Evaluating Health System Performance And Strategic Decision-Making Across Departments Of The Saudi Ministry Of Health

Dr. Abdulrahman Monuser Assaf Alsharif[1], Hussain ghanm shoail algashanin[2], Ahmad Assaf Alshereif[3], Ibrahim Saleh Mohammed Hashil[4], Hassan Mohammed Aljarrash[5], Hassan Makki Al Khamis[6], Khaled Jarallah Albalabel[7], Zaid Mohammad Ali Al Sharif[8]

[1.] Ministry of Health, Saudi Arabia
[2.] Ministry of Health, Saudi Arabia
[3.] Ministry of Health, Saudi Arabia
[4.] Ministry of Health, Saudi Arabia
[5.] Ministry of Health, Saudi Arabia
[6.] Ministry of Health, Saudi Arabia
[7.] Ministry of Health, Saudi Arabia
[8.] Ministry of Health, Saudi Arabia

Abstract
This research examines the performance evaluation mechanisms and strategic decision-making processes across departments within the Saudi Ministry of Health (MOH), focusing on their effectiveness in delivering healthcare services aligned with Vision 2030 objectives. Using a mixed-methods approach combining quantitative analysis of health system performance metrics and qualitative insights from key stakeholders, this study proposes an integrated framework for enhancing evidence-based decision-making throughout the Ministry. The findings reveal significant opportunities for improving cross-departmental collaboration, data integration, and strategic alignment. The research identifies four essential components for successful health system performance management: standardized evaluation frameworks, integrated information systems, collaborative governance mechanisms, and evidence-based decision-making protocols. This paper contributes to the growing discourse on healthcare transformation in Saudi Arabia by demonstrating how enhanced coordination across Ministry departments can drive system-wide improvements in healthcare delivery, resource allocation, and ultimately population health outcomes in alignment with national development goals.
Keywords: Health System Performance, Strategic Decision-Making, Saudi Ministry of Health, Vision 2030, Healthcare Evaluation, Evidence-Based Policy, Data Integration, Cross-Departmental Collaboration

1. INTRODUCTION

1.1 Background

Healthcare systems worldwide face unprecedented challenges in delivering high-quality, accessible, and cost-effective services amid changing population demographics, rising chronic disease burdens, and evolving public expectations. Robust performance evaluation mechanisms and effective strategic decision-making processes are essential for health ministries to address these challenges successfully (Phillips-Wren et al., 2020). Saudi Arabia's healthcare landscape has undergone significant transformation in recent years, driven by the ambitious goals outlined in Vision 2030, which explicitly positions healthcare

enhancement as a cornerstone of social and economic development (Alkhamis & Hassan, 2022).

The Saudi Ministry of Health (MOH), as the principal healthcare provider and regulator in the Kingdom, comprises numerous departments responsible for various aspects of the healthcare system, including public health, hospital services, primary care, workforce development, information technology, and planning. Each department operates with specific mandates, performance indicators, and decision-making processes, often leading to fragmented approaches to healthcare delivery and policy implementation (Kharrazi & Lehmann, 2024).

Despite significant investments in digital health infrastructure and artificial intelligence capabilities, Saudi Arabia continues to face challenges in healthcare delivery, including rising rates of non-communicable diseases, geographic disparities in healthcare access, and the need to optimize resource allocation across diverse contexts (Al-Daghri et al., 2021). Effective coordination across MOH departments is crucial for addressing these challenges and achieving the healthcare transformation goals outlined in Vision 2030.

1.2 Problem Statement

Despite significant investments and reforms under Vision 2030, a comprehensive and integrated framework for evaluating health system performance and linking it directly to strategic decision-making across all departments of the Saudi Ministry of Health remains challenging. This often leads to fragmented efforts, data silos, and suboptimal resource allocation. The complexity of the healthcare system, with its multiple departments and stakeholders, creates barriers to cohesive planning and implementation of healthcare initiatives. Moreover, the lack of standardized performance metrics and evaluation approaches across departments hinders systematic assessment of overall health system performance and impedes evidence-based strategic decision-making at the ministerial level.

