



## RESEARCH ARTICLE

# Strategic alignment in multispecialty hospitals: Implementing a balanced scorecard approach for optimal performance

Shefali Bahadur<sup>1\*</sup>, Rohit Kushwaha<sup>2</sup>, M. Venkatesan<sup>3</sup>, Ramya Singh<sup>2</sup>, Manish Mishra<sup>1</sup>

## Abstract

The study investigates the relationship between strategic alignment, balanced scorecard (BSC) implementation, and optimal performance (OP) in multispecialty hospitals. Data from 530 healthcare professionals in Lucknow, Varanasi, Kanpur, and Prayagraj were collected using a cross-sectional design. Descriptive statistics, correlation analysis, and regression analysis were employed for data analysis. The results demonstrate significant positive relationships between strategic alignment, balanced scorecard, and optimal performance. Both strategic alignment and balanced scorecards were identified as significant predictors of optimal performance, indicating that higher scores in these constructs are associated with higher levels of performance. The findings underscore the critical role of strategic alignment and performance measurement frameworks in enhancing organizational performance in healthcare settings. However, the study faces limitations, including reliance on self-reported data and limited generalizability to other healthcare settings and regions. Future research should explore longitudinal or experimental designs and incorporate objective performance measures to enhance the validity and generalizability of the findings. Overall, the study contributes to understanding strategic management practices in healthcare organizations and highlights avenues for further research in this area.

**Keywords:** Strategic alignment, Multispecialty hospitals, Balanced scorecard, Optimal performance, Healthcare management, Performance management.

## Introduction

In today's complex and competitive healthcare landscape, successful strategic management is critical for multispecialty hospitals to achieve optimal performance. With the ever-evolving healthcare industry, multispecialty hospitals align their goals and objectives with a strategic approach that ensures optimal performance across all areas of the organization (Azhar *et al.*, 2021). Multispecialty hospitals operate in a highly dynamic and challenging environment, where healthcare reform, technological advancements, and

evolving patient needs require effective strategic planning and execution (van den Heuvel *et al.*, 2013). Multispecialty hospitals align their strategic goals and objectives with measurable performance indicators by implementing a balanced scorecard approach. This approach allows for a comprehensive evaluation of performance from different perspectives - financial, customer (Shahian, 2011), internal processes, and learning and growth - ensuring that all areas of the organization are considered in the pursuit of optimal performance. Implementing a balanced scorecard in multispecialty hospitals enables a holistic and integrated approach to strategic planning and performance management. This approach allows for a clear understanding of the hospital's current state and provides a framework for setting and monitoring strategic goals (Trowbridge & Mische Lawson, 2016).

## *The Role of Balanced Scorecard in Strategic Alignment and Optimal Performance*

The balanced scorecard is a strategic management tool that offers a comprehensive framework for aligning organizational goals and objectives with performance metrics (Oliveira *et al.*, 2021). In the context of multispecialty hospitals, the balanced scorecard approach plays a fundamental role in ensuring strategic alignment and

<sup>1</sup>Amity University, Lucknow, Uttar Pradesh, India

<sup>2</sup>Amity Business School, Amity University, Lucknow Campus, Uttar Pradesh, India

<sup>3</sup>Indian Institute of Foreign Trade, New Delhi, India.

\***Corresponding Author:** Shefali Bahadur, Amity University, Lucknow, Uttar Pradesh, India, E-Mail: shefali.mohan@s.amity.edu

**How to cite this article:** Bahadur, S., Kushwaha, R., Venkatesan, M., Singh, R., Mishra, M. (2024). Strategic alignment in multispecialty hospitals: Implementing a balanced scorecard approach for optimal performance. *The Scientific Temper*, 15(1):1915-1923.

Doi: 10.58414/SCIENTIFICTEMPER.2024.15.1.45

**Source of support:** Nil

**Conflict of interest:** None.

optimal performance across various dimensions of the healthcare organization (Huebner & Flessa, 2022).

### **Strategic Alignment through Balanced Scorecard**

Implementing a balanced scorecard in multispecialty hospitals facilitates strategic alignment by aligning performance measures with the hospital's strategic objectives (Huebner & Flessa, 2022). By incorporating financial, customer, internal process, and learning and growth perspectives, the balanced scorecard ensures that all areas of the organization are integrated into the strategic planning process (Nørreklit, 2000). This alignment allows hospitals to effectively prioritize and focus on key strategic initiatives that are essential for achieving optimal performance.

### **Measuring and Managing Performance**

The balanced scorecard approach enables multispecialty hospitals to measure and manage performance in a holistic manner (van den Heuvel *et al.*, 2013). Hospitals can effectively monitor their progress towards strategic goals by establishing key performance indicators in areas such as financial management, patient satisfaction, operational efficiency, and employee engagement (Akachi & Kruk, 2017). This comprehensive performance measurement approach ensures that the hospital's efforts are directed toward achieving a balanced and well-rounded performance across different operational areas (Odiit *et al.*, 2014).

