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Determinants of financial condition of public hospitals in Poland

(Summary of doctoral dissertation)

Field: Economics Major: Finance

> Dissertation written under the academic supervision of Professor Agnieszka Alińska

Summary

Public hospitals are the most essential element of most healthcare systems in the world. They protect the health of the public in emergency situations, as well as in the event of the need for longer and more complex medical care. For this reason, the functioning of public hospitals in most models of medical care implies the highest expenditure of public funds. The continuity and stability of their operation is a critical area of any country's resilience. Their role is important not only in the current functioning of institutionalized medicine. It is particularly important in crisis situations on a local and global scale.

This doctoral dissertation is interdisciplinary in nature, in which theoretical, empirical and application goals are defined. The first of them is expressed by the desire to deepen research in the field of health policy, finance, and public finance around external factors that determine the financial condition of public hospitals in Poland. The introduction of a new service settlement system in the form of the Hospital Network (from the fourth quarter of 2017) and the occurrence of an unforeseen epidemiological phenomenon in 2020, which was the SARS-CoV-2 pandemic, created in the author's opinion the need to analyze changes in the financial condition of hospitals in Poland in a new perspective. Thus, it became necessary to identify new and conduct additional analyzes of changed external factors that affect the financial condition of public hospitals.

This is the cognitive aspect. The last aspect, i.e., the implementation aspect, is the basis for the development and implementation of solutions based on crisis management to create a comprehensive concept of actions in the event of unforeseen events (such as an epidemic or other extraordinary phenomena: flood, fire, war, etc.). The application of such an approach will make it possible to maintain the stability of the financial condition of public hospitals in the event of the emergence of new external factors and conditions - both micro- and macroeconomic ones.

Main and auxiliary hypotheses

The main hypothesis verified in this dissertation is as follows:

The analysis of the conditions of the financial condition of public hospitals in Poland shows that external factors influencing it are constantly present, but with varying intensity as after the introduction of the Hospital Network, and only the occurrence of a sudden epidemiological phenomenon in the form of the COVID-19 pandemic caused new external factors of the financial condition and significantly changed the conditions for these institutions. (**Hypothesis verified positively**)

In accordance with the main hypothesis adopted in this way, five auxiliary research hypotheses were also formulated in the dissertation:

- 1. The insurance model of the health care system implemented in Poland after the political transformation created new legal, organizational, and financial implications for the financial condition of public hospitals, which were significantly modified with the implementation of the Hospital Network. (Hypothesis verified positively)
- 2. Changes in the financial condition of public hospitals in Poland depend primarily on external factors, which are both quantitative and as well as qualitative. (**Hypothesis** verified positively)
- 3. Despite the deteriorating financial condition of all public hospitals in Poland, during the SARS-CoV-2 virus pandemic, the results of financial indicators of nationwide entities within the Hospital Network, as well as institutions for which a university and a government administration institution are the creating body, improved. (**Hypothesis verified negatively**)
- **4.** The sudden epidemiological phenomenon of the SARS-CoV-2 virus pandemic and the government's actions in this regard had a negative impact on the financial condition of public hospitals in Poland. (**Hypothesis verified negatively**)
- **5.** Additional, outsourced types of medical activities launched by public hospitals in Poland to prevent or treat SARS-CoV-2 virus infection had a negative impact on the financial condition of public hospitals. (**Hypothesis verified negatively**)

The main and auxiliary goals of the dissertation

The main goal of this doctoral dissertation is to propose a concept of activities enabling the maintenance of financial stability of public hospitals in Poland in crisis conditions for the health care system caused by extraordinary situations. The following specific objectives have been subordinated to the implementation of the main objective and verification of the above hypotheses:

- 1. Description of the characteristics and development of models of health care systems, as a result of which the organizational, legal and financial framework was created, conditioning the functioning of medical entities, including public hospitals in Poland.
- 2. Analysis of the change in the level of expenditure on the health care system in Poland as the basic external factor affecting the financial condition of public hospitals.
- 3. Determination of methods for measuring changes in the financial condition of public hospitals in Poland based on efficiency verification tools.
- 4. Verification and assessment of changes in the financial condition of public hospitals in Poland since the occurrence of two new external factors, namely the Hospital Network, and then the SARS-CoV-2 virus pandemic.
- 5. Identification of the main external factors and their impact on the change in the financial condition of public hospitals in Poland during the extraordinary event of the coronavirus pandemic.
- Assessment of the reaction of decision-makers in the area of state health policy to the COVID-19 pandemic in the context of its impact on the financial condition of public hospitals in Poland.

Chapters

The conducted and interpreted research corresponds to the hypotheses and content contained in the doctoral thesis. The dissertation consists of six main chapters, introduction, and conclusion, as well as a list of references and appendices. The first four are theoretical chapters, and the last two present the results of the study. The synthesis of the results of the query along with the validation of the hypotheses has been included at the end of the dissertation.

The **first chapter** discusses the basic concepts related to health care and describes its embedding in the current of public sector economics. At the same time, it defines what the financial condition is in relation to healthcare entities and distinguishes the factors conditioning it.

The **second chapter** is a reference to the legal and organizational framework for the functioning of healthcare entities, including public hospitals, as a result of the development of the health care system in Poland after the political transformation. After defining the basic

concepts related to health care, describing various models of health care systems, defining what the financial condition is and what are its determinants, as well as presenting the organization and development of Polish institutional medicine from the times of the People's Republic of Poland to the present, an analysis of the financing of this area in Poland was conducted. This includes the **third chapter** presenting changes in one of the most important external factors affecting the financial condition of public hospitals.

The next, **fourth chapter** of this dissertation is of a theoretical nature and presents knowledge about the effective measurement tools that can be used to study the financial condition and its changes in public sector entities, including public hospitals.

The penultimate, i.e., **fifth chapter** of this dissertation presents the results of the first part of the research and analysis, as well as conclusions drawn on the basis of the query. They concern the change in the financial condition of public hospitals in Poland after the implementation of the Hospital Network and during the two years of the COVID-19 pandemic.

The last, **sixth chapter** of the work covers the identification of factors that determine the financial condition of public hospitals in Poland on the example of selected healthcare entities. An element of this chapter is also the presentation of the assessment of the measures implemented by the government in Poland due to the SARS-CoV-2 virus pandemic and the concept of measures in a crisis situation of an epidemic nature concerning the health care system, allowing to maintain the stability of the financial condition of public hospitals in Poland.

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