ABSTRACT:

Health system performance assessment is a widely recognised tool, which supports the decision-making process in the health system and monitors the progress in achieving its goals. In the last 20 years, many international organisations such as Organisation for Economic Cooperation and Development, World Health Organisation European Region and European Observatory on Health Systems and Policy have undertaken several initiatives for health system performance assessment. At EU level, it is seen as an essential tool to achieve effectiveness, accessibility and resilience of health systems. Different conceptual frameworks for health system performance assessment have been proposed at international and national level. Although there is no uniform dimensions and indicators, all these frameworks have a common starting point – the conceptualisation of the health system, defined in a broader or narrower way.

In Bulgaria, over the past decades, comprehensive health system studies have been mainly devoted to the ongoing health reforms and their outcomes. There are numerous studies on specific aspects of the health system, such as effectiveness and access to health services, as well as studies related to the assessment of the health status of the nation. Despite the wide variety of healthcare publications in Bulgaria, there is no a uniform methodology for periodic assessment of the health system. The aim of this study is to review the current state of research on health system performance assessment at international and national level.

Keywords: health system, performance assessment, conceptual frameworks, measurement

BACKGROUND

Solid and reliable knowledge of how well a health system performs is essential at any time. But it is even more imperative in times of growing challenges such as faced by the European health systems nowadays: increasing cost of healthcare, population ageing associated with a rise of chronic diseases and multi-morbidity leading to growing demand for healthcare, shortages and uneven distribution of health professionals, health inequalities and inequities in access to healthcare [1].

According to the Tallinn Charter (2008) of the World Health Organisation (WHO) “well-functioning health systems are essential to improving health and health systems need to demonstrate good performance” [2]. This document envisages a commitment by WHO European Region Member States to strengthen health systems through promoting transparency and accountability for their performance, increasing the responsiveness to people’s needs, preferences and expectations, enhancing health systems resilience to crises, etc. The Tallinn Charter has marked the beginning of measuring health system performance in Europe, after which several countries have taken up the challenge and have started to introduce health system performance assessment (HSPA). A survey conducted in 2013 revealed that 13 EU Member States had some sort of HSPA at national or regional level (Belgium, Croatia, Sweden, England, Finland, Greece, Lithuania, Portugal, Slovakia, Slovenia, Spain, Austria, and Denmark) [3]. International organisations such as Organisation for Economic Cooperation and Development (OECD), WHO European Region and European Observatory on Health Systems and Policy have undertaken several HSPA initiatives.

The WHO defines HSPA as “a country-specific process of monitoring, evaluating, communicating and reviewing the achievement of high-level health system goals based on health system strategies” [4]. In accordance with the Tallinn Charter and following the recommendations of WHO Europe [5], the process of HSPA has several objectives:

1. To create a shared understanding and vision among stakeholders of the priorities for strengthening the health system.
2. To support evidence-based policy-making and priority-setting by providing information on system performance.
3. To determine the effects of health system reforms and national health strategies.
4. To provide a transparent and accountable view of the health system performance, in accordance with the commitment made in the Tallinn Charter.
5. In the long run, to monitor the health system performance over time.

HSPA is becoming a central instrument in the governance of modern health systems [3]. It is a widely recognised tool, which supports the decision-making process in
the health system and monitors the progress in achieving its goals. Thus, HSPA can be a powerful driver of health system improvement. However, if the analysis is partial or inadequate, the assessment can lead to misleading conclusions and inappropriate policy responses. It is therefore essential that the assessment is based on reliable data, comprehensive analysis and interconnected measurable indicators.

The aim of this study is to review the current state of research on health system performance assessment at international and national level. The article first presents the importance and relevance of the health system performance assessment at EU-level followed by an overview of the state of the research internationally and in Bulgaria.

**REVIEW RESULTS**

The relevance of health system performance assessment at EU-level

At EU-level, the European Commission has created the European Core Health Indicators Initiative, which assembles 88 indicators relevant to health system performance assessment. The indicators are systematised in four areas: demographic and socio-economic factors, health status, determinants of health, and health services [6].

In 2011, the Council of the European Union started the so-called “Reflection process on modern, responsive and sustainable health systems”. The 2013 conclusions encourage Member States to use “health system performance assessment for policymaking, accountability and transparency” and bring the issue of HSPA high on EU policy agenda [7]. The recommendations emphasise the streamlining the HSPA theoretical framework debate. In February 2014, the Council Work Party on Public Health at Senior Level invited the Member States and the Commission to set up an Expert Group on Health Systems Performance Assessment.

Another important driver for the development of a framework and indicators for HSPA has been the implementation of the EU Cross Border Directive since patients are expected to receive information on quality standards and safety of care in different EU countries and thus, take informed decision and choice [8].

