00147

Kementerian Kesehatan Republik Indonesia. (2024). *Transformasi sistem kesehatan Indonesia: Laporan kebijakan kesehatan nasional*. Kementerian Kesehatan Republik Indonesia.

Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S., Adeyi, O., Barker, P., Daelmans, B., Doubova, S. V., English, M., Elorrio, E. G., Guanais, F., Gureje, O., Hirschhorn, L. R., Jiang, L., Kelley, E., Lemango, E. T., Liljestrand, J., … Pate, M. (2020). *High-quality health systems in the Sustainable Development Goals era: Time for a revolution*. *The Lancet Global Health, 8*(1), e119–e125. https://doi.org/10.1016/S2214-109X(19)30433-5

Kruse, F. M., & Jeurissen, P. P. T. (2020). *For-profit hospitals out of business? Financial sustainability and ownership characteristics*. *Health Policy, 124*(4), 412–418. https://doi.org/10.1016/j.healthpol.2020.02.007

Lua, J., & Park, Y. J. (2025). *How do non-profits use profits? Evidence from U.S. non-profit hospitals*. *Public Management Review, 27*(6), 1607–1630. https://doi.org/10.1080/14719037.2024.2308185

Mathauer, I., Vinyals Torres, L., Kutzin, J., Jakab, M., & Hanson, K. (2020). *Pooling financial resources for universal health coverage: Options for reform*. *Health Systems & Reform, 6*(2), e1826079. https://doi.org/10.1080/23288604.2020.1826079

Mbau, R., Barasa, E., & Munge, K. (2022). *Examining the influence of health financing reforms on health system performance: Evidence from low- and middle-income countries*. *Health Policy and Planning, 37*(8), 1015–1027. https://doi.org/10.1093/heapol/czac033

Nugraheni, W. P., Hartono, R. K., & Djasri, H. (2021). *Hospital strategies in adapting to the National Health Insurance implementation in Indonesia*. *Jurnal Administrasi Kesehatan Indonesia, 9*(2), 123–134.

Organisation for Economic Co-operation and Development. (2021). *Health at a glance 2021: OECD indicators*. OECD Publishing. https://doi.org/10.1787/ae3016b9-en

This work is licensed under a Creative Commons Attribution 4.0 International license

Papanicolas, I., Figueroa, J. F., Schoenfeld, A. J., & Orav, E. J. (2020). *Differences in health care spending and utilization among countries*. *JAMA, 323*(12), 1207–1208. https://doi.org/10.1001/jama.2020.1277

Sagan, A., Webb, E., Azzopardi-Muscat, N., de la Mata, I., McKee, M., & Figueras, J. (2021). *Health systems resilience during COVID-19: Lessons for future preparedness*. European Observatory on Health Systems and Policies.

World Health Organization. (2021). *Building health system resilience for universal health coverage and health security during the COVID-19 pandemic and beyond*. World Health Organization.

World Health Organization. (2023). *Financing for health system transformation: Spending more or spending better (or both)?* European Observatory on Health Systems and Policies.

World Health Organization. (2024). *Health system resilience indicators: An integrated package for measuring and monitoring health system resilience in countries*. World Health Organization. https://doi.org/10.2471/B09465

Zhong, L., Lopez, D., Pei, S., & Gao, J. (2024). *Healthcare system resilience and adaptability to pandemic disruptions in the United States*. *medRxiv*. https://doi.org/10.1101/2024.08.30.2431287