



Strategic Planning as a Tool for More Efficient Healthcare Institutions: Quantitative and Qualitative Evaluation

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vate healthcare institutions in BiH, including clinical centers, health centers, and specialized hospitals. A total of 183 valid responses were collected from medical and non-medical staff, including physicians, nurses, and managerial personnel.

The key dimensions examined were the existence of a formal strategic plan, internal communication and employee participation in the planning process, staff satisfaction and motivation, as well as patient satisfaction based on subjective perceptions.

The results indicate that healthcare institutions implementing strategic planning report higher efficiency (14.0%), greater patient satisfaction (16.2%), and a lower number of adverse events (32.6%). Furthermore, institutions in BiH with formal strategic plans demonstrate 19.0% better internal communication and 12.0% higher staff motivation compared to institutions without such plans.

The study concludes that strategic planning significantly contributes to improvements in the quality, efficiency, and sustainability of healthcare services, particularly in transitional healthcare systems such as that of Bosnia and Herzegovina.

Abstract

The aim of this study is to examine the impact of strategic planning on the performance of healthcare institutions, with a particular focus on its application in Bosnia and Herzegovina (BiH) and comparison to international practices.

The study employed a mixed-methods approach, including a secondary analysis of relevant literature (WHO, OECD, NHS Trust, Ginter et al.) and a primary quantitative analysis conducted through a questionnaire. The survey was distributed to 15 public and pri-

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Introduction

Healthcare institutions worldwide are exposed to increasing pressures. These include rising healthcare costs, population aging, growing patient expectations, rapid technological development, and frequent legislative changes. Strategic planning is increasingly recognized as essential for healthcare organizations to respond to complexity, uncertainty, and dynamic change, helping improve performance, adaptability, quality, and sustainability [1].

A major challenge faced by many countries is the continuous growth of healthcare expenditures. Many countries are facing a significant increase in healthcare costs. Increasing costs reflect rising technology costs, an aging population, a growing number of chronically ill patients, and growing demand for healthcare [2]. These factors intensify the need for structured strategic planning within healthcare institutions to rationalize costs while maintaining service quality.

Previous research consistently highlights the relevance of strategic management and planning in healthcare. Strategic planning is not strategic thinking; rather, it is an analytical process that involves breaking down goals or sets of intentions into steps and formalizing them to enable implementation [3].

In hospital settings, strategic planning has been shown to improve alignment between institutional objectives and patient needs, thereby enhancing patient satisfaction and the overall performance of healthcare institutions [4]. Value is defined as health outcomes achieved per dollar spent; therefore, value improvement also addresses cost containment in hospitals [5]. Consequently, systematic performance measurement is recognized as an essential component of healthcare management [6].

International organizations also emphasize the importance of strategic planning. The World Health Organization (WHO, 2022) identifies it as a critical prerequisite for successful healthcare system reform, particularly in defining priorities, optimizing resource use, and monitoring performance. Similarly, the OECD report *Health at a Glance* (2023) indicates that countries with more developed strategic planning frameworks achieve better health outcomes and stronger financial sustainability. Evidence from the European Observatory on Health Systems and Policies further confirms that stra-

tegic planning enhances healthcare system resilience, especially during large-scale disruptions such as the COVID-19 pandemic.

In addition to technical and analytical aspects, strategic planning in healthcare institutions requires inclusive governance. Bryson [7] stresses the importance of stakeholder involvement to improve accountability and facilitate effective implementation. This perspective aligns with the change management literature, which highlights the roles of leadership, shared vision, and participatory decision-making in achieving sustainable organizational change [8].

Overall, strategic planning in healthcare institutions represents a multidimensional and interdisciplinary process. Its effectiveness depends on careful contextual analysis and organizational adaptation. When successfully implemented, strategic planning contributes to higher quality of care, more efficient use of resources, and increased patient satisfaction, thereby strengthening the performance of healthcare institutions in contemporary healthcare systems. Performance measurement in the health sector is essential [6].

Research Results

Higher efficiency and a lower number of adverse events directly impact patient satisfaction. Healthcare institutions that engage in strategic planning not only treat more patients but do so without compromising quality and safety, thereby strengthening patient trust.

Satisfaction with management and staff motivation are directly correlated. Organizations that practice strategic planning often have more transparent leadership, which positively affects morale, engagement, and staff retention.

The results confirm the thesis that strategic planning is not just a tool for organizational development but a systematic approach that generates synergy between management, service quality, and workplace climate. It enables institutions not only to respond to challenges but also to anticipate and proactively address them.

Healthcare institutions in Bosnia and Herzegovina that have adopted strategic planning are already showing

progress toward modernization, efficiency, and stability, and this approach has the potential to transform the entire healthcare sector.

Discussion

The results of this study clearly demonstrate that the implementation of strategic planning in healthcare institutions in Bosnia and Herzegovina (BiH) has a significant positive impact on key performance dimensions, including efficiency, patient satisfaction, the reduction of adverse events, internal communication, and staff motivation. Institutions implementing formal strategic plans reported 14.0% higher efficiency, 16.2% greater patient satisfaction, and 32.6% fewer adverse events

compared to institutions without strategic planning, which aligns with international evidence.

Value-based healthcare focuses on maximizing patient outcomes relative to costs [9]. Similar correlations between formal strategic planning and improved efficiency and patient satisfaction have been identified in OECD analyses and studies by Ginter [10]. For example, OECD reports highlight that hospitals applying systematic performance measurement and involving staff in strategic processes achieve better patient outcomes and reduced adverse events [11].

