## **Summary of Doctoral Dissertation**

## DETERMINANTS OF THE IMPLEMENTATION OF LOGISTIC SERVICES IN HEALTH CARE CENTRES

## MSc Łukasz Zwoliński

Effective implementation of planned actions and the expected value added by public and private entities which exist in the free-market economy is not possible without logistic actions in the broad sense. Maintaining high quality standards, utility values of finished products, comprehensiveness of services, security of data flow, continuity and effectiveness of desired processes, systematic satisfying customers' requirements and needs is inextricably linked to implementation of logistics in general. Processes in the logistics field have become an indispensable determinant conditioning development, ability to compete and sometimes survival of market organisations. Through implemented logistic actions, organisations have the ability to provide comprehensive services to their clients, customers and patients by supplying them with the right products of appropriate quality, at the right time, in the right place, to the right customer and at the right price. A good example of the effective implementation of logistics is the health care sector, especially hospitals, where logistics plays a crucial role by influencing the safety, quality, effectiveness, dynamism and continuity of medical, organisational and information services in the process of treatment and care. A positive example of using hospital logistics is a health care centre (Polish abbrev. ZOL), which functions in the hospital structures. The need to provide long-term care and treatment to chronically ill people, and also providing human, material, infrastructure and information resources require well-organised supply chains and implementing logistic processes that can meet the needs and expectations of both patients and staff of health care centres. The aim of this doctoral dissertation as well as the aim of the conducted empirical research is an attempt to identify and assess logistic support in health care centres that exist in hospitals. The main research problem resulting from the aim of this research is: What requirements need to be met and how the logistics support system should be organised in order to ensure smooth and effective functioning both for the staff and the patients of a health care centre? The

subjects of research were the health care centres located across the neighbouring voivodships. The aim of the empirical research was the logistics support system in the health care centresin the field of security of their managing board, staff and patients, as well as the heads of the hospitals. The research limitations were:

- in the spatial extent- the health care centres located only across lodzkie and wielkopolskie voivodships are concerned
- in the temporal extent- the planned time of surveying was estimated to take place during six months, from April to September 2015.

In order to solve the main research problem, two detailed hypotheses were formulated:

- 1. Logistic processes in health care centres in Poland do not meet the requirements of their staff as well as of the patients who stay in them.
- 2. The current logistics system in health care centres needs to be complemented on the basis of identifying and analysing its determinants.

Among all the subjects qualified to be researched, eight health care centres were chosen (four in each voivodship) by purposive sampling. A deep analysis concerning the need to select a proper way of conducting the research let the author of this thesis choose a questionnaire-based interview and an expert interview. The scope of empirical tests included the intentionally chosen health care centres that exist in hospitals. Methodological studies were carried out on a research sample of more than 270 deliberately chosen people, including managerial staff (the heads of the hospitals), managers of ZOL (expected to be the experts), health service staff, support staff and patients of the centre. The results of the empirical research provided the basis for verification, analysis and assessment of the aim and the research hypotheses. They also enabled the author to formulate proper conclusions and their summary. This doctoral dissertation contains six chapters; four of them are theoretical, and two are methodological.

Chapter I entitled: "A hospital as a socio-economic system" contains social and economic operating conditions, as well as the meaning and the role of health care, and the influence it has on the citizens' health security. This chapter discusses operational problems of hospitals on the basis of legal acts, statutory acts, social conditions and statistical data. The general characteristics of how the hospitals function in Poland has been included. It has been

emphasised that managers of the hospital play a key role not only in hospital management but also in rational management of the resources and creating pro-health attitude in their local community. Moreover, this chapter describes the issue of directions and trends of development of the hospitals in Poland, including social and demographic problems, and also market needs.

Chapter II entitled: "Hospital quality improvement" describes not only the meaning of quality in hospitals, but also the characteristics and the type of pro-quality activity in health care, using quality management system as a tool supporting the hospital management, and a general overview of implementing and using ISO standards in hospitals in Poland.

Chapter III entitled: "General characteristics of the functioning of hospital logistics" describes the meaning of logistic services in hospitals, identification of their logistic processes and the practice of outsourcing, which is a tool supporting the functionality and effectiveness of the planned processes in a hospital.

Chapter IV, which is the last theoretical chapter, is entitled: "Practical use of logistic operations based on the example of health care centres". It describes the use of logistics in health care centres and includes the characteristics of their functioning and their aims and tasks. It also contains a general description of logistic processes and the issue of the development directions of logistics services in health care centres.

Chapter V entitled: "Research methodology" describes the choice of research methods, shows the defined research objectives, the research problem, the applied research technique, the testing tool that has been used, formulated research hypotheses and the choice of the research sample.

Chapter VI entitled: "Results of empirical research" contains the graphical presentation of the results obtained from the research, analysis, the assessment of the research results and also from verification of the research hypotheses. The chapter finishes with a research summary and the conclusions based on the research. Conducting the empirical research as well as obtaining unbiased results that are presented in this thesis enabled the author to verify the objective of the study, solve the main research problem, verify the research hypotheses and propose the concept of improving the functioning of logistics in health care centres by implementing model logistic support.