The Review Of
DIABETIC
STUDIES OPEN ACCESS

Role Of Health Care Privatization In Improving Hospital Performance Indicators: A Case Study Of Abha Maternity And Children Hospital

Saeed A Almones,[1] Maram Ali Alwadei[2]

[1] Department of Health and Services Administration Faculty of Economics and Administration King Abdulaziz University Jeddah, Saudi Arabia
[2] King Abdulaziz Hospital Jeddah, Saudi Arabia

Abstract
In this study we focus on ongoing developments in Saudi Arabia's health care sector, emphasizing the expansion of privatization and public–private partnerships as key parts of the national health transformation. We aim to examine how health care privatization affects hospital performance indicators, using Abha Maternity and Children Hospital as a case study. A total of 45 participants from various administrative and clinical roles at the hospital took part in this exploratory field study, supported by a descriptive and analytical approach. We collected data through a five-point Likert scale questionnaire. The results show that the hospital's performance is moderate, with some areas gradually improving. The employees were well-informed about methods to improve service through performance indicators, although the many neutral responses to certain questions suggest there may be inconsistencies in their application. Based on these findings, we recommend more training within the hospital on measuring and utilizing performance as well as improved communication.

Keywords: health care privatization, hospital performance indicators, Abha Maternity and Children Hospital

Introduction

Role of Health Care Privatization in Improving Hospital Performance Indicators: A Case Study of Abha Maternity and Children Hospital

Public–private partnerships (PPPs) can serve as tools for health care system reforms because their application involves private investment. Governments seek improved efficiency without compromising public finances. PPPs offer efficiency through private management expertise, along with private investment, which can enhance waste reduction as well as health care quality. New evidence that has supported this solution. Duggan et al. (2023) conducted systematic reviews and found that PPPs assist in increasing human resource capacity within hospitals, enhancing financial effectiveness, and improving governance. The organization's resource management and accountability were improved, aligning with those of other PPP hospitals in Europe, Asia, and the Middle East.

Saudi Arabia's Health Sector Transformation Program under Vision 2030 aims to increase the role of the private sector in boosting service capacity, transforming health care infrastructure, and adopting a "performance management approach" (Alasiri & Mohammed, 2022). Ironically, privatization is being linked with transformations that embrace accountability frameworks, whereby hospitals will be required to "measure, analyze, and report common metrics that will be used for assessing their performance in both organizational as well as healthcare aspects" (Iroz et al. 2024). Metrics would be integrated with the country's budgeting systems. The focus on measurable performance indicators such as bed occupancy rates, average length of stay, patient waiting times, patient satisfaction, and readmission rates supports strategic decision-making and resource planning while moving providers toward outcomes-based care. This approach aligns hospital operations with national targets and comparative benchmarking standards while encouraging competition and continuous improvement in service delivery (Ghalibi et al., 2024; Suleiman & Ming, 2025).

Internationally, there is evidence that privatization is not always associated with beneficial results. Although some PPP schemes or privatization experiences have improved accessibility and efficiency, others, especially those with high profit margins, have led researchers to question a degradation in patient care, patient safety, and equity (Duggan et al. 2023; Rahman, 2024). Therefore, the effective privatization of hospitals must be accompanied by clearly defined performance contracts to ensure that efficiency improvements do not harm the quality of patient care.

In this study we examine the impact of health care privatization on the efficiency of hospitals through a case study at Abha Maternity and Children Hospital. We examine issues such as efficiency, patient satisfaction, and patient safety. These issues relate to bed occupancy rate, patient waiting time, infection rate, and patient readmission through a global perspective. In health care, privatization tends to involve changes in management structure, financing structure, and the adoption of efficiency tools that enhance accountability and quality of care. Measuring through proper tools helps hospitals identify issues and increase efficiency and then address issues through proper quality improvements. Studies have shown that privatization enhances waste reduction, resource efficiency, and prompt attention to patient requirements with proper governance clarity (Ghalibi et al., 2024, Suleiman & Ming, 2025).