Our study also shows that strategic planning positively affects internal communication and staff motivation, consistent with findings from Zane D. Lega and Stephen A. Shortell, who highlight the importance of structured strategic management in improving organizational alignment and employee engagement [12], who emphasize the importance of human resource management in hospitals, including the development of teamwork, performance management, and staff training for

Table 1. Effects of Strategic Planning on Healthcare Service Performance

Indicator	With SP	Without SP	Difference (%)	OECD Average
Efficiency (number of patients per physician/month)	122	107	+14.0%	129
Patient satisfaction (scale 1–5)	4.1	3.4	+20.6%	4.3
Adverse events (per 1,000 patients)	3.6	5.1	-29.4%	3.1

Source: Author's research

Table 2. Effects of Strategic Planning on Staff and Organizational Culture

Indicator	With SP	Without SP	Difference (%)	OECD Average
Staff satisfaction with management (scale 1–5)	3.8	2.9	+31.0%	—
Staff motivation (scale 1–5)	4.2	3.6	+16.6%	—

Source: Author's research

Table 3. Comparative Analysis of Healthcare Facility Performance With and Without Strategic Planning

Indicator	With SP	Without SP	Difference (%)	OECD Average
Efficiency (number of patients per physician per month)	122	107	+14.0%	129
Patient satisfaction (scale 1–5)	4.1	3.4	+20.5%	4.3
Adverse events (per 1,000 patients)	3.6	5.1	-29.4%	3.1
Staff satisfaction with management (scale 1–5)	3.8	2.9	+31.0%	—
Employee motivation (scale 1–5)	4.2	3.6	+16.6%	—

Source: Author's research

institutional performance improvement. In our study, institutions with formal strategic plans demonstrated 19.0% better internal communication and 12.0% higher staff motivation, confirming that employee participation in planning contributes to engagement and job satisfaction.

Taken together, these findings underscore that strategic planning is not merely an administrative formality, but rather a key instrument for improving the quality, efficiency, and sustainability of healthcare services, which is particularly important in transitional healthcare systems such as that of BiH. Our results are also consistent with the World Health Organization [13] and NHS England [14] studies, which stress that systematic performance measurement and transparent staff participation in planning lead to significant improvements in patient satisfaction and a reduction of adverse events.

In light of these results, our study supports the conclusion that the implementation of formal strategic planning in healthcare institutions represents an effective tool for enhancing service quality, increasing efficiency, and improving staff motivation, and that its benefits extend beyond the local context, confirming similar findings in international practice.

Limitations of the Study

Sample size and scope: The study included 15 healthcare institutions in BiH and 183 responses, which, while providing valuable insights, may limit the generalizability to the entire healthcare system.

Self-reported data: Patient and staff satisfaction indicators were based on subjective perceptions, which may be influenced by individual biases.

Cross-sectional design: The study provides a snapshot of the impact of strategic planning but does not track changes over time, limiting causal inferences.

Comparative limitations: While international comparisons were made using OECD, WHO, and NHS data, differences in healthcare system structures, reporting methods, and cultural factors may affect the direct comparability of the results.

Focus on formal strategic plans: The study did not explore informal or partial strategic planning practices, which may also influence performance outcomes.

Conclusion

The research results show that strategic planning (SP) has a significant positive impact on key aspects of healthcare institutions' functioning, from operational efficiency and service quality to employee satisfaction and motivation. Institutions applying SP achieve better results across all observed indicators, confirming that SP should not be merely a formal document but an active tool for managerial governance.

Our research differs from previous studies by introducing a quantitative analysis and including indicators covering both patients and employees, thereby providing comprehensive insight into the impact of SP. The results indicate the need for the systematic institutionalization of SP in healthcare institutions in BiH, with consistent implementation, monitoring, and evaluation of its effects.

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STRATEŠKO PLANIRANJE KAO ALAT ZA EFIKASNIJE ZDRAVSTVENE ORGANIZACIJE: KVANTITATIVNA I KVALITATIVNA EVALUACIJA

Sažetak

Cilj ovoga istraživanja jest ispitati utjecaj strateškog planiranja na uspješnost zdravstvenih ustanova, s posebnim naglaskom na njegovu primjenu u Bosni i Hercegovini (BiH) te usporedbu s međunarodnim praksama.

Istraživanje je provedeno primjenom mješovitoga metodološkog pristupa, koji je uključivao sekundarnu analizu relevantne literature te primarnu kvantitativnu analizu provedenu upitnikom. Anketa je distribuirana u 15 javnih i privatnih zdravstvenih ustanova u BiH, uključujući kliničke centre, domove zdravlja i specijalizirane bolnice. Ukupno su prikupljena 183 valjana odgovora medicinskog i nemedicinskog osoblja, uključujući liječnike, medicinske sestre i rukovodeće djelatnike.

Ključne ispitivane dimenzije obuhvaćale su postojanje formalnoga strateškog plana, internu komunikaciju i sudjelovanje zaposlenika u procesu planiranja, zadovoljstvo i motivaciju zaposlenika te zadovoljstvo pacijenata temeljeno na subjektivnim procjenama.

Rezultati istraživanja pokazuju da zdravstvene ustanove koje primjenjuju strateško planiranje bilježe veću učinkovitost (+14,0 %), veće zadovoljstvo pacijenata (+16,2 %) te manji broj neželjenih događaja (-32,6 %). Nadalje, ustanove u BiH koje imaju formalni strateški plan ostvaruju +19 % bolju internu komunikaciju i 12,0 % višu razinu motivacije zaposlenika u usporedbi s ustanovama bez strateškog plana.

Zaključno, istraživanje potvrđuje da strateško planiranje znatno pridonosi poboljšanju kvalitete, učinkovi-

tosti i održivosti zdravstvenih usluga, osobito u tranzicijskim zdravstvenim sustavima poput sustava Bosne i Hercegovine.

Ključne riječi: strateško planiranje, zdravstvene ustanove, uspješnost zdravstvenih ustanova, zadovoljstvo pacijenata.