1.3 Research Objectives

This research addresses this gap by examining how performance evaluation and strategic decision-making processes can be enhanced and harmonized across departments within the Saudi MOH. Specifically, the research objectives are:

1. To assess the current frameworks and methodologies used by different departments within the Saudi MOH to evaluate health system performance
2. To identify key challenges and facilitators in integrating performance data into strategic decision-making processes across MOH departments
3. To develop and validate a comprehensive framework for enhancing cross-departmental coordination in performance evaluation and strategic decision-making
4. To propose evidence-based recommendations for strengthening the connection between performance measurement and strategic planning across the Ministry

1.4 Significance of the Study

This research has significant implications for healthcare policy and practice in Saudi Arabia. By examining how performance evaluation and strategic decision-making can be enhanced across MOH departments, this study contributes to the evolving discourse on healthcare transformation under Vision 2030. The findings can inform the development of integrated performance management systems and collaborative decision-making processes that strengthen the Ministry's capacity to address complex health challenges effectively. Furthermore, the proposed framework offers practical guidance for policymakers, health administrators, and department leaders seeking to improve coordination and strategic alignment across the healthcare system.

2. LITERATURE REVIEW

2.1 Health System Performance Evaluation Frameworks

Health system performance evaluation has evolved significantly over the past decade, with increasing emphasis on comprehensive frameworks that capture multiple dimensions of healthcare delivery (Yakovlev, 2025). The World Health Organization's (WHO) health systems performance assessment framework highlights six core dimensions: effectiveness, efficiency, accessibility, acceptability/patient-centeredness, equity, and safety (WHO, 2018). Similarly, the Institute for Healthcare Improvement's Quadruple Aim emphasizes improving patient experience, enhancing population health, reducing costs, and improving provider work-life (Sikka et al., 2019).

In Saudi Arabia, health system performance evaluation has traditionally focused on input indicators (e.g., number of hospitals, beds, workforce) and output measures (e.g., utilization rates, procedural volumes), with less emphasis on outcomes and patient experiences (Alharthi, 2018). Recent efforts have aimed to develop more comprehensive frameworks aligned with international best practices, though implementation varies across departments and regions (Al-Abri, 2020).

2.2 Strategic Decision-Making in Healthcare Organizations

Strategic decision-making in healthcare organizations involves complex processes influenced by multiple factors, including organizational structure, leadership styles, stakeholder interests, resource constraints, and external environments (Phillips-Wren et al., 2020). Effective strategic decisions require reliable data, analytical capabilities, stakeholder engagement, and alignment with organizational vision and values.

Research by Noorain et al. (2023) emphasizes the importance of evidence-based approaches to strategic planning in healthcare organizations, highlighting how data-driven insights can enhance decision quality and implementation effectiveness. Studies by Singh et al. (2024) further demonstrate how strategic decision-making in healthcare organizations increasingly leverages advanced analytics, including predictive modeling and artificial intelligence, to anticipate future challenges and optimize resource allocation.

2.3 Data-Driven Decision-Making in Healthcare

The healthcare sector has witnessed a significant shift toward data-driven decision-making, enabled by advances in information technology, analytics capabilities, and digital health infrastructure (Kharrazi & Lehmann, 2024). Predictive analytics, artificial intelligence, and machine learning have demonstrated value in various healthcare applications, including disease surveillance, resource planning, quality improvement, and personalized interventions.

In Saudi Arabia, the adoption of data-driven approaches has accelerated in recent years, with the establishment of the Saudi Data and Artificial Intelligence Authority (SDAIA) and significant investments in digital health infrastructure (Alkhamis & Hassan, 2022). However, challenges remain in data quality, interoperability, analytical capabilities, and organizational cultures that support evidence-based decision-making (Toit et al., 2023).

2.4 Healthcare Governance and Inter-departmental Collaboration

Effective healthcare governance requires clear structures, processes, and relationships that ensure healthcare organizations achieve their objectives with accountability, transparency, and integrity (Ademusi et al., 2024). Inter-departmental collaboration is essential for addressing complex health challenges that span traditional organizational boundaries and require coordinated responses.

Research by Paik et al. (2023) highlights the importance of collaborative governance models in healthcare organizations, emphasizing how shared decision-making structures, communication channels, and accountability mechanisms can enhance coordination across

departments and functions. Similarly, studies by Bigna et al. (2022) demonstrate how standardized data governance frameworks can facilitate information sharing and collaborative analysis across organizational boundaries.