Research has shown that on hospital performance analysis has indicated that the number of performance indicators and the scope of evaluation are increasing. There is also evidence that the indicators, as well as their application, display different tendencies on both hospital and country levels. Carini et al. (2020) emphasized that a shared language of measurement was required, focusing on the most commonly assessed aspects of hospitals, such as efficiency, effectiveness, patient-centered care, and safety. Other researchers have emphasized that other aspects, such as administrative responsiveness, employee focus, or timeliness, differed based on their settings (Carini et al. 2020).
Moreover, Ranjbar et al. (2021) indicated that if significant changes in health care are achieved, some results will be better, particularly patient-oriented metrics such as mortality rate, admission rate, and bed occupancy rate. Efficiency, however, remained relatively stagnant, with bed turnover rates as well as patient stay lengths remaining mostly the same. This finding further supports the idea that improvement occurs through process. Furthermore, as Nabovati et al. (2023) highlighted, the opinion of managers is central in determining which aspect of performance will be monitored. Hospital managers rate patient service quality and safety, finances, human resources, and operations as their highest priorities. These opinions indicate that performance measurement can be not only a method of surveillance but also a way to stay sustainable and ahead of the competition, and adding value to services depends on such measures.

The efficiency of the health care facility's supply chain was measured by 64 key areas that Fallahnezhad et al. (2024) identified in their study that expanded their focus on performance. These measures can be divided into three areas: financial, administrative, and clinical. Incorporating supply chain measures into the assessment of hospitals' performance illustrates that effective health care requires proper purchasing, inventory management, and timely delivery of vital supplies. An effective health care facility's well-managed supply chain will translate to fewer delays, proper use of essential assets, and effective patient care. This finding illustrates that patient satisfaction, care, safety, and quality will depend on a well-functioning logistics system because service disruptions, costs, and risks may arise from problematic health care facility supply chain processes (Fallahnezhad et al., 2024).
At the national system level, the use of statistical models for forecasting, such as autoregressive integrated moving average, was helpful in examining system performance tendencies. Forecasting applications enhance planning for the future with evidence because they allow estimations of future service demand as well as the identification of tendencies that may not be identified through basic descriptive statistics. Results have indicated that some measures remained constant, such as the case mix index, whereas others varied as a result of events such as pandemics, which contributed to rapid changes in usage, patient acuity, and resource requirements. These models enhance strategic decision-making because they provide a basis for evidence-based predictions of system stresses as well as assessment of reactions to external shock (Drăgan et al., 2025).

The most widely accepted variables or dimensions of hospital performance, or more commonly referred to as metrics, are as follows: "average length of stay, rates of infection acquired in hospitals, patient satisfaction, rate of mortality, bed occupancy rate, rates of adverse events, waiting time, rates of readmission, and cost per patient" (Hadian et al., 2024). These variables provide a broad perspective on the dynamics of health care facilities, covering practice, accessibility, and financial aspects. Efficiency, which refers to the "effectiveness of the operation of a hospital, remains the crucial component essential in any sound healthcare facility performance assessment as it more or less affects its productivity, patient throughput, as well as its value within the healthcare system" (Talebpour et al., 2025, p. 195).

Although in previous studies, researchers have examined hospital performance indicators from different angles, such as identifying core performance dimensions (Carini et al., 2020), evaluating the impact of health care reform policies (Ranjbar et al., 2021), and prioritizing performance indicators from the perspective of hospital managers (Nabovati et al., 2023), most of these studies focused on conceptual classification, national-level benchmarking, or broad policy outcomes. Furthermore, several studies have extended performance assessment to include areas such as hospital supply chains, statistical forecasting of performance trends, and exploring commonly reported key performance indicators (Drăgan et al., 2025; Fallahnezhad et al., 2024; Talebpour et al., 2025). The impact of privatization initiatives, particularly regarding the transformation of Saudi Arabia's health care sector, on hospital performance indicators at both institutional and operational levels remains uncertain.

