

**”GEORGE EMIL PALADE” UNIVERSITY OF MEDICINE,
PHARMACY, SCIENCE, AND TECHNOLOGY of TÂRGU MUREŞ**

**DOCTORAL SCHOOL OF LITERATURE, HUMANITIES AND APPLIED
SCIENCES**

DOCTORAL FIELD: ENGINEERING AND MANAGEMENT

DOCTORAL THESIS

Research and contributions on quality improvement and sustainable development in healthcare facilities

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The quality and sustainability of healthcare services is a topical issue in the health care system, but also for society as a whole.

In the first part of the research, it is presented the current state of knowledge in the field, by defining quality in healthcare services, performance measurement in healthcare facilities, quality assurance of medical services, sustainability and social responsibility in health care services.

The general objective of the research is to define and develop a model of analysis and evaluation, in the form of a reference framework, for the design, development and implementation, periodic evaluation and continuous improvement of quality management and sustainable development systems in health, at the level of micro system, which is compatible with applicable national and international standards.

The new San-Q (sanitary-quality) reference framework, developed in this doctoral research, is structured on the 3 pillars of sustainable development: social, economic and environmental, incorporated in the 7 basic topics of social responsibility, mentioned in standard ISO 26000 - Social responsibility guidelines, adapted to the context of healthcare provision: organizational governance, human rights, work practices, environment, good healthcare practices, patient issues, community involvement and development.

In order to establish the indicators that make up the San-Q reference framework, each of the four phases of the Planning, Implementation, Evaluation and Review (PIER) quality cycle was divided into two core activities: P.A. Accreditation of healthcare services, P.B. Designing patient-centered care interventions, I.A. Providing healthcare, I.B. Transfer assurance, E.A. Assessing and involving local opinion leaders, E.B. Satisfaction assessment, R.A. Self-assessment, R.B. Innovation in healthcare services.

The new sustainability assessment framework developed for healthcare facilities allows for guidance in the following five areas: capacity and institutional management; environmental responsibility; economic performance; social responsibility; and medical care. It contains correspondence with hospital accreditation standards as well as with the evaluation matrices established in the updated framework for the evaluation and improvement of quality and safety in hospitals in Europe.

The exploration of the specialized scientific literature allowed me to identify the successful medical practices, designed and verified in practice, which I have presented grouped on the basic activities of the PIER quality cycle. With their support I have designed the matrix of indicators of the San-Q sustainable development framework, as well as the content of the 57 indicators in its composition. The indicators are treated in the sequence of the basic activities from the phases of the quality cycle, for each basic

subject of social responsibility.

The implementation and employment of the San-Q reference framework in practice, required the development of a self-assessment tool, which contains a new way of numerical evaluation of indicators, through the values of a pair of information composed of the degree of fulfillment of the indicator - the significance of the indicator. Both categories of information are classified by numerical values from 0 to 5. The overall quality level is assessed by means of the quality scale.

The methodological approach of the evaluation is performed in 4 phases (planning, execution, reporting-improvement, follow-up) and 13 stages, which are presented in the implementation guide.

In the experimental part of the research, it was carried out a pilot implementation of the reference framework for sustainable development at the Târgu Mureș County Emergency Clinical Hospital, which aimed to validate the methodological approach in practice.

The doctoral research is relevant and innovative, as it is the first study of its kind in the field of sustainable development of healthcare facilities, which makes a connection between the three areas of sustainability: economic, social, environmental, to which are added the aspects of institutional management and basic healthcare processes, with the seven basic topics of social responsibility mentioned in the standard ISO 26000, adapted to the context of healthcare provision.

The original contributions in the field of theoretical research are materialized in: Development of the conceptual model of the new reference framework San-Q; Establishing the key pillars that a healthcare facility has to consider for sustainable development; Correlation between basic activities in the quality cycle of the healthcare facility and the basic topics of social responsibility, in the form of 53 correspondences; Indicator matrix design; Design of the 57 indicators; Design of the self-assessment tool, which allows a new way of numerical evaluation of indicators; Elaboration of the evaluation grids for the degree of fulfillment of each of the 57 indicators; Development of the implementation guide.

The original contributions in the field of experimental research consist in the validation in practice of theoretical developments by using the three tools: San-Q sustainable development framework; Self-assessment tool; Implementation guide; Presentation of the results of the evaluation of the 57 indicators, which is a good example for users.

Valorization of scientific research results contributes to increasing the prestige of Doctoral School by the presence in the main scientific current of published articles: eight articles as first author, of which **one article is indexed Clarivate Q1-red zone IF 4,614** and **two articles are indexed Clarivate, proceedings paper.**