

CED : « Engineering Sciences and Techniques »

THESIS DEFENSE

«ANAS ZIAT»

CANDIDATE FOR DOCTOR SCIENCES AND TECHNIQUES

« Healthcare Supply Chain Process Modeling and Performance Management »

Date :	Saturday 04 November 2023
Time :	10 am
Location :	Conference Room, Building F, FST - Tangier

Committe Members

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ABSTRACT

The assessment of the healthcare supply chain management represents a key challenge by virtue of the complexity of the sector. This thesis seeks to develop a generic framework for the hospital supply chain in order to describe this complex environment through a holistic and inductive approach. Build using the grounded

theory concept, the framework aims to describe both patient and material flows in the hospital. A three-level structured model is presented where we identified first the most valued activities in the chain from both patient and hospital's staff perspectives. We also propose some best practices to overcome the most common bottlenecks in the chain and identify interactions between the processes.

The second part of the thesis consist in introducing a hybrid approach that helps healthcare administrators to clearly identify, evaluate and narrow the key performance criterions for their supply chain. The methodology attempts to minimize information loss, reduce the fuzziness and subjectivity of the collected data and describes the interdependence among criterions. The proposed generic framework can be valuable for hospitals organizations aiming for a sustainable performance decision-making process. The combination of the Fuzzy Delphi method and Structural Equation Modeling proved to be effective in determining the pillars driving the sustainable performance of the hospital supply chain.

Keywords: Supply Chain Management, Performance, Healthcare, Hospital, Grounded Theory, Fuzzy Delphi Method, Structural Equation Modeling.