Moreover, in current studies researchers have rarely considered the influence of staff perceptions and internal readiness, as well as organizational and communication factors, on the effectiveness of the privatization process in improving performance indicators, especially for hospitals undergoing active transformation. To our knowledge, no such work has been conducted for Abha Maternity and Children Hospital. This study adds to the existing knowledge by providing a practical, context-specific analysis of how health care privatization may affect key hospital performance indicators in a real-world setting. Focusing on Abha Maternity and Children Hospital, we present empirical insights from a hospital involved in the ongoing Health Sector Transformation Program in Saudi Arabia, thereby bridging the gap between policy expectations and actual implementation.

This study enables a better understanding of Health care privatization by linking performance indicators to organizational culture, staff awareness, and internal process readiness—factors that have not been fully explored in previous research. The exploratory nature of this study emphasizes the importance of training, communication, and standardization of performance measurement practices, offering both theoretical insights and practical recommendations to help hospital leaders improve performance amid privatization-driven reforms. This study contributes to academic discourse and offers guidance for policymakers, hospital administrators, and health care quality teams seeking to align performance-improvement strategies with privatization and transformation initiatives.

Methods

In this study we adopted the descriptive method because it is the most appropriate for achieving the study objectives, which focus on identifying the reality and level of the impact of health care privatization on improving hospital performance indicators. The study was applied to Abha Maternity and Children Hospital as a case study in the Kingdom of Saudi Arabia. We adapted an exploratory study involving 45 participants from various levels within the hospital. The study represents different administrative and clinical roles, including department heads, supervisors, nurses, and quality specialists. The purpose of this exploratory phase was to gather preliminary insights regarding the level of efficiency, quality of service delivery, patient flow management, and responsiveness to patient needs. We collected data through interviews with employees at Abha Maternity and Children Hospital.

Results

Performance indicators in hospitals are widely used as a reliable approach to evaluating and assessing the quality of health care services and the effectiveness of operational activities. Performance indicators provide a clear picture of how well the hospital is performing at both administrative and clinical levels.

Beyond measurement, these indicators also help identify areas that require improvement and support decision-makers in setting priorities. The focus of this study is on examining performance indicators at Abha Maternity and Children Hospital, which represents an important model of a public health care institution that continues to undergo development and improvement efforts.

The analysis in Table 1 is based on the responses of 45 participants representing different clinical and administrative roles within Abha Maternity and Children Hospital. We adapted a five-point Likert scale to capture participants' views on a set of statements related to hospital performance indicators. The purpose of our analysis is to understand how employees perceive their current statues level of the hospital's performance and how these indicators are reflected in the quality of care.

Each statement was assessed using five response levels: Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), and Strongly Agree (5). We calculated the number and percentage of participants selecting each response. In Table 1 we summarize the results and present a detailed view of participants' responses regarding performance indicators in Abha Maternity and Children Hospital.\

Table 1 Participants' Responses Regarding Performance Indicators in Abha Maternity and Children Hospital

No.	Statement	Strongly Disagree (1) Count / %	Disagree (2) Count / %	Neutral (3) Count / %	Agree (4) Count / %	Strongly Agree (5) Count / %
1	Performance indicators measure the efficiency and quality of health care services.	3 (6.7%)	5 (11.1%)	12 (26.7%)	15 (33.3%)	10 (22.2%)
2	Performance indicators help in utilizing human and material resources efficiently.	4 (8.9%)	6 (13.3%)	11 (24.4%)	14 (31.1%)	10 (22.2%)
3	Analyzing indicators such as length of stay and bed occupancy contribute to performance improvement.	5 (11.1%)	6 (13.3%)	13 (28.9%)	12 (26.7%)	9 (20.0%)
4	Performance indicators enhance transparency and support administrative decision-making.	4 (8.9%)	7 (15.6%)	12 (26.7%)	13 (28.9%)	9 (20.0%)
5	Patient satisfaction reflects the quality of health care services provided.	3 (6.7%)	6 (13.3%)	10 (22.2%)	14 (31.1%)	12 (26.7%)
6	Readmission rates serve as an indicator of the effectiveness of treatment plans.	6 (13.3%)	7 (15.6%)	12 (26.7%)	11 (24.4%)	9 (20.0%)
7	Long waiting times indicate weak operational efficiency in the hospital.	7 (15.6%)	9 (20.0%)	13 (28.9%)	10 (22.2%)	6 (13.3%)
8	Comparing performance indicators with other hospitals improves competitiveness.	4 (8.9%)	8 (17.8%)	14 (31.1%)	12 (26.7%)	7 (15.6%)
9	Regular measurement of performance indicators detects administrative problems early.	3 (6.7%)	7 (15.6%)	12 (26.7%)	14 (31.1%)	9 (20.0%)