### **Driving Strategic Alignment**

Strategic alignment is enhanced through the balanced scorecard approach by providing a clear framework for translating strategic objectives into actionable initiatives (Martinsons *et al.*, 1999). The balanced scorecard allows hospitals to link strategic objectives with specific performance measures, thus ensuring that every operational decision and action is aligned with the overarching strategic goals (Smith, 2008). This alignment fosters a cohesive and coordinated approach to organizational performance, ultimately driving the hospital toward optimal performance and competitive advantage (Mikula *et al.*, 2021).

The implementation of a balanced scorecard approach in multispecialty hospitals is instrumental in achieving strategic alignment and enhancing overall performance (Chakravarthi, 2010). By integrating performance measures across different perspectives and aligning them with strategic objectives, hospitals can effectively navigate the healthcare landscape's complexities while focusing on delivering high-quality care and operational excellence (Chatterjee *et al.*, 2017). This research paper will focus on implementing a balanced scorecard approach in multispecialty hospitals to achieve strategic alignment and enhance performance. By adopting a balanced scorecard approach, multispecialty hospitals effectively measure and manage performance in key

areas such as financial management, patient satisfaction, operational efficiency, and employee engagement (Trowbridge & Mische Lawson, 2016).

### **Related work**

In the rapidly evolving landscape of healthcare, multispecialty hospitals face increasing challenges in achieving and maintaining optimal performance (Van Diggele *et al.*, 2020). As these institutions aim to provide comprehensive and integrated care across various medical specialties (Nørreklit, 2000), the need for strategic alignment becomes paramount. This literature review explores the concept of strategic alignment in the context of multispecialty hospitals and investigates the potential benefits of implementing a balanced scorecard (BSC) approach to enhance overall performance (Shahian, 2011).

### **Multispecialty Hospitals and Strategic Alignment**

Multispecialty hospitals operate in a complex environment where various medical disciplines intersect (Trowbridge & Mische Lawson, 2016). Achieving strategic alignment in these settings involves aligning organizational goals, resources, and activities across different specialties to ensure a cohesive and synergistic approach to healthcare delivery (Azhar *et al.*, 2021). Research suggests that effective strategic alignment contributes to improved patient outcomes, enhanced operational efficiency, and greater organizational resilience in the face of dynamic healthcare challenges (van den Heuvel *et al.*, 2013).

### **Balanced Scorecard as a Strategic Management Tool**

The Balanced Scorecard, introduced by Kaplan and Norton in the early 1990s, is a comprehensive strategic management framework designed to translate an organization's vision and strategy into tangible objectives and performance indicators (Win *et al.*, 2019). Extensive literature supports the applicability of the BSC in healthcare settings, highlighting its ability to provide a balanced view of organizational performance across financial, customer, internal processes, and learning and growth perspectives (Breen *et al.*, 2009).

### **Implementation Challenges in Multispecialty Hospitals**

Implementing the balanced scorecard (BSC) in multispecialty hospitals is acknowledged as a valuable strategy for enhancing overall performance (Comfort *et al.*, 2022), yet it comes with distinct challenges. Literature highlights issues such as resistance to change among clinical and administrative staff (Samanta *et al.*, 2023), divergent interests among different specialties, and the complexity of integrating diverse clinical and administrative functions (Ahamed *et al.*, 2023). Overcoming these challenges is imperative for successful strategic alignment. Addressing resistance involves creating awareness of the BSC's benefits,

fostering a culture of continuous improvement (Papastamatis & Panitsides, 2014), and involving in decision-making (Singer *et al.*, 2022). The presence of diverse specialties necessitates a collaborative approach, tailoring performance metrics to align with each specialty's unique objectives (Cagliano *et al.*, 2011). Integrating clinical and administrative functions requires a thorough organizational analysis to identify common ground and establish a cohesive framework (Eason, 2010). Resource allocation challenges demand a nuanced understanding of each specialty's needs, transparent communication, and adaptable mechanisms (Papalexandris *et al.*, 2005). Engagement, effective communication, and continuous monitoring ensure the BSC's ongoing success, promoting organizational agility and responsiveness to healthcare dynamics (Scialpi & Declercq, 2023).

### **Benefits of BSC Implementation in Multispecialty Hospitals**

Numerous studies have demonstrated the positive impact of BSC implementation in healthcare organizations (Smith, 2008). In the context of multispecialty hospitals, the BSC can foster collaboration among specialties, enhance communication, and align individual departmental goals with the overall organizational strategy (Stoller, 2008). The reported benefits are improved resource allocation, enhanced patient satisfaction, and better financial performance (Mikula *et al.*, 2021).