2.5 Saudi Arabia's Healthcare Transformation under Vision 2030

Saudi Arabia's Vision 2030 has positioned healthcare transformation as a central pillar of national development, with ambitious goals for improving population health outcomes, enhancing healthcare quality and efficiency, and developing a sustainable healthcare system (Al-Daghri et al., 2021). Key initiatives include the privatization of healthcare services, expansion of health insurance coverage, adoption of digital health technologies, and workforce development.

The Ministry of Health plays a central role in implementing Vision 2030's healthcare transformation agenda, with responsibility for policy development, service delivery, regulation, and coordination across the healthcare system (Alkhamis & Hassan, 2022). However, the complexity of the transformation agenda and the diversity of stakeholders involved create challenges for effective implementation and coordination across Ministry departments.

3. METHODOLOGY

3.1 Research Design

This study employed a mixed-methods research design combining quantitative and qualitative approaches to provide a comprehensive understanding of health system performance evaluation and strategic decision-making processes across departments within the Saudi MOH. The sequential explanatory design first collected and analyzed quantitative data on performance metrics and decision-making patterns, followed by qualitative exploration to provide deeper insights into the findings.

3.2 Study Population and Sampling

The study population comprised key stakeholders across various departments within the Saudi MOH, including department directors, strategic planning officers, performance monitoring specialists, data analysts, and healthcare administrators. A purposive sampling approach was used to select participants who could provide informed perspectives on departmental performance evaluation and strategic decision-making processes.

For the quantitative phase, we collected data from 23 departments within the MOH, representing various functional areas including public health, hospital services, primary care, health informatics, quality improvement, workforce development, and planning. For the qualitative phase, we conducted in-depth interviews with 35 key informants and organized 4 focus group discussions with 6-8 participants each.

3.3 Data Collection Methods

3.3.1 Quantitative Data Collection

Quantitative data collection involved:

- **Document analysis:** Review of departmental strategic plans, performance reports, balanced scorecards, and monitoring frameworks to identify stated objectives, performance indicators, and evaluation methodologies.
- **Survey questionnaire:** Administration of a structured questionnaire to department representatives, gathering information on performance measurement practices, data utilization patterns, decision-making processes, and cross-departmental coordination.
- **Performance metrics database:** Compilation of key performance indicators tracked by each department, including input measures (resources, staffing), process measures (activities, compliance), output measures (services delivered), and outcome measures (health impacts, patient satisfaction).

3.3.2 Qualitative Data Collection

Qualitative data collection included:

- **In-depth interviews:** Semi-structured interviews with key stakeholders exploring their perspectives on performance evaluation practices, strategic decision-making processes, facilitators and barriers to data utilization, and opportunities for cross-departmental coordination.
- **Focus group discussions:** Facilitated discussions with mixed groups of stakeholders from different departments, examining shared challenges, collaborative opportunities, and potential solutions for enhancing performance evaluation and strategic decision-making.
- **Case studies:** Detailed examination of specific initiatives or decisions that required coordination across multiple departments, documenting processes, challenges, and outcomes.

3.4 Data Analysis

3.4.1 Quantitative Data Analysis

Quantitative data were analyzed using descriptive and inferential statistical methods. Descriptive analyses included frequency distributions, measures of central tendency, and variability for survey responses and performance indicators. Comparative analyses examined differences in performance measurement practices and decision-making approaches across departments. Correlation analyses explored relationships between performance measurement attributes (comprehensiveness, frequency, utilization) and perceived effectiveness of strategic decision-making.

3.4.2 Qualitative Data Analysis

Qualitative data were analyzed using thematic analysis techniques. Interview and focus group transcripts were coded using a hybrid approach combining predetermined codes based on the research questions and emergent codes identified during the analysis. The coding process involved open coding, axial coding, and selective coding to identify key themes and relationships. NVivo software was used to facilitate the organization and analysis of qualitative data.

3.5 Ethical Considerations

The study adhered to ethical principles and obtained approval from the appropriate institutional review boards. Informed consent was obtained from all participants, and confidentiality was maintained throughout the research process. Data were anonymized during analysis and reporting to protect participant identities. The research team also maintained transparency regarding the study's purpose, methods, and potential implications.

4. RESULTS

4.1 Current Performance Evaluation Landscape

4.1.1 Variability in Performance Evaluation Frameworks

Our analysis revealed considerable variability in performance evaluation frameworks across MOH departments. While all departments reported having some form of performance measurement system, the comprehensiveness, sophistication, and utilization of these systems varied significantly. Figure 1 illustrates the distribution of departments according to the maturity level of their performance evaluation systems.

