

STATEMENT

By: Assoc. Prof. **Alexander Ivanov Valkov**, PhD

University of National and World Economy
Professional field 3.7. Administration and Management
“Organization and Management outside the Sphere of Material Production”

Regarding: Dissertation for the award of PhD degree
Professional field 3.7. Administration and Management

Author of the dissertation: **VALERIYA VESELINOVA NIKOLOVA**
Full-time doctoral student enrolled in PhD programme
“Organization and Management outside the Sphere of
Material Production (in Healthcare)”

Dissertation thesis: **SYSTEM OF INDICATORS FOR MEASURING
AND EVALUATING THE QUALITY OF
HEALTHCARE IN BULGARIA**

Grounds for presenting the statement: participation in the scientific jury for the defence of the dissertation according to Order № P-109-194/28.04.2022 of the Vice-Rector of MU - Varna

Training in the PhD programme

Valeriya Veselinova Nikolova is enrolled since 2019 (Order № P-109-85/01.02.2019 of the Vice-Rector of MU - Varna) in the PhD program "Organization and Management outside the Sphere of Material Production (in Healthcare)", professional field 3.7 Administration and Management. The PhD student is admitted in full-time training with dissertation topic "System of indicators for measuring and evaluating the quality of healthcare in Bulgaria". Her supervisor is prof. Antonia Dimova - Yordanova. The training is organized and conducted at the Department of Health Economics and Management at the Faculty of Public Health, Medical University - Varna. During her training she successfully passed the PhD exam in the scientific specialty (13.09.2019). As per decision of the Faculty Council of the Faculty of Public Health (178/26.01.2022) and Order № P-109-62/02.02.2022 of the Vice-Rector of MU-Varna, the PhD student is entitled to defence.

PhD student data

Valeriya Veselinova Nikolova (b. 1988) is an assistant professor at the Department of Economics and Health Care Management at MU - Varna since March 2017. She teaches undergraduate and graduate students in the field of management theory and health management (including Quality Management in Health Care). Prior to her academic career, she gained a professional experience as a medical representative at AVO Pharma (2011 - 2016) and then as a study organizer at MU-Varna (2016 - 2017).

Valeriya Nikolova's education is related to her interest and professional engagements in the field of pharmaceutical business. Her educational portfolio was built at MU – Varna from

where she obtained a Bachelor's degree in Health Management (2008/12) and a Master's degree in Pharmaceutical Management (2010/13). She is currently studying at MU - Varna for a degree in Medical Informatics and Health Management.

General characteristics of the dissertation

The submitted manuscript consists of 182 pages, of which 131 pages comprise the main text, structured as follows: an introduction, four chapters and a conclusion. A total of 32 figures and 26 tables are included in the main text of the dissertation. There are 8 appendices (40 pages in total). It should be noted that Appendices 1 - 5 (25 pages in total) represent a key research result, part of the author's research (on the basis of which the analysis in Chapter 2 of the dissertation is elaborated). They present a structurally extracted, summarized and systematically presented elements, criteria and indicators based on an extensive review of national legislation, medical standards, rules of good practice, etc. Annex 5 systematises the indicators for which there is available data and their sources. Due to their relatively larger size, the annexes are properly positioned at the end of the thesis. I would like to note that they are a result of a considerable effort, carried out with impressive precision, thought and consistency. The reference list of sources used (the bibliography) includes a total of 175 titles, of which 53 are in Bulgarian (of which 28 are laws and regulations) and 122 in English language. Approximately ½ of all sources cited and used date from the last 5 years, which allows (as evident from the text of the thesis) for a thorough and extensive literature review that combines contemporary and classical scientific ideas and results on the topic of healthcare quality. The cited sources fully correspond to the subject area of the study and highlight the importance of the topic, the theoretical and methodological nature and contributions of the dissertation. The bibliography is excellently arranged, presented according to a uniform standard (APA). Evident are the serious efforts of the PhD student to be precise in handling the literature sources, the theoretical reviews and the based on them analyses, comments and summaries. There is a conscientious use of knowledge. The work with sources, correct selection and use of data and information could be defined as excellent. All figures and tables are formatted according to the academic standards - they are readable, comprehensive and convincing, with correct source citation.

The individual chapters (parts) of the dissertation are logically arranged and generally balanced in terms of length, precisely and meaningfully structured internally, and provide insight into the overall course of the research. In connection with the theoretical and methodological orientation and complexity of the topic, subject of the dissertation, it should be noted the accurate and careful use of categories and terms as a result of a thorough knowledge of the scientific literature, which allows to freely handle the various sources and to make competent summaries and comparisons. It can be concluded that the dissertation author has developed her own academic writing style - comprehensible, logical, structured, sparing, but without affecting the thorough and correct presentation of different points of view, their confirmation with scientific arguments, and particular attention and precision in the use of scientific apparatus.