Strategic alignment is imperative for multispecialty hospitals to navigate the complexities of modern healthcare effectively (Hearld *et al.*, 2022). The implementation of the balanced scorecard offers a promising avenue for achieving optimal performance by aligning organizational goals and facilitating a holistic approach to healthcare delivery (Singer *et al.*, 2022). While challenges exist, the potential benefits outlined in this literature review underscore the significance of strategic alignment through the Balanced Scorecard in enhancing the overall performance of multispecialty hospitals (Copnell *et al.*, 2009).

### **Research Methodology**

The research involved the distribution of a closed-ended questionnaire comprising two sections with a total of 24 questions. The initial section focused on gathering demographic statistics. The second section included three parts related to strategic alignment, balanced scorecard approach, and optimal performance of Multispecialty Hospitals, with the study implementing a 5-point Likert scale (Table 1). A total of 690 questionnaires were distributed across locations, including Lucknow, Varanasi, Kanpur, and Prayagraj, resulting in the collection of 560 responses. Following the application of Cochran's formula (Cochran, 1997), 384 responses were deemed suitable for the study. The selection process employed purposive sampling.

## **Results**

### **Demographic Profile of Respondents**

Table 2 shows the demographic characteristics of the respondents in the context of their gender, age group, occupation, and years of experience in the healthcare sector. The majority of respondents were male (59.0%) and female (41.0%). Regarding age distribution, the highest proportion of respondents fell in the "Above 45 years" category (37.6%), followed by "37 to 44 Years" (25.8%), "29 to 36 Years" (20.6%), and "18 to 28 Years" (16.0%). In terms of occupation, the respondents included healthcare professionals (38.0%), administrative staff (27.0%), management staff (17.5%), and support staff (16.4%). Regarding years of experience in the healthcare sector, the highest percentage of respondents had 15 years or less of experience, with 15 years (23.7%), 11 to 15 years (20.1%), and 6 to 10 years (14.1%). Fewer respondents had 16 to 20 years of experience (8.6%) or more than 20 years of experience (6.2%).

### **Mean, Standard Deviation, Reliability, Skewness, and Kurtosis of Item**

Table 3 presents the descriptive statistics and reliability coefficients for the items measuring the balanced scorecard (BS), strategic alignment (SA), and optimal performance (OP) constructs. These statistics provide insights into the central tendency, variability, and internal consistency of responses for each item.

For the balanced scorecard items (BS1–BS8), the mean scores ranged from 2.289 to 3.238, indicating the average response for each item. The standard deviations ranged from 1.2050 to 1.3174, reflecting the extent of variability or dispersion of responses around the mean. The reliability coefficients (Cronbach's Alpha) for these items ranged from 0.791 to 0.802, suggesting a high level of internal consistency among the items measuring the Balanced Scorecard construct.

Similarly, for the strategic alignment items (SA1–SA8), the mean scores ranged from 2.191 to 2.864, with standard deviations ranging from 1.1370 to 1.3218. The reliability coefficients for these items ranged from 0.790 to 0.799, indicating good internal consistency.

For the optimal performance items (OP1–OP8), the mean scores ranged from 2.153 to 2.860, with standard deviations ranging from 1.1450 to 1.3027. The reliability coefficients for these items ranged from 0.790 to 0.803, indicating a high level of internal consistency.

### **Correlation Matrix of Balanced Scorecard, Strategic Alignment, and Optimal Performance**

The correlation matrix presented in Table 4 illustrates the Pearson correlation coefficients among the variables balanced scorecard, strategic alignment, and optimal