10	Financial performance indicators reflect economic sustainability.	5 (11.1%)	8 (17.8%)	13 (28.9%)	11 (24.4%)	8 (17.8%)
11	Analyzing medication errors improves patient safety.	4 (8.9%)	6 (13.3%)	14 (31.1%)	13 (28.9%)	8 (17.8%)
12	Hospital-acquired infection rates indicate adherence to infection control procedures.	5 (11.1%)	7 (15.6%)	12 (26.7%)	13 (28.9%)	8 (17.8%)
13	Average length of stay reflects the efficiency of diagnosis and treatment.	6 (13.3%)	8 (17.8%)	14 (31.1%)	11 (24.4%)	6 (13.3%)
14	Workforce stability represents a healthy, supportive work environment.	4 (8.9%)	7 (15.6%)	11 (24.4%)	13 (28.9%)	10 (22.2%)
15	Health information systems support accurate reporting and administrative decision-making.	3 (6.7%)	6 (13.3%)	13 (28.9%)	14 (31.1%)	9 (20.0%)

Note. The percentage reflects the share of respondents who selected that answer.

According to Table 1, the outcomes reveal that most people perceive hospital performance indicators at Abha Maternity and Children Hospital as having medium to positive perception levels. For most items, the highest percentages are in the categories of Agree and Neutral, indicating that staff recognize the presence of performance indicators but see areas for improvement. For example, when using performance indicators to evaluate service efficiency and quality, 33.3% agreed and 22.2% strongly agreed, whereas 26.7% remained neutral.

Similarly, the findings on the efficient use of human and material resources show a comparable distribution, with 31.1% agreeing and 22.2% strongly agreeing, compared to 24.4% who expressed other views. These findings suggest that although many staff members are satisfied that resources are well utilized, some uncertainty remains. Conversely, patient-centered measures, such as patient satisfaction as an indicator of service quality, showed higher agreement levels, with 31.1% agreeing and 26.7% strongly agreeing.

Regarding operational factors such as waiting times and readmission rates, there was a slightly higher percentage of disagreement. For example, regarding long waiting times as an indicator of inefficiency, 20.0% disagreed, and 15.6% strongly disagreed, suggesting that the hospital effectively manages patient flow. However, 28.9% exhibited neutrality, suggesting a degree of variation. Regarding readmission rates, 26.7% were neutral, 24.4% expressed agreement, and 20.0% strongly agreed. Despite acknowledging the importance of monitoring readmission rates, staff have different views on their effectiveness.

Discussion

The findings show that the staff members of Abha Maternity and Children Hospital tend to have relatively equal and progressively positive attitudes concerning the performance indicators of the hospital. Most of the respondents tended to choose either “Agree” or “Neutral” options, which indicates that the members are well-informed regarding the use of performance measurement practices, though their applicability and clarity are not equal for the various departments. This trend indicates that the performance level for the hospitals stands somewhere in the middle, where there are efforts for improvement, but it is still evolving.

The responses reflect that most of the hospital employees think that the performance indicators help improve the quality of care and assist the administration. This perspective was particularly noticeable in the responses regarding patient satisfaction as one of the most important indicators of quality, where the percentage of agreement was higher. This result could be attributed to the increasing focus of the

health care transformation strategy on the Kingdom of Saudi Arabia to improve patient satisfaction, thus making it an important topic of discussion for the hospital workforce.

In contrast, the fact that there are relatively high proportions of responses that are neutral on some items indicates that not all staff members are engaged and familiar with the process for which performance indicators are measured and interpreted. This result could suggest that although there are processes for the measurement of performance, there are discrepancies in the levels of engagement and communication concerning the processes. In fact, the indicators that are linked to the process concerning operational efficiency, such as waiting times and rates for readmission, had high levels of variability.

