

To
the Members of the Scientific Jury,
appointed by Order No. 5631/30.09.2026
of the Rector of the Medical University
of Plovdiv

REVIEW

By Prof. Dr. Boyko Kostov Bonev, PhD
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Concerning the procedure for the defence of the doctoral dissertation submitted by Dr Ivelina Tenkova Popova-Sotirova, a full-time doctoral candidate at the Department of Social Medicine and Public Health, Faculty of Public Health, Medical University of Plovdiv, entitled "*Models for Pricing and Remuneration of Services in Outpatient Dental Care*", within the doctoral programme in *Social Medicine and Organisation of Healthcare and Pharmacy*, professional field 7.1. Medicine, under the supervision of Prof. Nina Musurliyeva, PhD, and Prof. Ralitsa Raycheva, PhD.

1. Description of the documents and materials submitted for the procedure

The documents and materials submitted for the procedure comply with the Regulations for the Implementation of the Development of Academic Staff in the Republic of Bulgaria Act, as well as with the Regulations on the Development of Academic Staff at the Medical University of Plovdiv.

2. Overview of the doctoral candidate's professional and academic development

Dr Ivelina Tenkova Popova-Sotirova graduated from the Faculty of Dental Medicine in Plovdiv in 1992. In 1996, she began working as a resident dentist at the Municipal Dental Polyclinic in Karlovo. In the same year, she established her own dental practice in Plovdiv.

On 1 April 2022, following a successful competitive selection procedure, she was appointed as an Assistant Professor at the Department of Social Medicine and Public Health, Medical University of Plovdiv. In 2025, she obtained a specialist qualification in Public Dental Health.

3. Relevance of the research topic

The topic of the doctoral dissertation is timely and possesses unequivocal practical significance for contemporary dental care. Its relevance stems from the need to reconsider existing mechanisms for the costing and remuneration of dental services so that they more accurately reflect actual costs, the professional labour involved, and the quality of the services provided.

Of particular importance is the pursuit of a more transparent and predictable approach to price-setting, one that takes into account the interests of both dental practitioners and patients. In this respect, the doctoral candidate addresses the problem comprehensively, situating pricing within the broader context of the organisation and management of dental care, the economic sustainability of dental practices, professional motivation, and access to services.

Knowledge of the research problem

My overall assessment of the submitted doctoral dissertation is positive. The doctoral candidate demonstrates a sound understanding of the scientific issues under investigation, the ability to conduct independent and critical analysis, and the capacity to interpret the findings convincingly. In the literature review, she systematically examines and analyses existing scientific concepts and approaches. In discussing her own findings, she demonstrates the ability to compare and substantiate them and to interpret them in the context of the stated research aims and objectives.

Description and assessment of the doctoral dissertation and its abstract

The principal aim of the study is **to develop and empirically validate an innovative model for the pricing and remuneration of dental services in outpatient care**, taking into account actual costs, the quality-related characteristics of services, and the expectations of the principal stakeholders—patients and dental practitioners. The stated aim is clearly defined, corresponds to the subject matter of the dissertation, and is consistently pursued through the research objectives.

From a methodological perspective, the inclusion of **two principal stakeholder groups—patients and dental practitioners**—deserves particular recognition. This approach enables the problem to be examined simultaneously from the

perspectives of both the recipients and the providers of dental care. Four research hypotheses have been formulated, addressing the transparency of pricing, the economic adequacy of existing prices, patients' willingness to accept higher prices when these are clearly justified, and dental practitioners' attitudes towards a model incorporating cost-based considerations and incentives for quality.

A major strength of the dissertation is that the study **does not stop at identifying the shortcomings of the existing system**, but proceeds to construct an original applied model. This feature enhances the scientific and practical value of the research. The proposed approach combines cost-oriented and value-based principles and seeks to strike a balance between the economic sustainability of dental practices, the quality of care provided, and the interests of patients.

The findings enable the author to accept the formulated research hypotheses and provide a reasoned justification for the need to reform the existing mechanisms. The dissertation's conclusions emphasise that the parallel surveys of patients and dental practitioners identify deficiencies relating to pricing transparency, the coverage of actual costs, and the availability of quality incentives, while also demonstrating support for the principles underpinning the proposed model.

I particularly appreciate the practical orientation of the research. The recommendations put forward go beyond general statements of intent and are directed towards specific stakeholders within the system, namely the Ministry of Health, the National Health Insurance Fund, the Bulgarian Dental Association, and dental practitioners. These recommendations include the development of a national methodology for costing dental services, the periodic updating of cost estimates, the expansion of publicly funded dental services with an emphasis on prevention and early diagnosis, the introduction of quality-based incentives, and greater transparency in price-setting.

An important indication of scientific rigour is that the proposed model **is not presented as a definitive solution**, but rather as a conceptual and methodological framework requiring subsequent pilot testing, further validation under real-world conditions, digitalisation, and adaptation to the applicable regulatory framework. This approach establishes a clear direction for further research and the practical development of the results achieved.

The dissertation abstract adequately reflects the content and principal findings of the doctoral dissertation. It presents the relevance of the research topic, the aim and objectives of the study, the methods employed, the principal findings, the conclusions, the recommendations, and the contributions of the research. The abstract is structured in a logical sequence and provides a sufficiently clear account of the scientific investigation undertaken and the model developed for the pricing and remuneration of services in outpatient dental care. Its content and

structure are consistent with those of the dissertation, and it accurately presents the scientific and applied research results achieved by the doctoral candidate.

4. Assessment of publications and participation in scientific forums related to the dissertation topic

In connection with the doctoral dissertation, the candidate has submitted five scientific publications reflecting key aspects and findings of the research conducted. Two of these publications have appeared in scientific journals with an impact factor, further attesting to the scientific value and international visibility of the research topic.

The candidate's publication record demonstrates that Dr Ivelina Tenkova Popova-Sotirova meets the minimum national requirements and the relevant scientometric criteria stipulated in the Regulations on the Development of Academic Staff at the Medical University of Plovdiv.

Conclusion

In conclusion, I consider the submitted doctoral dissertation to be an independent, comprehensive, and methodologically sound scientific study with clearly demonstrated theoretical and applied significance. The findings obtained and the contributions formulated demonstrate the doctoral candidate's ability to conduct independent scientific research, critically analyse research data, and propose well-substantiated solutions to current challenges in the organisation and economics of dental care.

The doctoral dissertation meets the requirements of the Development of Academic Staff in the Republic of Bulgaria Act, the Regulations for its Implementation, and the Regulations on the Development of Academic Staff at the Medical University of Plovdiv.

On the basis of my overall positive assessment of the doctoral dissertation and the scientific and applied research results achieved, **I confidently recommend that the Honourable Scientific Jury award Dr Ivelina Tenkova Popova-Sotirova the educational and scientific degree of Doctor (PhD)** within the doctoral programme in *Social Medicine and Organisation of Healthcare and Pharmacy*, professional field 7.1. Medicine.

10 October 2026

Reviewer:

Prof. Dr. Boyko Kostov Bonev, PhD