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

Shefali Bahadur1*, Rohit Kushwaha2, M. Venkatesan3, Ramya Singh2, Manish Mishra1

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
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 (Norreklit, 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 (Norreklit, 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 performance. The correlation matrix indicates the strength and direction of the linear relationship between each pair of variables. The correlation coefficients range from -1 to 1, with values close to 1 or -1 indicating a strong positive or negative relationship, respectively. The correlation coefficients are significant for strategic alignment and optimal performance, suggesting a meaningful association between these constructs. Further analysis would be required to explore the specific nature of these relationships and potential causal influences.
<table>
<thead>
<tr>
<th>Construct</th>
<th>Operational definition</th>
<th>Item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balanced Scorecard</td>
<td>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.</td>
<td>I believe the Balanced Scorecard facilitates communication and alignment of strategic goals across different departments within the hospital. From a financial standpoint, Key performance indicators (KPIs) are considered crucial for ensuring optimal performance in multispeciality hospitals. The financial objectives outlined in the Balanced Scorecard align seamlessly with our hospital’s broader financial goals, fostering strategic harmony and optimal financial performance. In my experience, Balanced Scorecard contributed to fostering a culture of continuous learning, innovation, and professional development among healthcare professionals in my hospital. Financial objectives outlined in the Balanced Scorecard align with the broader financial goals of your hospital. I feel the Balanced Scorecard facilitate communication and alignment of strategic goals across different departments within the hospital. I believe the financial, customer, internal processes, and learning and growth perspectives integrated into the Balanced Scorecard to drive holistic performance assessment. In my opinion the Balanced Scorecard has influenced decision-making processes and resource allocation in your hospital to enhance overall performance.</td>
<td>Epstein &amp; Manzoni, 1997; Nørreklit, 2000; Martinsons et al., 1999</td>
</tr>
</tbody>
</table>
The current performance measurement and evaluation processes align with the hospital’s goals for achieving optimal performance. (Gautham et al., 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 et al., 2014)

I believe that the performance assessments conducted to ensure ongoing progress and alignment with the hospital’s goals for optimal performance? (Odiit et al., 2014)

### Table 2: Demographic profile

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

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.
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.

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
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

<table>
<thead>
<tr>
<th>Model B</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>8.066</td>
<td>.973</td>
<td>8.287</td>
<td>.000</td>
</tr>
<tr>
<td>Strategic alignment</td>
<td>.260</td>
<td>.038</td>
<td>.279</td>
<td>6.917</td>
</tr>
<tr>
<td>Balance scorecard</td>
<td>.290</td>
<td>.038</td>
<td>.305</td>
<td>7.580</td>
</tr>
</tbody>
</table>

Table 6: Regression table
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.

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