These results highlight an important development focus. To enhance the use and effectiveness of performance indicators, it would be an advantage for the hospital to focus on offering further training, improving communication networks for management and staff, and ensuring standardized measurement and reporting for all departments. The involvement of staff members in performance reviews could play an important role and help the hospital promote a culture of responsibility.

Overall, the findings show that there exists some degree of performance for Abha Maternity and Children Hospital, which exhibits excellent increasing tendencies concerning some indicators of performance. The employees seem to understand the use of performance indicators for the improvement of health care, and they perceive the practices applied inside the hospital as acceptable. However, the high degree of the number of employees who gave neutral answers for most of the statements indicates that some employees fail to understand how performance indicators are applied, interpreted, and correlated to performance. Nonetheless, there appears to be an urgent need for improvement concerning the efforts exerted for continuous employee training; the development of efficient communication processes between the administration and the hospital employees; and the standardization of processes regarding the collection, processing, and utilization of performance indicators for the entire hospital.

Conclusion

The study's findings and analyses provide an overview of the current situation regarding the performance indicators of Abha Maternity and Children Hospital. The findings clearly show that the hospital's performance is at a medium level and that some transitional progress toward improvement is occurring. The staff members seemed to understand the importance of the performance indicators and the benefits of such indicators for enhanced performance and improvement. The repeated neutral responses to the same items indicate that staff members are unfamiliar with the processes involved in the evaluation and use of performance indicators.

In addition, the study's findings underline the significance of standardization in the process of data collection and reporting, particularly across various departments. Increased levels of transparency and facilitated collaboration for reviewing performance results could provide impetus for improved continuous improvement and the development of the hospital, as per the health care transformation strategy objectives in the Kingdom of Saudi Arabia.

This study had an exploratory design and was conducted on a smaller sample size of 45 participants from the same health care setting. This small sample size could prove to be one limitation on the generalizability of the findings to other hospitals. In addition, the study was based on self-perceptions, which may be influenced by factors such as individual experiences, job positions, and levels of familiarity and awareness of performance management systems. In this study we did not present information based on external comparisons and patient outcome information, which could assist in gaining an even deeper and objective perspective regarding performance levels. We recommend that in future studies researchers base their work on larger and varied samples and quantitative performance information.

Based on the outcomes, we observed that there was a moderate level of performance, with gradual improvements over time. However, we noted a high number of neutral responses, along with inconsistencies in the clarity of performance indicator practices. Therefore, we recommend ongoing employee training sessions at various levels of professionalism. These sessions would focus on enhancing employees' understanding of how to compile and utilize performance indicators.

In addition, the report we proposes enhancing the communication process between the administration and staff regarding performance results. This improvement can be achieved by sharing the results of

the performance indicators, which would help create clarity and therefore improve staff engagement. This aspect would help develop a culture of improvement. The outcome of the study, therefore, would suggest that there are factors that should be addressed concerning variability observed in some indicators, such as waiting times and rates of readmission. Consequently, we propose that patient pathways be assessed and optimized and process improvement carried out.

In addition, this study illustrates the need for standardized performance measurement processes for all units of the hospital. Use of standardized data collection and reporting tools would help increase the accuracy of the process. These metrics would help eliminate inaccuracies that could arise. We also recommend that the culture of quality and performance measurement be promoted by involving people in quality committees and improvement teams and by allowing frontline employees to suggest solutions. This initiative would help performance indicators shift from the perspective of administrative burdens to tools of professionals. Finally, it would be advisable to carry out assessments regarding the maturity of performance indicator development and implementation on a semiannual or annual basis, comparing the progress achieved against the desired objectives. These assessments should be tied to the employee development and reward programs to ensure that the efforts are not merely short term.

This study's findings, along with its exploratory nature, highlight several areas for future research. First, future studies should be conducted across multiple hospitals in the kingdom to improve the generalizability of the results. For comparison purposes, it would be valuable to examine government hospitals undergoing privatization as well as those that are not. Second, it would be beneficial to conduct research using both subjective and quantitative performance indicators, such as patient records and financial data, to better understand how privatization influences these performance metrics. Third, longitudinal study should be used to examine the performance indicators before and after the privatization and PPP schemes are implemented. This approach would help assess whether the performance improvement experienced after the privatization process, if any, tends to be short term and based on certain conditions. In the future, the relationship between the privatization process and performance improvement, and possibly the internal factors that influence the process (e.g., culture, motivation, leadership styles of management), could be investigated.

