



International Congress on Economics, Management and Business Studies

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Date: 23rd September, 2026

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AN INTEGRAL INDEX FOR ASSESSING THE PERFORMANCE OF HEALTHCARE PROVIDERS: DESIGN FOR A REGIONAL HEALTH SYSTEM

Bekzod Alisherovich Yo'ldoshev

Head of the Front Office

Samarkand State Medical University

Samarkand, Uzbekistan

Abstract

The thesis presents the design of an integral performance index for healthcare providers combining resource, process, financial-economic and social-quality indicators.

Keywords: Integral index; healthcare providers; performance; composite indicator; AHP.

Background

Single indicators capture only one dimension of provider performance, whereas managers of regional health systems need a comparable overall measure; composite indicators are widely used for this purpose when their construction is transparent [1].

Objective

To design an integral index for assessing the performance of healthcare providers in a region.



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Methods

Indicators are grouped into four blocks (resources, processes, financial-economic results, social effect and quality) and normalized by the min-max method; weights are derived with the Analytic Hierarchy Process, with consistency ratio ≤ 0.10 [2]; the index is calculated as $ISIJ = \sum b W_b \cdot (\sum k WBK - XBJK)$. Providers are classified as high (≥ 0.75), medium (0.50-0.74), low (0.25-0.49) or critical (< 0.25). Robustness is verified by rank correlation between alternative weighting schemes and comparison with Data Envelopment Analysis scores [3, 4].

Results

The index makes it possible to rank providers, identify the weakest block for each of them and link it to targeted optimisation measures, which is consistent with the aim of making efficiency measurement useful for policy and management [5].

Conclusion

The proposed index offers a transparent, reproducible tool for monitoring provider performance; its limitations (subjective weights, compensability) are addressed by AHP consistency control and robustness analysis.

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