Relevance and importance of the topic

The significant topic of the medical care quality - a subject of research in many other studies, not only on national level - is hereby *stated in a different way*, which is also decisive for the PhD student's approach to its solution. Quality is an intrinsic, structural element of the healthcare system and healthcare organisations' functioning. How to measure quality, as per

which of its aspects (elements) and with which specific indicators, how to link the different aspects of quality so as to obtain a comprehensive and objective measurement of quality, which would give a general impetus to the health system, the health care institutions, the medical professionals and to all stakeholders towards its improvement - this is an essential practical task. However, it cannot be fragmentarily approached. It is imperative to create (1) a *common model* that builds on established practices, a model that is accepted by all stakeholders, that considers the place and interests of each of them, and (2) a *system of indicators* that ensures effective management of the health system and health care organizations. If until now this task has been solved "top-down" (including in health policy plan), i.e. first the theoretical model is created and then the elements are searched for (unravelling), here the author applies a different approach (without defining it in this way), namely: on the basis of a common understanding of quality in and of health care, to identify its main aspects (elements) and the indicators that describe them, so as to be "inscribed" at different levels and to different actors in the health system.

I find such framework for the problem of quality to be relevant, significant (not only for our country) and to represent an original scientific (scientifically applied) task.

Study design

The idea for the dissertation research is set out in the first two parts, the 'introduction' and the 'research organisation'. The approach taken of presenting *in two parts* (1) the need to design and implement a national health policy instrument (system) for health care quality monitoring, outlined briefly in the introduction, and (2) the way in which this task is achieved, which is the subject of the other part, is not successful. The two parts have a common meaning and purpose. A by-product of this, in my view, is a focus on the practical side of the study - identifying the criteria and indicators for assessing quality and "piecing together" in a way that implies systematic collection of relevant information and, on this basis, quality management at different levels of the health system. This is, of course, a worthy aim of the dissertation research (as I have already pointed out above), but I think that the scientific results achieved are primarily in methodological terms and in conceptual solutions. What the dissertation does, and for which she is to be commended, is that she goes about them the hard way, namely from the analysis of a multitude of data and from the juxtaposition of different ideas and practices she builds a workable taxonomy of healthcare quality, shaped into a common systemic tool suitable for its management. In this respect, the formulation of a *general thesis* of the study would provide an opportunity to rethink the actual scientific results obtained at a higher level.

All elements of the research plan are aimed at achieving the defined main objective "the establishment of a system of criteria and indicators for measuring and evaluating the quality of health care in Bulgaria". These are criteria and indicators that are derived from the scientific literature and from international practices in health system evaluation. The organization of the study is shown in a synthesized way. An approach has been adopted in which the details of the different stages of the study presented in each chapter are presented in the relevant section.

The research methodology is relevant to the aims and objectives of the thesis. The research approach successfully combines theoretical and empirical methods. They are grounded and the obtained research results are linked and logically structured.

Main scientific achievements in the dissertation

- *Chapter One* is designed as the theoretical foundation of the dissertation. It can be characterised as a compendium of quality in healthcare and the approaches to its measurement. A number of terms are refined in the context of different concepts of healthcare quality and approaches to its measurement. On the basis of a thorough theoretical (conceptual) investigation and systematization of leading views on healthcare quality, the dissertation achieves two important (for the further course of the research) *results*. The first, integrates the two perspectives of quality - at the level of the healthcare system (macro-perspective) and at the level of the healthcare facility and medical professionals (micro-perspective) - into a common framework by deriving their inherent quality assurance functions. The second, summarizes the leading and scientifically valid elements of health care quality and, accordingly, the most commonly used indicators for each of them.

- *Chapter Two* provides answers along two lines of inquiry in a national context. The first question, relates to how legislation, medical standards and rules of good medical practice define quality of healthcare, its elements and measures. The aim is to show the gaps in legislation that make the quality measurement process difficult or ineffective. The second line of research provides a detailed assessment of healthcare quality by the defined core elements. The aim is to assess the functioning of the health system in terms of quality and to systematize the main sources of information (Annexes 1-5).

- *The Third chapter*, aims to verify empirically the elements and measures of healthcare quality derived in the first chapter. This was done on the basis of two survey (sociological) studies. The first survey provides information on how citizens rate the quality of healthcare. The second survey has as target group medical professionals. The survey method allows answering the question which quality elements form the citizens' (respectively medical professionals') perception of high quality healthcare. On this basis, the information needs of the two target groups to the national quality measurement system and the information needed by citizens to choose a specific medical institution are selected.