In April 2014, the Commission published a Communication on effective, accessible and resilient health systems, which proposed an EU agenda to strengthen effectiveness, increase accessibility and improve the resilience of health systems [1]. In recent years, increasing trends in instability, frequent financial and migration crises in European countries as well as the need for the health system to return to its equilibrium after each shock, have been shifted the focus of political governance from sustainability to resilience. HSPA is seen as an essential tool to achieve effectiveness, accessibility and resilience of health systems. The Communication focuses on effectiveness: health systems’ ability to produce positive health outcomes, i.e. to improve the health of the population. HSPA is particularly important from the perspective of enhanced resilience, defined as the ability of the health system “to adapt effectively to changing environments, tackling significant challenges with limited resources”. The Council of Health Ministers has urged the Commission to support Member States in using HSPA. The Communication encourages EU Member States to develop criteria and procedures for selecting priority areas for HSPA at the national level and to share their experience and outcomes.

In 2016, the European Commission started an initiative “State of Health in the EU” in collaboration with OECD and European Observatory on Health Systems and Policy, which also includes elements of HSPA.

The widely recognised importance and relevance of HSPA at international and EU level streamline the scientific research in this field. More than one-quarter of the articles on health system performance and its different aspects in Scopus and Web of Science has been published in the last three years. Many national organisations, institutions and universities have conducted various studies in the field of HSPA.

**International frameworks of health system performance assessment**

The first attempt to systematically measure and compare the performance of health systems was made in the 2000 report of WHO (World Health Report 2000 - Health systems: improving performance). The report applied a holistic approach to health system performance measurement including a definition of the health system, health system’s goals and its main functions [9]. The WHO framework for HSPA is based on three goals (improving the health of the population; fair financing; and responsiveness to people’s non-medical expectation) which interact with four functions of the health system (stewardship; financing; service provision and resource generation) (Figure 1). In the report WHO proposes an index of national health system performance, which combines five dimensions with respective indicators:

- overall level of health;
- distribution of health in the population;
- overall level of responsiveness;
- distribution of responsiveness; and
- distribution of financial contribution.

![WHO 2000 Framework](https://www.journal-imab-bg.org)

Murray and Frenk argue that the first step in HSPA is to define the boundaries of the health system. According to their definition, a health system includes the resources, actors and institutions related to the financing, regulation and provision of health actions. In addition, a health action is defined as “any set of activities whose primary intent is to improve or maintain health” [11].

In 2001, OECD published a new conceptual framework for HSPA, which is similar to WHO’s framework but includes also some modifications [12]. The OCEd framework adopts a narrower definition of a health system, which is limited only to the performance of the system itself without public health activities. The changes concern the goals of the health system as well. OECD adds the access as a component of responsiveness and the level of health expenditure as an objective. This modifies the three goals of the OECD framework as follows: health improvement and outcomes; responsiveness and access; and financial contributions and health expenditure.

Based on the defined goals the OECD framework proposes four measurement dimensions:
- health improvement/outcomes;
- responsiveness;
- equity and
- macroeconomic and microeconomic efficiency.

In contrast to WHO the OECD framework does not envisage a calculation of the performance index and ranking of health systems according to such an index.

In 2001, OECD started Health Care Quality Indicators project, which aimed at developing a set of indicators that could be used to investigate the quality of health care across countries. In 2006, O. Arah et al. published conceptual framework, which defined “quality of health care”, placing it within a wider performance framework [13]. This framework has four interconnected tiers (Figure 2):
- health status – influenced by health care and non-health care factors;
- non-health care determinants of health such as socio-economic conditions, physical environment, etc.
- health care system performance with three dimensions: quality (effectiveness, safety and responsiveness), access and expenditures.
- health system design and context including health system policy and delivery characteristics.

The goals of health policy as determined by Arah et al. are improving health, efficiency, and equity.

Fig. 2. Revised OECD framework for performance measurement (2015)

Source: Carinci et al., 2015 [14].
Other frameworks for HSPA include The Commonwealth Fund Framework for a High-Performance System (2006), WHO Building Blocks (2007) – a modification of 2000 WHO framework, International Health Partnership Common Evaluation Framework (2008) – an initiative led by the WHO and the World Bank [10, 15, 16]. In addition to frameworks proposed by international organisations and foundations, numerous country-specific HSPA frameworks have been created, too. Examples of good practices can be found in the Netherlands, Canada, Belgium, New Zealand, Malta, etc. [17, 18, 19, 20, 21]. These countries have developed their own health performance assessment frameworks based on existing frameworks in the literature and adapted to the specific health system context. The process of developing country-specific frameworks often includes broad consultation with experts and stakeholders and cooperation between policy-makers and researchers.

