HPR125

Clinical Quality Indicators in Orthopedic Care in Türkiye: A Policy Analysis and Framework for Refinement

Ekin Begum Ozdemir, MSc[1], OZNUR SEYHUN, BSc, MFE, MSc[2], Guvenc Kockaya, MSc, PhD, MD[2], Selin Okcun, MSc[3]

[1]Econix Research, Istanbul, Turkey, [2]Econix Research, Tallin, Estonia, [3]Health Economist, Econix Research, Istanbul, Turkey.

OBJECTIVES

This study aims to review the current clinical quality framework in orthopedic care in Türkiye and to propose a structured approach for refining clinical quality indicators based on national needs.

METHODS

This study employed a structured document review and policy analysis of the Turkish Clinical Quality Measurement and Evaluation Guideline (2021 update) and the Clinical Quality Application and Data Quality Improvement Guideline. The analysis focused on the structure of the national clinical quality cycle, data architecture, and the scope of orthopedic quality indicators. Indicators were examined and categorized according to their measurement domains (e.g., clinical outcomes, utilization measures, and risk characteristics).

RESULTS

National Clinical Quality Cycle



Current Orthopedic Quality Indicator Scope

Domain	Examples	Current Coverage	Gap
Clinical outcomes	Readmission due to dislocation; Reoperation	Included	Short-term focus
Utilization	Length of hospital stay	Included	No value-based metrics
Risk characteristics	Age distribution; BMI >40	Included	Limited contextualization
Data sources	ICD, DRG, SUT, lab, imaging, demographic data	Integrated via e-Nabiz / DSS	Patient-reported outcomes absent
Long-term outcomes	Functional status; PROMs	Not systematic	Major evidence gap

RESULTS

The review demonstrates that Türkiye has established a comprehensive, centrally integrated clinical quality monitoring system supported by standardized coding and electronic data infrastructure. The system follows a five-stage cycle: identification, measurement, evaluation, improvement, and regulation. Clinical data are transferred to the Ministry of Health's central database, e-Nabiz, and processed through a Decision Support System. Data sources include demographic records, ICD, DRG, SUT procedure codes, and clinical parameters such as BMI, smoking status, laboratory, and imaging records. For hip and knee arthroplasty, indicators include early readmission due to dislocation, reoperation rates, length of hospital stay, age distribution, and BMI >40. These indicators mainly address short-term complications, revision, utilization, and patient risk characteristics. However, patient-reported outcomes, long-term functional status, and value-based measures are not systematically incorporated. Therefore, a five-step stakeholder-driven framework is proposed, including literature review, questionnaire development, orthopedic association engagement, expert focus groups, and national prioritization.

CONCLUSIONS

Türkiye has developed a structured and data-driven clinical quality framework in orthopedics, particularly for hip and knee arthroplasty. Nevertheless, a formal gap analysis and stakeholder-driven indicator refinement process have not yet been implemented. The proposed framework may support development of context-specific, evidence-based, and sustainable clinical quality indicators aligned with evolving healthcare priorities.

ECONiX Build Knowledge Secure Access