- *Chapter Four* designs the general appearance of the quality measurement and evaluation system. The conceptual model contains the key elements of the system mapped to the three guiding perspectives for the operation of this system: structure, process and outcome, respectively. The functioning of the quality measurement and evaluation system is "assured" by (1) the acceptance of the indicators included in the system by the two focus groups and (2) the linkage of the evaluation elements and indicators to the specific levels of the health system at which quality problems are to be addressed.

Scientific and applied contributions

I accept as valid the scientific results of the conducted research, which are indicated in the reference in the abstract (p. 42). A total of 5 scientific contributions are listed, grouped into two groups - theoretical (1) and theoretical-applied (4). I fully accept and acknowledge the contributions of theoretical significance. I would define the last two contributions mentioned in the reference as contributions of methodological significance. Of an applied nature are the results obtained in research on legislation and surveys of the attitudes of citizens and medical professionals.

These results and contributions are the work of the author of the study. There is scope for extending and continuing the research.

Publications and participation in scientific forums

In the author's abstract (p. 43) are listed 3 independent scientific publications on the topic of the thesis for the period 2020-2021. They reflect the individual stages and achievements of the research. Two of the publications are in scientific conferences proceedings (one of them is abroad). An article has been published in the journal Health Economics and Management. The publications are sufficient to meet the minimum national requirements for publication credits.

The article "*Elements and indicators of health service quality used in assessing health systems performance*" (2020) identifies the six most commonly used elements, and their corresponding indicators, to assess health service quality in 15 countries. The main part of the indicators focusses on measuring the process and outcome of care provided, and the elements efficiency, safety and putting the patient at the centre of the health system include the most indicators. The report "*Continuity in healthcare delivery ...*" (2020) explores this element of quality, which refers to consistency between different healthcare professionals and identifies the indicators most commonly used to assess it. The report „*Indicators of Quality of Primary Care...*“ (2021) explores one of the most commonly used tools for quality assessment of primary health care - the Health System Performance Assessment.

Opinions, recommendations and comments

The dissertation is an original scientific product that proves the author's high professional competence in the topic of the research. In the course of her work, she has shown an ability and affinity for in-depth theoretical analysis and generalizations, for correct selection and competent use of modern scientific methods, for collection and analysis of relevant empirical data. The new challenge in front of the PhD student is to continue the research towards practical application of the conceptual model that she has developed at different organizational levels in the health care system. I recommend publishing the dissertation as a monographic study.

I would like to make the following remarks to the presented dissertation:

- Although related, the main purpose of the study (p. 10) cannot compensate for the lack of a clearly defined overall research thesis. Without it, the main objective seems to be a "technical" task.

- The separation of an *introductory* and respectively a *concluding (summary) sections* to each chapter would be helpful in presenting the results of the research more convincingly. The former would compensate for the missing "research plan" (in the introduction) by outlining more clearly the logic and expectations ahead. The second, would give completeness to the respective chapter and provide a 'bridge' to the research aims and objectives (this is also not well outlined in the manuscript).

- A conceptual model development is the necessary general framework (here the author is right), but is only a first step. Even at the health system level, this framework needs to be *designed* (and subsequently deployed) for the other lower levels of the system with their respective functions. There are open questions about (1) the applicability of this framework (indicator system) at a regional level; (2) its mirroring at the three levels - health system, health facility, professionals/citizens (Figure 4.1); (3) and to what extent it reflects some specific features of activity, e.g. health care.

- With reference to the above, the developed indicator system could be elaborated (as a continuation of the work on the topic) into a system implementation roadmap, based on the outlined main directions (section 4.3).

The above remarks do not detract from the overall very positive impression of the dissertation presented and from the convincingly demonstrated qualities of a researcher on part of the PhD student.

Conclusion

The dissertation is an original research on a contemporary, scientifically and practically significant topic. It shows excellent awareness and thorough theoretical knowledge of the subject matter. Convincingly demonstrated are the skills for conducting independent scientific research - to pose a problem, to plan, organize and implement research by using valid scientific methods, the results of which are of high scientific and applied value. The emphasised affinity of the author for theoretical analysis and search for practically applicable methodological solutions based on empirical evidence obtained through relevant research tools deserves admiration. I evaluate the efforts made by the PhD student as successful and the results as scientifically valid. The main objective is achieved and the specific tasks set in the project are solved. Specific contributions of scientific and applied nature are obtained, that are the basis for the sustainability of the research and outline opportunities for further development.

The foregoing allows me to give a **positive evaluation** of the thesis. I recommend the esteemed members of the scientific jury to support the decision **FOR awarding a PhD degree** in the professional field 3.7. "Administration and Management", doctoral program "Organization and Management outside the sphere of material production (in health care)" to **Valeriya Veselinova Nikolova.**

June 17, 2022

Member of the scientific jury: _____



Assoc. Prof. Alexander Valkov, PhD