Table 1: Construct, operational definition and items

Construct	Operational definition	Item	Source
Balanced Scorecard	The balanced scorecard is a strategic management framework comprising financial, customer, internal processes, and learning/growth perspectives. It helps organizations align goals, monitor performance, and make informed decisions by considering a balanced view of key performance indicators across these four dimensions.	I believe the Balanced Scorecard facilitates communication and alignment of strategic goals across different departments within the hospital.	(Epstein & Manzoni, 1997)
		From a financial standpoint, Key performance indicators (KPIs) are considered crucial for ensuring optimal performance in multispecialty hospitals.	(Epstein & Manzoni, 1997)
		The financial objectives outlined in the Balanced Scorecard align seamlessly with our hospital's broader financial goals, fostering strategic harmony and optimal financial performance.	(Nørreklit, 2000)
		In my experience, Balanced Scorecard contributed to fostering a culture of continuous learning, innovation, and professional development among healthcare professionals in my hospital.	(Martinsons <i>et al.</i> , 1999)
		Financial objectives outlined in the Balanced Scorecard align with the broader financial goals of your hospital.	(Epstein & Manzoni, 1997)
		I feel the Balanced Scorecard facilitate communication and alignment of strategic goals across different departments within the hospital.	(Nørreklit, 2000)
		I believe the financial, customer, internal processes, and learning and growth perspectives integrated into the Balanced Scorecard to drive holistic performance assessment.	(Epstein & Manzoni, 1997)
		In my opinion the Balanced Scorecard has influenced decision-making processes and resource allocation in your hospital to enhance overall performance.	(Martinsons <i>et al.</i> , 1999)
Strategic Alignment	Strategic alignment refers to the harmonization of an organization's goals, activities, and resources with its overarching strategic objectives. It ensures that all aspects of the organization work cohesively towards a common vision, optimizing performance and facilitating the achievement of strategic goals.	I believe there is alignment between the strategic objectives outlined by my hospital's leadership and the day-to-day activities of employees.	(Oliveira <i>et al.</i> , 2021)
		I believe the goals and priorities set at the organizational level communicated to different departments and teams, ensuring strategic alignment throughout the hospital.	(Azhar <i>et al.</i> , 2021)
		In my opinion the current communication strategy foster alignment with the overall strategic direction of the hospital.	(Gautham <i>et al.</i> , 2019)
		I perceive that individual performance goals align with the broader strategic objectives of the hospital.	(Stoller, 2008)
		The connection between the mission and vision of the hospital and the specific strategic initiatives implemented to achieve them.	(Stefanovska & Soklevski, 2014)
		In my hospital ensure that all levels of management and staff are aware of and committed to the strategic priorities set by the leadership team.	(Odiit <i>et al.</i> , 2014)
		The strategic plan reviewed and updated to ensure ongoing relevance and alignment with the dynamic healthcare landscape.	(Odiit <i>et al.</i> , 2014)
		I believe that the connection between the strategic objectives outlined in the Balanced Scorecard and the day-to-day activities and performance goals of employees at different levels.	(Oliveira <i>et al.</i> , 2021)
Optimal Performance	Optimal performance refers to the highest level of efficiency, effectiveness, and productivity that an organization or individual can achieve. It involves maximizing output, achieving goals, and utilizing resources in the most efficient and effective manner to attain peak performance and desired outcomes.	I agree that certain key performance indicators (KPIs) are crucial for assessing the overall optimal performance of my hospital.	(Azhar <i>et al.</i> , 2021)
		I think the concept of optimal performance is communicated and understood among different levels of employees in your hospital.	(Shahian, 2011)
		I believe that individual and team goals contribute to the achievement of optimal performance for the hospital.	(Azhar <i>et al.</i> , 2021)
		I believe that the hospital's current strategies for identifying and addressing areas for improvement to enhance overall performance of the hospital.	(Chakravarthi, 2010)

	The current performance measurement and evaluation processes align with the hospital's goals for achieving optimal performance.	(Gautham <i>et al.</i> , 2019)
	I believe that the hospital's strategies or initiatives effectively foster a culture of continuous improvement to strive for optimal performance.	(Akachi & Kruk, 2017)
	You agree that leadership contributes to creating an environment that supports and encourages optimal performance among employees?	(Odiit <i>et al.</i> , 2014)
	I believe that the performance assessments conducted to ensure ongoing progress and alignment with the hospital's goals for optimal performance?	(Odiit <i>et al.</i> , 2014)

Table 2: Demographic profile

S. No.	Demographic Characteristics	Category	N	%
1	Gender	Male	312	58.9
		Female	218	41.1
2	Age group	18–28 Years	112	21.1
		29–36 Years	142	26.8
		37–44 years	124	23.4
		Above 45 years	152	28.7
		Healthcare professional (Doctor, Nurse, Technician, etc.)	203	38.4
3	Occupation	Administrative	145	27.4
		Management staff	94	17.7
		Support staff (Clerical, Maintenance, etc.)	88	16.6
4	Experience	15 years	163	30.8
		6–10 years	91	17.2
		11–15 years	135	25.5
		16–20 years	82	15.5
		> 20 years	59	11.1

performance. Each cell in the matrix indicates the strength and direction of the relationship between the variables corresponding to the row and column.

The analysis reveals several key findings. First, a positive and statistically significant correlation between Balanced Scorecard and Strategic Alignment ( $r = 0.300$ ,  $p < 0.01$ ) indicates a moderate positive relationship between these constructs. Second, a similar positive and statistically significant correlation between balanced scorecard and optimal performance ( $r = 0.389$ ,  $p < 0.01$ ) suggests a moderate positive association between these variables. Lastly, the correlation between strategic alignment and optimal performance is also positive and statistically significant ( $r = 0.370$ ,  $p < 0.01$ ), indicating a moderate positive relationship between these constructs.

