

ACADEMIA DE STUDII ECONOMICE DIN BUCUREȘTI
Consiliul pentru Studii Universitare de Doctorat
Școala Doctorală de Management

TITLUL TEZEI DE DOCTORAT:

**PERFEȚIONAREA MANAGEMENTULUI CALITĂȚII ÎN
SECTORUL SERVICIILOR MEDICALE PUBLICE DIN
ROMÂNIA**

Anghel M.N. Cristiana Maria

Conducător științific:

Prof.univ. dr. Dobrin Octavian Cosmin

București, 2026

SUMMARY

The Romanian healthcare system, marked by structural inefficiencies, workforce shortages, institutional fragmentation, and process variability, requires the adoption of data-driven management models focused on continuous improvement. In this context, the Lean Six Sigma (LSS) methodology, integrated with the Digital Health Operations (DHO) concept, provides a strategic solution for improving quality and efficiency in public healthcare. This study applies and validates the model within the Techirghiol Balneal and Rehabilitation Sanatorium, adapting it to the Romanian institutional environment.

The research uses the DMAIC (Define, Measure, Analyze, Improve, Control) cycle as a structured framework for identifying and controlling process variation. Through the integration of statistical tools, predictive analytics, and digital monitoring (Power BI), the study demonstrates that Lean Six Sigma can be effectively implemented in public healthcare, leading to process standardization, waste reduction, and improved decision-making.

The LSS-DHO model produced measurable outcomes: average waiting time reduced to under 12 minutes, patient satisfaction increased by over 25%, administrative errors decreased by 20%, and a data-driven operational system with predictive alerts was established. These results confirm that performance can be achieved even under resource constraints through data utilization, staff training, and active leadership involvement.

The research proposes an integrated framework linking Lean Six Sigma principles with digital transformation and predictive performance management. The LSS-DHO model acts as a clinical governance system aimed at preventing deviations, enhancing transparency, and aligning managerial decisions with operational objectives.

The study validates the transformative potential of Lean Six Sigma in Romania's public healthcare system and provides a scalable framework for other institutions. Its originality lies in the development and empirical validation of a digitally integrated operational model that aligns with EU4Health and WHO standards for quality, safety, and efficiency in healthcare.