All these frameworks have a common starting point – the conceptualisation of the health system, defined in a broader or narrower way [22]. However, the drivers of HSPA and factors for health improvement vary in the different frameworks. Thus, the dimensions and indicator used for performance measurement also differ. The choice of the specific form of HSPA is at the discretion of the individual country, and the framework should take into account the respective national goals and targets, as well as health system’s specific features and context.

An attempt to facilitate the international comparison of health systems is the “Health Systems in Transition” series following a standardised template by the European Observatory on Health Systems and Policies. HIT health system reviews are country-based reports that provide a comprehensive description of the health system and of reform and policy initiatives, including an assessment of the health system. The reviews cover the countries of the WHO European Region as well as some additional OECD countries [23].

State of the research in Bulgaria

In Bulgaria, over the past decades, comprehensive health system studies have been mainly devoted to the ongoing health reforms and their outcomes. There are numerous studies on specific aspects of the health system, such as effectiveness and access to health services, as well as studies related to the assessment of the health status of the nation.

Several in-depth publications stand out in the preparatory phase of the health care reform. The first comprehensive study on the health care reform in Bulgaria is conducted by M. Popov and Z. Kraev – „The Health Care Reform - Policy and Strategy in a Market Economy” [24]. This publication provoked the interest of various authors who further developed and elaborated its ideas. Two volumes of a study titled “The Health Care Reform in Bulgaria” were published in 1997 and 1998. This multi-faceted work offered for the first time an in-depth discussion of different issues of the health care reform from the perspective of a wide range of experts in different areas of knowledge [25]. A national conference on the health care reform was held in 1998, and a comprehensive report on the forthcoming health care reform was presented which outlined the model and the organisation of the health insurance system to be introduced in Bulgaria [26].

The launching of the health insurance system has given a further impetus for the research in the field. A few years after the beginning of the healthcare reform, it became possible to assess the results achieved and define the main problem areas in the system at the macro and micro level. Since 2004, the Ministry of Health and its National Centre of Public Health and Analysis (NCPHA) has been publishing an annual National Health Report, an indispensable part of which is an analysis of the health care system performance. The publications and analyses of the NCPHA are fundamental for any research on health care system reforms. In 2007, “The Health Care Reform in Bulgaria: Analysis” was published which is a relatively detailed and multifaceted study by A. Dimova, M. Popov, and M. Rohova [27]. The authors offer an interesting and impartial analysis broadly based on various and multiple sources. T. Vekov is the author of another work on the health care reform in the country, which covers a period of ten years [28]. He further discusses the main problems of the undergoing transformation of the system and offers possible solutions in his later research. In 2009, G. Komitov and S. Geniev published “Management of resources - a priority of the health reform” [29]. The same year E. Delcheva published a monograph titled “Increasing the Competitiveness of Healthcare in Bulgaria” [30]. According to E. Delcheva, the study of the competitiveness of healthcare in the first years of the reform is a research challenge that goes beyond “pure theory”.

The Open Society Institute in Sofia periodically publishes expert reports on various problems of the health care system. Within its “Management of public policies” program the Institute works to support health care through initiating legislative changes, organising and assisting seminars and conferences in the field of public health.

The Bulgarian Industrial Association has a principled position that health is a fundamental value, which should be a leading priority of society. It has published reports on the state, problems, and challenges of healthcare and has made proposals to the government on the main reform priorities in some key areas.

CONCLUSION

In the last years, there has been a substantial effort at EU level to promote HSPA as an important instrument for health system performance improvement. Various international and national organisations and institutions offer more or less comprehensive frameworks for HSPA. There is a common understanding about the importance and relevance of such an assessment, but no uniform indicators for the measurement have been proposed so far. Thus, the comparison between different health systems performance has been impeded. Regardless of the lack of common conceptual framework, the countries have initiated the creation of their own framework and set of indicators for measurement according to the specific objectives of HSPA at a
national level. Dissemination of the results could be very useful for sharing good practices at international level and could contribute to the elaboration of international benchmarks. However, such an exercise should be initiated by policymakers and needs the support of the stakeholders and involvement of the researchers. 

Despite the wide variety of healthcare publications in Bulgaria, no specific research on HSPA has been recorded. Hence, there is no a uniform methodology for periodic assessment of the health system which will allow for finding directions for its improvement and following up the progress in achieving health policy main objectives. Further efforts in the development of a uniform methodology for periodic assessment of the health system, based on existing frameworks and reflecting the country specific features and context will provide a sound basis for building a common vision of health policy, improving decision making and strengthening health system governance in general. 

**Abbreviation:**
EU – European Union
HSPA – Health system performance assessment
NCPHA - National Centre of Public Health and Analysis
OECD - Organisation for Economic Cooperation and Development
WHO – World Health Organisation

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