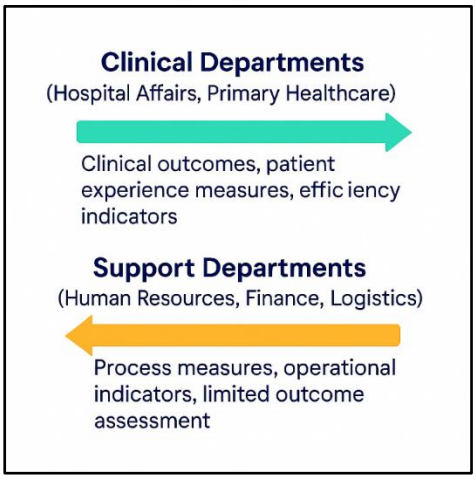

Figure 1: Maturity Levels of Departmental Performance Evaluation Systems

Clinical departments (Hospital Affairs, Primary Healthcare) generally demonstrated more advanced performance measurement systems, often incorporating clinical outcomes, patient experience measures, and efficiency indicators. In contrast, support departments (Human Resources, Finance, Logistics) predominantly focused on process measures and operational indicators, with limited outcome assessment.

4.1.2 Performance Indicator Profiles

Analysis of performance indicators used across departments revealed an imbalance in measurement focus. As shown in Table 1, process and output measures dominated departmental scorecards, while outcome measures and patient-reported indicators were less prevalent.

Table 1: Distribution of Performance Indicator Types Across MOH Departments

Indicator Type	% of Total Indicators	# of Departments Using	Focus	Typical Use	Strategic Value
Input measures	22%	23	Resources & readiness	Budget, staffing, infrastructure	Foundational, not outcome-linked
Process measures	41%	23	Activities & workflows	Protocol adherence, service flow	Operational optimization
Output measures	28%	22	Immediate results	Service volume, completion rates	Performance tracking
Outcome measures	7%	14	Long-term impact	Health status, recovery rates	Strategic effectiveness
Patient-reported measures	2%	8	Experience & perception	Satisfaction, quality of life	Equity & person-centered care

Furthermore, most departments operated with a large number of indicators (average of 43 per department), creating challenges for focused performance management and strategic decision-making.

4.1.3 Data Quality and Integration Challenges

Significant challenges were reported regarding data quality, integration, and accessibility across departmental boundaries. Survey responses indicated that 67% of department

representatives considered data fragmentation a major obstacle to comprehensive performance evaluation, while 58% reported difficulties in accessing relevant data from other departments.

Qualitative findings provided further insights into these challenges:

"We collect extensive data within our department, but when we need to understand how our initiatives affect outcomes measured by other departments, the process becomes extremely cumbersome. Systems don't talk to each other, and data definitions often differ." - Director, Quality and Patient Safety Department

"Sometimes we discover that multiple departments are tracking similar indicators but using different definitions or calculation methods, making it impossible to compare or aggregate results." - Performance Specialist, Strategic Planning Department

4.2 Strategic Decision-Making Processes

4.2.1 Decision-Making Approaches

The study identified three predominant approaches to strategic decision-making across MOH departments, as illustrated in Figure 2:

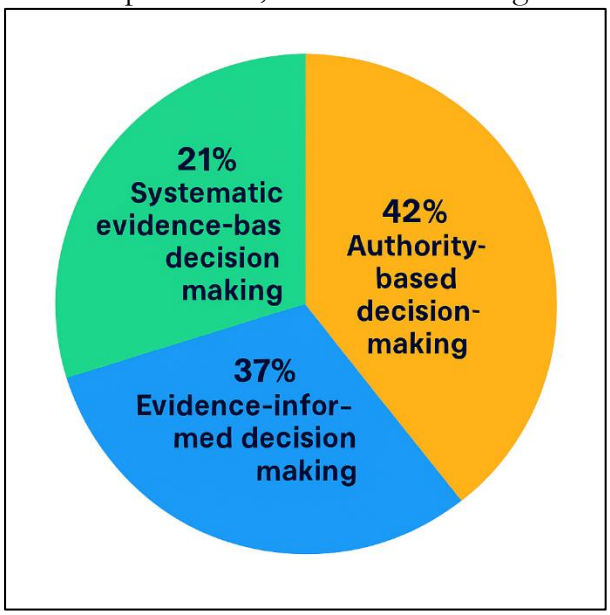

Figure 2: Predominant Strategic Decision-Making Approaches

1. **Authority-based decision-making (42%)**: Decisions primarily driven by hierarchical authority and expert opinion
2. **Evidence-informed decision-making (37%)**: Decisions influenced by data and evidence but balanced with other considerations
3. **Systematic evidence-based decision-making (21%)**: Decisions systematically based on comprehensive data analysis and evaluation