The results show that there are significant positive relationships between the balanced scorecard, strategic alignment, and optimal.

### **Regression Analysis Results for Predicting Optimal Performance**

The analysis of variance (ANOVA) results revealed compelling insights into the relationship between strategic alignment, balanced scorecard approach, and optimal performance within multispecialty hospitals. The obtained F-value of 75.116 ( $p < 0.001$ ) signifies the significance of the overall regression model, indicating that at least one of the predictors has a substantial effect on optimal performance.

Furthermore, the regression model accounts for a considerable portion of the variance in optimal performance, with an R-squared value of 0.222. This suggests that approximately 22.2% of the variability in optimal performance scores can be explained by the combined influence of strategic alignment and balanced scorecard approach. These results highlight the critical roles played by these constructs in shaping optimal performance outcomes within multispecialty hospitals.

**Table 3:** Mean, standard deviation, reliability, skewness, and kurtosis of item

Item	N	Mean	S.D	Reliability	Skewness	Kurtosis
BS1	530	2.991	1.2831	.798	-.117	-.959
BS2	530	2.811	1.2398	.801	.201	-.798
BS3	530	3.223	1.2341	.800	-.273	-.848
BS4	530	3.238	1.3174	.799	-.226	-1.033
BS5	530	2.309	1.2246	.793	.639	-.556
BS6	530	2.413	1.2843	.791	.489	-.856
BS7	530	2.289	1.2652	.792	.614	-.639
BS8	530	2.475	1.2050	.795	.565	-.435
SA1	530	2.191	1.1583	.790	.715	-.269
SA2	530	2.445	1.1576	.791	.431	-.430
SA3	530	2.583	1.2426	.797	.474	-.631
SA4	530	2.619	1.1658	.797	.368	-.493
SA5	530	2.466	1.1370	.792	.533	-.244
SA6	530	2.791	1.2464	.799	.390	-.734
SA7	530	2.675	1.1893	.792	.404	-.495
SA8	530	2.864	1.3218	.799	.187	-.998
OP1	530	2.711	1.2977	.802	.277	-.920
OP2	530	2.860	1.3027	.803	.157	-.998
OP3	530	2.811	1.2994	.800	.281	-.920
OP4	530	2.247	1.1492	.793	.721	-.204
OP5	530	2.296	1.1783	.791	.529	-.655
OP6	530	2.153	1.1912	.790	.706	-.422
OP7	530	2.455	1.1775	.796	.566	-.358
OP8	530	2.196	1.1450	.790	.740	-.177

The individual contributions of the predictors are also noteworthy, as indicated by their coefficients. Both strategic alignment ( $B = 0.260, p < 0.001$ ) and balanced scorecard ( $B = 0.290, p < 0.001$ ) show positive and statistically significant coefficients, suggesting that an increase in either predictor is associated with an increase in optimal performance.

The standardized coefficients (Beta) provide additional insights into the relative strength of the predictors' effects on optimal performance. Both strategic alignment (Beta = 0.279) and balanced scorecard (Beta = 0.305) exhibit similar and substantial influences on optimal performance. This implies that both constructs are pivotal drivers of optimal performance in multispecialty hospitals, with balanced scorecard potentially exerting a slightly stronger impact.

The ANOVA results underscore the significance of strategic alignment and balanced scorecard approach as predictors, enriching our comprehension of optimal performance in multispecialty hospitals (Table 5). These findings emphasize the critical nature of strategic alignment and performance measurement frameworks in enhancing the overall performance of healthcare organizations.

**Table 4:** Correlation matrix of balanced scorecard, strategic alignment, and optimal performance

		Balanced scorecard	Strategic alignment	Optimal performance
Balanced scorecard	Pearson Correlation	1	.300**	.389**
	Sig. (2-tailed)		.000	.000
	N	530	530	530
Strategic alignment	Pearson Correlation	.300**	1	.370**
	Sig. (2-tailed)	.000		.000
	N	530	530	530
Optimal performance	Pearson Correlation	.389**	.370**	1
	Sig. (2-tailed)	.000	.000	
	N	530	530	530

**Table 5:** ANOVA table

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	3306.267	2	1653.134	75.116	.000 <sup>b</sup>
	Residual	11598.150	527	22.008		
	Total	14904.417	529			

The regression analysis reveals that both strategic alignment and a balanced scorecard approach are significant predictors of optimal performance (Table 6). The constant term in the model indicates that the estimated optimal performance score is 8.066 when both strategic alignment and balanced scorecard approach scores are zero. This suggests a baseline level of optimal performance in the absence of strategic alignment and balanced scorecard approach considerations.