References

1. Alasiri, A. & Mohammed, V. (2022). Healthcare Transformation in Saudi Arabia: An Overview Since the Launch of Vision 2030. https://doi.org/10.1177/11786329221121214
2. Carini, E., Gabutti, I., Frisicale, E. M., Di Pilla, A., Pezzullo, A. M., De Waure, C., Cicchetti, A., Boccia, S., & Specchia, M. L. (2020). Assessing hospital performance indicators. What dimensions? Evidence from an umbrella review. BMC Health Services Research, 20(1), 1038. https://link.springer.com/article /10.1186/s12913-020-05879-y
3. Drăgan, C. O., Mihai, L. S., Popescu, A. M. C., Buligiu, I., Mirescu, L., & Militaru, D. (2025, January). Statistical analysis and forecasts of performance indicators in the Romanian healthcare system. Healthcare (Vol. 13, No. 2, 102). MDPI. https://doi.org/10.3390/healthcare13020102
4. Duggan, M., Gupta, A., Jackson, E., & Templeton, Z. S. (2023). The impact of privatization: Evidence from the hospital sector (No. w30824). National Bureau of Economic Research. https://www.nber.org/papers/w30824
5. Hadian, S., Rezayatmand, R., Shaarbafchizadeh, N., Ketabi, S., & Pourghaderi, A. (2024). Hospital performance evaluation indicators: a scoping review. https://doi.org/10.1186/s12913-024-10940-1
6. Fallahnezhad, M., Langarizadeh, M., & Vahabzadeh, A. (2024). Key performance indicators of hospital supply chain: A systematic review. BMC Health Services Research, 24, Article 11954.
7. Ghalibi, K. M., Omer, H. M. I., & Al Mamun, M. (2024). Awareness and readiness of healthcare workers regarding national transformation program in the health sector in Tabuk Region, Saudi Arabia. Saudi Journal of Health Systems Research, 4(1), 45–53. https://doi.org/10.1159/000534781
8. Iroz, C., Ramaswamy, R., Bhutta, Z., & Barach, P. (2024). Quality improvement in public–private partnerships in low- and middle-income countries: a systematic review. https://doi.org/10.1186/s12913-024-10802-w
9. Nabovati, E., Farrahi, R., Sadeqi Jabali, M., Khajouei, R., & Abbasi, R. (2023). Identifying and prioritizing the key performance indicators for hospital management dashboard at a national level:

Viewpoint of hospital managers. Health Informatics Journal, 29(4), 14604582231221139. https://doi.org/10.1177/ 14604582231221139

10. Rahman, H. M. A. A. (2024). Privatization of University Hospital and its impact on improving the quality of health services. Journal of Arts, Literature, Humanities and Social Sciences, (99), 604–631. https://doi.org/10.33193/JALHSS.99.2024.993
11. Ranjbar, M., Bazyar, M., Jafari, H., Pakdaman, M., & Pirasteh, V. (2021). Investigating the effect of health transformation plan on the public hospitals performance indicators; a case study from Iran. BMC Health Services Research, 21(1), 1133. https://link.springer.com/article/10.1186/s12913-021-07164-y
12. Suleiman, A. K., & Ming, L. C. (2025). Transforming healthcare: Saudi Arabia's vision 2030 healthcare model. Journal of Pharmaceutical Policy and Practice, 18(1), 2449051. https://doi.org/10.1080/ 20523211.2024.2449051
13. Talebpour, A., Sadeghi-Bazargani, H., Janati, A., Pashazadeh, F., & Gholizadeh, M. (2025). Crucial key performance indicators for hospital evaluation: A scoping review. Journal of Education and Health Promotion, 14(1), 195. https://journals.lww.com/jehp/fulltext/2025/05300/crucial_key_performance_indicators_for_hospital.195.aspx