Departments with more mature performance measurement systems were significantly more likely to employ evidence-informed or evidence-based decision-making approaches ($p<0.01$), suggesting a positive relationship between performance measurement capabilities and evidence-based practice.

4.2.2 Utilization of Performance Data

While 83% of departments reported regularly collecting performance data, only 47% indicated that these data consistently informed strategic decisions. Figure 3 illustrates the reported frequency with which performance data influenced various types of decisions.

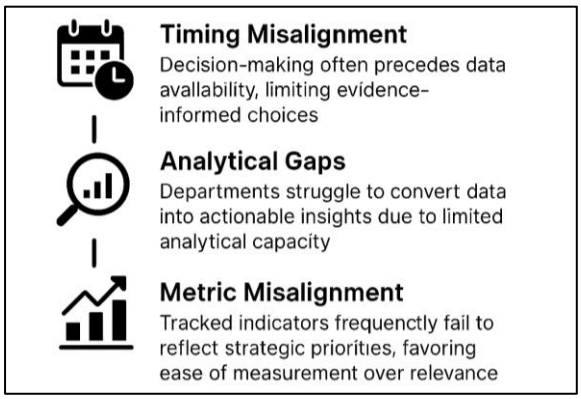

Figure 3: Influence of Performance Data on Different Decision Types

Qualitative findings revealed several barriers to effective utilization of performance data:

"Often, the timing of decision-making doesn't align with our measurement cycles. Urgent decisions need to be made before we have the complete data picture." - Planning Director

"We collect the data, generate the reports, but then struggle to translate findings into clear action implications. There's a gap in analytical capabilities." - Health Information Department Head

"Sometimes the performance metrics we track don't directly address the strategic questions leaders are asking. We measure what's easy to measure rather than what's most important for decision-making." - Strategic Advisor

4.2.3 Cross-Departmental Decision-Making

The study revealed significant challenges in coordinating strategic decisions across departmental boundaries. Survey responses indicated that 73% of participants perceived inadequate mechanisms for cross-departmental strategic planning and decision-making. Qualitative data highlighted several specific challenges:

"Each department develops its own strategic initiatives with limited consideration of their impact on or dependencies with other departments. We operate in parallel universes." - Senior Administrator

"When decisions require input or implementation from multiple departments, the process becomes extremely slow. Accountability gets diffused, and coordination costs are high." - Department Director

"We have joint committees for specific issues, but they lack decision-making authority. They make recommendations that then need to go through each department's approval process." - Planning Officer

The most effective cross-departmental decision-making occurred when there was: (1) clear executive sponsorship, (2) shared accountability for outcomes, (3) dedicated coordination resources, and (4) aligned performance metrics across departments.

4.3 Integration of Performance Evaluation and Strategic Decision-Making

4.3.1 Current Linkage Mechanisms

The study identified varying degrees of integration between performance evaluation and strategic decision-making processes across departments, as shown in Table 2.

Table 2: Levels of Integration Between Performance Evaluation and Strategic Decision-Making

Integration Level	Description	% Distribution	Focus Area	Signature Actions	Community Linkages

Minimal	Separate processes with limited connection	35%	Siloed operations	Ad hoc coordination	Weak or absent
Periodic	Reviewed during planning cycles only	42%	Strategic reviews	Annual planning sessions	Limited, formalized
Operational	Influences daily tasks but not strategy	14%	Workflow alignment	Embedded routines	Functional partnerships
Comprehensive	Fully integrated at multiple levels	9%	Strategic and operational synergy	Cross-sector co-design	Strong, multi-level engagement

Qualitative findings revealed that even departments with sophisticated performance measurement systems sometimes struggled to translate performance insights into strategic decisions:

"We've invested heavily in our measurement capabilities, but there's still a gap between having the data and knowing what strategic changes we should make in response." - Quality Improvement Director

"Our performance review meetings tend to focus on explaining variances rather than making strategic adjustments. We're better at diagnosis than treatment." - Hospital Affairs Executive

4.3.2 Barriers to Integration

Through our analysis of survey responses and qualitative data, we identified four categories of barriers to effective integration of performance evaluation and strategic decision-making, as illustrated in Table 3.