The strategic alignment and balanced scorecard approach regression coefficients are statistically significant. The estimated optimal performance score increases by 0.260 units for every one-unit increase in strategic alignment score. Similarly, the estimated optimal performance score increases by 0.290 units for every one-unit increase in balanced scorecard approach score. These findings suggest that higher scores in both strategic alignment and balanced scorecard approach are associated with higher levels of optimal performance. The standardized coefficients (Beta) further indicate that both predictors have a relatively equal influence on optimal performance, with strategic alignment at 0.279 and balanced scorecard approach at 0.305, highlighting their importance in predicting optimal performance.

### Discussion

The findings of this study are consistent with prior research, as highlighted by Nørreklit (2000), Martinsons *et*

Table 6: Regression table

Model B	Unstandardized coefficients		Standardized coefficients		t	Sig.
	Std. Error	Beta				
1 (Constant)	8.066	.973			8.287	.000
Strategic alignment	.260	.038	.279		6.917	.000
Balance scorecard	.290	.038	.305		7.580	.000

al. (1999), and Epstein & Manzoni (1997), who emphasize the importance of strategic alignment and performance measurement systems in organizational performance. These authors argue that a well-aligned strategic framework, such as the BSC, can lead to improved performance outcomes.

Similarly, Oliveira *et al.* (2021), Azhar *et al.* (2021), and Gautham *et al.* (2019) have also emphasized the significance of strategic alignment and performance measurement frameworks in enhancing organizational performance, particularly in the healthcare sector. These studies provide further support for the findings of this study, suggesting that strategic alignment and the BSC play crucial roles in driving optimal performance in healthcare organizations.

By aligning with these theoretical perspectives, this study contributes to the existing literature by providing empirical evidence of the positive impact of strategic alignment and the BSC on optimal performance in multispecialty hospitals.

These findings have significant implications for healthcare management, suggesting that healthcare organizations can enhance their performance by implementing strategic alignment practices and adopting performance measurement frameworks like the BSC.

## Conclusion

In this study examined the relationship between BSC, SA, and OP in multispecialty hospitals. The findings highlight the significant positive relationships between BSC, SA, and OP, indicating that a well-aligned strategic approach, as measured by BSC, contributes to improved performance outcomes. Both BSC and SA were found to be significant predictors of OP, with higher scores in these constructs associated with higher levels of performance. The study underscores the importance of strategic alignment and performance measurement frameworks in driving optimal performance in healthcare organizations.

These findings have several implications for healthcare practice and management. Healthcare organizations should focus on aligning their strategic goals with operational activities to improve performance outcomes. Implementing the Balanced Scorecard approach can help organizations effectively measure and manage their performance, leading to enhanced overall performance. Additionally, investing in strategic alignment initiatives can improve organizational performance and patient outcomes.

## Implication of the study

The implications of this study are profound for healthcare organizations, policymakers, and researchers, offering valuable insights into the relationship between the BSC, SA, and OP. Understanding these connections is critical for informed decision-making and organizational improvement in healthcare settings.

One significant implication is the importance of strategic alignment within healthcare organizations. The study highlights that aligning organizational strategies with operational functions is essential for enhancing performance. Healthcare entities can use these findings to evaluate their current alignment strategies and make necessary adjustments to improve performance.

Another key implication is related to performance evaluation methodologies. The adoption of the balanced scorecard approach can help healthcare organizations measure and oversee their performance across various dimensions more effectively. This comprehensive approach to performance evaluation can enhance decision-making processes and resource allocation, ultimately leading to improved organizational performance.

Moreover, the study emphasizes that augmenting strategic alignment and implementing the Balanced Scorecard approach can positively impact organizational performance. Healthcare organizations can enhance their ability to achieve strategic objectives and improve overall performance metrics by focusing on these aspects.

Additionally, the study suggests that enhancing strategic alignment and implementing robust performance measurement mechanisms can lead to improved patient outcomes. By improving strategic alignment and performance evaluation, healthcare organizations can enhance patient care quality and satisfaction levels, ultimately benefiting community health outcomes.

From a policy perspective, policymakers can use these findings to develop policies that encourage healthcare organizations to embrace strategic alignment practices and performance measurement frameworks. This can help create a more efficient and effective healthcare delivery system, benefiting both healthcare establishments and patients.

The implications of this study extend to healthcare practitioners, policymakers, and researchers, offering valuable insights into how strategic alignment and

performance measurement can drive organizational success in healthcare settings.

### Limitation

The study's findings suggest a significant positive relationship between Strategic Alignment, BSC implementation, and OP in multispecialty hospitals. However, the study's cross-sectional design, reliance on self-reported data, and limited generalizability to other healthcare settings and regions are notable limitations. Future research should consider longitudinal or experimental designs, objective performance measures, and diverse healthcare contexts to enhance the validity and generalizability of the findings.