Table 3: Key Barriers to Integration of Performance Evaluation and Strategic Decision-Making

Barrier Category	Specific Challenges	Prevalence	Focus Area	Signature Actions Needed	Stakeholder Implications
Technical Barriers	- Data accessibility limitations - Analytical capability gaps - Interoperability issues - Reporting delays	High	Infrastructure & tools	Invest in interoperable systems; build analytical capacity	Limits evidence-based decision-making; slows reporting
Organizational Barriers	- Departmental silos - Misaligned incentives	Very High	Governance & alignment	Establish cross-departmental	Fragmented efforts; weak accountabili

	- Competing priorities - Unclear accountability			governance; align incentives	ty; reduced efficiency
Methodological Barriers	- Metric relevance/validity issues - Lack of predictive capabilities - Difficulty linking metrics to strategy - Inadequate causal models	Moderate	Measurement & evaluation	Develop robust causal models; integrate predictive analytics	Weak strategic insights; limited long-term planning
Cultural Barriers	- Resistance to data-driven approaches - Risk aversion - Preference for experience over evidence - Time pressure	High	Mindset & adoption	Promote data literacy; incentivize evidence-based culture	Slows innovation; perpetuates reliance on tradition

4.3.3 Enablers of Effective Integration

The study also identified key factors that facilitated successful integration of performance evaluation and strategic decision-making in certain departments or initiatives:

"When we aligned our performance metrics directly with our strategic objectives and reviewed them in the same meetings, the connection between measurement and decision-making became much stronger." - Strategic Planning Director

"Creating visualization dashboards that connected performance data to strategic options made it much easier for leadership to see the implications of the data for decision-making." - Health Informatics Specialist

"Having analytical staff who understand both the technical aspects of measurement and the strategic context of decisions has been crucial for translating data into actionable insights." - Public Health Department Head

4.4 Integrated Framework for Performance Evaluation and Strategic Decision-Making

Based on our findings, we developed an integrated framework to strengthen the connection between performance evaluation and strategic decision-making across MOH departments. The framework consists of four interconnected components, as illustrated in Figure 4:

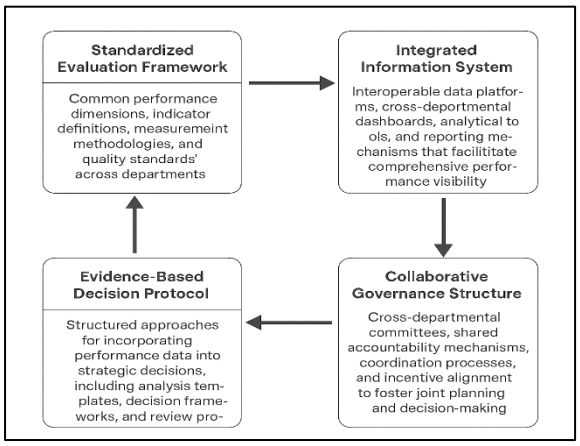

Figure 4: Integrated Framework for Performance Evaluation and Strategic Decision-Making

1. **Standardized Evaluation Framework**: Common performance dimensions, indicator definitions, measurement methodologies, and quality standards across departments
2. **Integrated Information System**: Interoperable data platforms, cross-departmental dashboards, analytical tools, and reporting mechanisms that facilitate comprehensive performance visibility
3. **Collaborative Governance Structure**: Cross-departmental committees, shared accountability mechanisms, coordination processes, and incentive alignment to foster joint planning and decision-making
4. **Evidence-Based Decision Protocol**: Structured approaches for incorporating performance data into strategic decisions, including analysis templates, decision frameworks, and review processes

Each component addresses specific challenges identified in the study and builds on existing strengths within the MOH. The framework emphasizes practical implementation considerations rather than theoretical ideals, recognizing the complex reality of ministerial operations.

5. DISCUSSION

5.1 Key Findings and Implications

This study reveals that while the Saudi MOH has made significant progress in establishing performance evaluation mechanisms across its departments, considerable challenges remain in harmonizing these approaches and effectively integrating performance insights into strategic decision-making processes. The fragmented nature of performance measurement, limited cross-departmental data sharing, and barriers to evidence-based decision-making constrain the Ministry's ability to optimize healthcare delivery and achieve Vision 2030 objectives.

The findings align with previous research highlighting the challenges of performance management in complex healthcare organizations. As Kharrazi and Lehmann (2024) observed, healthcare institutions often struggle to transition from data collection to strategic insight generation, a pattern evident in our analysis of the Saudi MOH. Similarly, our identification of technical, organizational, methodological, and cultural barriers to data utilization echoes findings from Toit et al. (2023) regarding implementation challenges in healthcare analytics.

The integrated framework proposed in this study addresses these challenges by providing a comprehensive approach to strengthening performance evaluation and strategic decision-making across MOH departments. By emphasizing standardization, integration,

collaboration, and evidence-based protocols, the framework offers a roadmap for enhancing the Ministry's capacity to make informed strategic decisions that optimize health system performance.

5.2 Alignment with Vision 2030

The findings and recommendations from this study directly support Saudi Arabia's Vision 2030 healthcare transformation objectives. Vision 2030 emphasizes efficiency, effectiveness, and innovation in healthcare delivery, all of which require robust performance evaluation and evidence-based strategic decision-making. The integrated framework proposed in this study provides mechanisms for enhancing these capabilities across the MOH.

Furthermore, the emphasis on cross-departmental collaboration and data integration aligns with Vision 2030's focus on governance reform and institutional effectiveness. By breaking down silos and fostering coordinated approaches to healthcare challenges, the MOH can more effectively leverage its resources and expertise to improve population health outcomes.

5.3 Comparison with International Approaches

Comparing our findings with international experiences in health system performance management reveals both similarities and distinctive aspects of the Saudi context. Like healthcare systems in many countries, Saudi Arabia faces challenges in transitioning from fragmented, process-focused measurement to integrated, outcome-oriented evaluation (Phillips-Wren et al., 2020). However, several factors unique to the Saudi context influence these challenges, including:

1. **Rapid transformation agenda**: The ambitious pace of healthcare reform under Vision 2030 creates tension between established processes and new strategic directions.
2. **Centralized governance structure**: The MOH's hierarchical structure offers potential advantages for standardization but can complicate cross-departmental collaboration.
3. **Digital health investment**: Saudi Arabia's significant investments in health information technology and AI capabilities provide opportunities for advanced analytics if integration challenges can be addressed.

The integrated framework proposed in this study draws on international best practices while addressing these contextual factors. For example, the standardized evaluation component incorporates elements from the WHO health systems performance assessment framework but adapts them to the Saudi MOH's departmental structure and priorities.

5.4 Implementation Considerations

Implementing the proposed framework will require careful attention to several critical factors:

Phased approach: Full implementation across all departments simultaneously would be impractical given the scope of change required. A phased approach starting with pilot departments or specific strategic initiatives would allow for testing and refinement.

Leadership commitment: Sustained leadership support at both ministerial and departmental levels is essential for driving the cultural and organizational changes required.

Capability development: Enhancing analytical capabilities, data literacy, and evidence-based decision-making skills across the organization will be crucial for successful implementation.

Technology enablement: While technology alone cannot solve the challenges identified, appropriate information systems and analytical tools are necessary enablers for the integrated framework.

Change management: Systematic change management approaches will be needed to address resistance, build stakeholder buy-in, and sustain new practices beyond initial implementation.

5.5 Limitations

This study has several limitations that should be acknowledged. First, while we included representatives from 23 MOH departments, resource constraints prevented comprehensive coverage of all units and hierarchical levels. Second, the cross-sectional nature of the research provides a snapshot of current practices but does not capture longitudinal changes or implementation dynamics. Third, the self-reported nature of some data may introduce biases, though we attempted to mitigate this through triangulation across multiple data sources. Finally, our focus on the central MOH may not fully reflect practices and challenges at regional directorates or healthcare facilities.