### Credit Author Statement

Shefali Bahadur: Writing-original draft, Conceptualization, Formal Analysis, Methodology; Prof.(Dr). Rohit Kushwaha: Conceptualization, Methodology, Writing-review & editing, Formal analysis; Prof. (Dr.) M. Venkatesan: Formal Analysis and Conceptualization, Ramya Singh: Conceptualization, Methodology, Review & Editing. Manish Mishra: Data Curation and Formal analysis.

### Acknowledgment

I am grateful to Dr. Jitendra Rajaram for his valuable guidance and support throughout this research project. His expertise and insights have been instrumental in shaping the direction and outcomes of this study. Additionally, I would like to acknowledge that this research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

### References

- Ahamed, S. K., Nishant, N., Selvaraj, A., Gandhewar, N., Srithar, A., & Baseer, K. K. (2023). *Investigating privacy-preserving machine learning for healthcare data sharing through federated learning*. 14, 1308–1315. <https://doi.org/10.58414/SCIENTIFICTEMPER.2023.14.4.37>
- Akachi, Y., & Kruk, M. E. (2017). Qualité des soins: Mesure d'un facteur négligé d'amélioration de la santé. *Bulletin of the World Health Organization*, 95(6), 465–472. <https://doi.org/10.2471/BLT.16.180190>
- Azhar, F., Ahmad, F., & Anwar, S. (2021). Key Parameters for Healthcare Quality. *Asian Journal of Medicine and Health*, 19(8), 48–53. <https://doi.org/10.9734/ajmah/2021/v19i830356>
- Breen, G. M., Wan, T. T. H., Zhang, N. J., Marathe, S. S., Seblega, B. K., & Paek, S. C. (2009). Improving doctor-patient communication: Examining innovative modalities vis-à-vis effective patient-centric care management technology. *Journal of Medical Systems*, 33(2), 155–162. <https://doi.org/10.1007/s10916-008-9175-3>
- Cagliano, A. C., Grimaldi, S., & Rafele, C. (2011). A systemic methodology for risk management in healthcare sector. In *Safety Science* (Vol. 49, Issue 5). <https://doi.org/10.1016/j.ssci.2011.01.006>
- Chakravarthi, I. (2010). Corporate presence in the Health care Sector in India. *Social Medicine*, 5(4), 192–204.
- Chatterjee, R., Suy, R., Yen, Y., & Chhay, L. (2017). Literature Review on Leadership in Healthcare Management. *Journal of Social Science Studies*, 5(1), 38. <https://doi.org/10.5296/jsss.v5i1.11460>
- Cochran, W. G. (1997). *Cochran\_1977\_Sampling\_Techniques\_Third\_E.pdf* (pp. 76–78). [https://www.academia.edu/29684662/Cochran\\_1977\\_Sampling\\_Techniques\\_Third\\_Edition](https://www.academia.edu/29684662/Cochran_1977_Sampling_Techniques_Third_Edition)
- Comfort, L. N., Bambury, E., & Atkinson, M. K. (2022). Physician role differentiation: Patients, practice patterns, and performance. *Health Care Management Review*, 47(4), 279–288. <https://doi.org/10.1097/HMR.0000000000000332>
- Copnell, B., Hagger, V., Wilson, S. G., Evans, S. M., Sprivulis, P. C., & Cameron, P. A. (2009). Measuring the quality of hospital care: An inventory of indicators. *Internal Medicine Journal*, 39(6), 352–360. <https://doi.org/10.1111/j.1445-5994.2009.01961.x>
- Eason, T. (2010). Lifelong learning: fostering a culture of curiosity. *Creative Nursing*, 16(4), 155–159. <https://doi.org/10.1891/1078-4535.16.4.155>
- Epstein, M. J., & Manzoni, J.-F. (1997). The Balanced Scorecard and Tableau de Bord : A Global Perspective on Translating Strategy into Action by Marc J. Epstein and Jean-Francois Manzoni. *European Management Journal*, 1–20.
- Gautham, M., Bruxvoort, K., Iles, R., Subharwal, M., Gupta, S., Jain, M., & Goodman, C. (2019). Investigating the nature of competition facing private healthcare facilities: The case of maternity care in Uttar Pradesh, India. *Health Policy and Planning*, 34(6), 450–460. <https://doi.org/10.1093/heapol/czz056>
- Hearld, L., Hall, A., Kelly, R. J., Karabukayeva, A., & Singh, J. (2022). Organizational context and the learning and change readiness climate for implementing an evidence-based shared decision-making aid in US rheumatology clinics. *Journal of Health Organization and Management*, 36(1), 121–140. <https://doi.org/10.1108/JHOM-10-2020-0397>
- Huebner, C., & Flessa, S. (2022). Strategic Management in Healthcare: A Call for Long-Term and Systems-Thinking in an Uncertain System. *International Journal of Environmental Research and Public Health*, 19(14). <https://doi.org/10.3390/ijerph19148617>
- Martinsons, M., Davison, R., & Tse, D. (1999). The balanced scorecard: A foundation for the strategic management of information systems. *Decision Support Systems*, 25(1), 71–88. [https://doi.org/10.1016/S0167-9236\(98\)00086-4](https://doi.org/10.1016/S0167-9236(98)00086-4)
- Mikula, B., Vajdova, I., & Tobisova, A. (2021). Application of the Balanced Scorecard Customer Perspective in an Airport Environment. *Acta Avionica Journal*, XXIII(1), 35–41. <https://doi.org/10.35116/aa.2021.0006>
- Nørreklit, H. (2000). The balance on the balanced scorecard - A critical analysis of some of its assumptions. *Management Accounting Research*, 11(1), 65–88. <https://doi.org/10.1006/mare.1999.0121>
- Odiit, M. C. A., Mayoka, G. K., Ochara, N. M., & Rwashana, A. S. (2014). Alignment of information systems to strategy in the health sector using a systems dynamics approach. *ACM International Conference Proceeding Series*, 28-Septemb, 38–49. <https://doi.org/10.1145/2664591.2664624>
- Oliveira, C., Martins, A., Camilleri, M. A., & Jayantilal, S. (2021). Using the Balanced Scorecard for Strategic Communication and Performance Management. *Strategic Corporate*