5. CONCLUSION AND RECOMMENDATIONS:

This research examined health system performance evaluation and strategic decision-making across Saudi Ministry of Health departments, revealing significant variability in evaluation frameworks, methodologies, and maturity levels that create challenges for comprehensive system-wide assessment. Key findings include the predominance of process and output measures over outcome indicators, limited cross-departmental data integration, variable approaches to strategic decision-making, and substantial barriers to integrating performance data into decisions—spanning technical, organizational, methodological, and cultural factors. Based on these findings, we developed an integrated framework comprising standardized evaluation approaches, integrated information systems, collaborative governance structures, and evidence-based decision protocols to strengthen the connection between performance evaluation and strategic decision-making across the Ministry.

Our practical recommendations include establishing a unified performance framework with common dimensions and core indicators while allowing for department-specific supplements; creating cross-departmental governance mechanisms with clear authority and accountability; investing in integrated information infrastructure that enables comprehensive performance visibility; driving cultural transformation through leadership messaging and incentive alignment; rationalizing performance indicators to focus on strategically relevant metrics; strengthening analytical capabilities that translate data into decision-relevant insights; establishing explicit connections between metrics and decisions; fostering cross-departmental collaboration; clarifying data governance frameworks; establishing funding mechanisms for cross-departmental initiatives; promoting workforce development in data science and performance management; and ensuring accountability through monitoring mechanisms that track implementation progress.

References

[1] Abdelfattah, W., & Alanazi, B. S. (2024). Application of data envelopment analysis to evaluate health regions efficiency in Saudi Arabia. Engineering, Technology & Applied Science Research, 14(3), 13902–13908. https://doi.org/10.48084/etasr.7176

[2] Alatawi, A. D., Niessen, L. W., & Khan, J. A. M. (2020). Efficiency evaluation of public hospitals in Saudi Arabia: An application of data envelopment analysis. BMJ Open, 10(1), e031924. https://doi.org/10.1136/bmjopen-2019-031924

[3] Alatawi, A. D., Niessen, L. W., & Khan, J. A. M. (2020). Determinants of technical efficiency in public hospitals: The case of Saudi Arabia. Health Economics Review, 10(1), 17. https://doi.org/10.1186/s13561-020-00282-z

[4] Alblowi, E. A., Shujaa, M. A., & Alonazi, W. B. (2023). Measuring performance of rural mental healthcare services in Saudi Arabia. Psychology Research and Behavior Management, 16, 3895–3905. https://doi.org/10.2147/PRBM.S420662

[5] Al-Ghamdi, M., et al. (2023). Development of national framework for health status and health system performance indicators in Saudi Arabia. Journal of Infection and Public Health, 16(2), 295–302. https://doi.org/10.1016/j.jiph.2022.12.020
[6] Alqurashi, H., & Alharbi, N. M. (2024). Saudi healthcare workers' perception of the national transformation program. Clinical Epidemiology and Global Health, 25, 101459. https://doi.org/10.1016/j.cegh.2023.101459
[7] Alshehri, A., et al. (2023). Efficiency and resource allocation in government hospitals in Saudi Arabia. Healthcare, 11(18), 2513. https://doi.org/10.3390/healthcare11182513
[8] Alshehri, A. A., & Abduljawad, A. A. (2025). Impact of the Saudi Health Sector Transformation Program. Healthcare, 13(22), 2968.
https://doi.org/10.3390/healthcare13222968
[9] Alzahrani, A. S., et al. (2025). Health sector transformation assessment. Saudi Journal of Health Systems Research, 5(3), 136–144. https://doi.org/10.1159/000546023
[10] Amer, F., et al. (2022). Dimensions to evaluate health care performance. BMC Health Services Research, 22, 621. https://doi.org/10.1186/s12913-022-07863-0
[11] Dinar, H. H. A. (2024). Performance power in Saudi Arabia's health system. Saudi Journal of Health Systems Research, 4(3), 127–136. https://doi.org/10.1159/000539708
[12] Hassanain, M. (2017). Performance improvement initiatives by the Ministry of Health in Saudi Arabia. Inquiry, 54, 1–7. https://doi.org/10.1177/0046958017707872
[13] Shakoor, M., et al. (2021). Performance evaluation in private healthcare. International Journal of Healthcare Management, 14(4), 1303–1312.
https://doi.org/10.1080/20479700.2020.1757875
[14] Suleiman, A. K. (2025). Transforming healthcare: Saudi Arabia's Vision 2030. Global Health Action, 18(1). https://doi.org/10.1080/20523211.2024.2449051