- Communication in the Digital Age*, 73–88. <https://doi.org/10.1108/978-1-80071-264-520211005>
- Papalexandris, A., Ioannou, G., Prastacos, G. P., & Soderquist, K. E. (2005). An integrated methodology for putting the balanced scorecard into action. *European Management Journal*, 23(2), 214–227. <https://doi.org/10.1016/j.emj.2005.02.004>
- Papastamatis, A., & Panitsides, E. A. (2014). Transformative learning: Advocating for a holistic approach. *Review of European Studies*, 6(4), 74–81. <https://doi.org/10.5539/res.v6n4p74>
- Samanta, A. K., Varaprasad, G., Gurumurthy, A., & Antony, J. (2023). Implementing Lean Six Sigma in a multispecialty hospital through a change management approach. *TQM Journal*. <https://doi.org/10.1108/TQM-02-2023-0043>
- Scialpi, G., & Declercq, J. (2023). Adaptability in healthcare buildings: a perspective through Joseph Bracops Hospital. *Frontiers in Medical Technology*, 5(July), 1–7. <https://doi.org/10.3389/fmedt.2023.1199581>
- Shahian, D. M. (2011). Measuring healthcare quality. *Deutsche Medizinische Wochenschrift*, 136, S57–S57. <https://doi.org/10.1055/s-0031-1286086>
- Singer, S. J., Kellogg, K. C., Galper, A. B., & Viola, D. (2022). Enhancing the value to users of machine learning-based clinical decision support tools: A framework for iterative, collaborative development and implementation. *Health Care Management Review*, 47(2), E21 – E31. <https://doi.org/10.1097/HMR.0000000000000324>
- Smith, P. C. (2008). Resource allocation and purchasing in the health sector: The English experience. *Bulletin of the World Health Organization*, 86(11), 884–888. <https://doi.org/10.2471/BLT.07.049528>
- Stefanovska, L., & Soklevski, T. (2014). Benefits of Using Balanced Scorecard in Strategic and Operational Planning. *Universal Journal of Management*, 2(4), 165–171. <https://doi.org/10.13189/ujm.2014.020404>
- Stoller, J. K. (2008). Developing physician-leaders: key competencies and available programs. *The Journal of Health Administration Education*, 25(4), 307–328.
- Trowbridge, K., & Mische Lawson, L. (2016). Mindfulness-based interventions with social workers and the potential for enhanced patient-centered care: A systematic review of the literature. *Social Work in Health Care*, 55(2), 101–124. <https://doi.org/10.1080/00981389.2015.1094165>
- van den Heuvel, J., Niemeijer, G. C., & Does, R. J. M. M. (2013). Measuring healthcare quality: The challenges. *International Journal of Health Care Quality Assurance*, 26(3), 269–278. <https://doi.org/10.1108/09526861311311454>
- van Diggele, C., Burgess, A., Roberts, C., & Mellis, C. (2020). Leadership in healthcare education. *BMC Medical Education*, 20(Suppl 2), 1–6. <https://doi.org/10.1186/s12909-020-02288-x>
- Win, T. R., Yee, T. T., & Htoon, E. C. (2019). Optimized Resource Allocation Model in Cloud Computing System. *2019 International Conference on Advanced Information Technologies, ICAIT 2019*, 49–54. <https://doi.org/10.1109/AITC.2019.8920852>