

**DOI: 10.38173/RST.2022.24.2.24:323-330**

<b>Title:</b>	<i>CURRENT TRENDS IN HEALTH SYSTEM PERFORMANCE ASSESSMENT – WHAT COULD BE USED FOR THE ROMANIAN HEALTH SYSTEM?</i>
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**Section:** Medicine

**Issue:** 2(24)/2022

<b>Received:</b> 9 September 2022	<b>Revised:</b> 27 September 2022
<b>Accepted:</b> 25 October 2022	<b>Available Online:</b> 15 November 2022

Paper available online [HERE](#)

## CURRENT TRENDS IN HEALTH SYSTEM PERFORMANCE ASSESSMENT – WHAT COULD BE USED FOR THE ROMANIAN HEALTH SYSTEM?

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### ABSTRACT:

THE HEALTH STATUS OF THE ROMANIAN POPULATION AND THE HEALTH SYSTEM RESOURCES ARE BEHIND THE EU AVERAGES, SITUATION WHICH COULD BE SIMILAR TO OTHER MEMBER STATES FROM CENTRAL AND EASTERN EUROPE, BUT MORE DETRIMENTAL IN SOME AREAS. A HEALTH SYSTEM PERFORMANCE ASSESSMENT (HSPA) HAS NOT ROUTINELY PERFORMED IN ROMANIA AT PRESENT.

THIS PAPER AIMED TO DESCRIBE THE EVOLUTION OF THE CONCEPTS AND METHODS USED GLOBALLY FOR THE HEALTH SYSTEMS' PERFORMANCE ASSESSMENT AND TO EXPLORE THE COUNTRY CONTEXT FOR CREATING A NATIONAL FRAMEWORK IN THIS SENSE. WE PERFORMED A LITERATURE REVIEW OF THE INTERNATIONAL SCIENTIFIC PAPERS AND GREY LITERATURE RELEVANT FOR THE TOPIC AND ALSO AN EXPLORATION OF THE NATIONAL LEGISLATION ON HEALTH AND HEALTH SYSTEM AND OF THE NATIONAL DATABASES INCLUDING HEALTH DATA.

WE FOUND THAT HSPA IS A TOPIC OF HUGE INTEREST AT INTERNATIONAL LEVEL AND IN EU, WITH MANY EXAMPLES OF FRAMEWORKS FOR HSPA DEVELOPED DURING THE LAST TWO DECADES. MANY COUNTRIES ARE PERFORMING HSPA AT PRESENT, BUT WITH WIDE HETEROGENEITY. ONE TOPIC INCLUDED RECENTLY IN HSPA IS HEALTH SYSTEM'S RESILIENCE.

IN ROMANIA, DESPTE A WELL STATED PROCESS OF QUALITY ASSESSMENT, ESPECIALLY FOR THE HOSPITAL LEVEL, THE HSPA PROCESS IS IN AN EARLY STAGE OF DEVELOPMENT. THERE IS NOW AN EXTREMELY FAVORABLE MOMENTUM TO DEVELOP A NATIONAL HSPA FRAMEWORK DUE TO THE POLITICAL COMMITMENT FOR IMPROVING HEALTH SYSTEM RESILIENCE AND PERFORMANCE. AND ALSO DUE TO THE EXCELLENT OPPORTUNITIES TO FINANCE THE REFORM OF THE HEALTH SYSTEM AND ITS DIGITALIZATION THROUGH DIFFERENT EU FUNDED PROGRAMS.

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**KEY WORDS:** HEALTH SYSTEMS' PERFORMANCE ASSESSMENT, RESILIENCE, QUALITY, PRIMARY CARE

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## INTRODUCTION

The Romanian health system used to be a state centralized - Semashko type during the communist era (Sheiman I, 2018)<sup>3</sup>. After the 90ies, it turned gradually into a social health insurance system, this meaning that every citizen has the responsibility of a compulsory financial contribution for health, proportionate to his income, and also the right to benefit for a basic package of health care including preventive, curative and rehabilitation services<sup>4</sup>.

Since the accession of Romania to the European Union (EU) in 2007, the country started to compare its health indicators to the other EU members and it was obvious that the health status of the Romanian people and the health system resources and performances were much behind the most of the EU members or the EU averages<sup>5</sup>. The situation of Romania was not singular, being similar to Bulgaria and, partially to other newer EU members from the Central Europe.

In the 15 years since Romania acted as an EU member state, the health indicators have had favorable trends, but the difference compared to the EU average has been maintained, in some cases it has even increased, eventually due to the faster progress achieved in other states or at the level of the EU average. Thus, main characteristics of the health status of the Romanian population could be summarized at present by an almost 6 years gap in life expectancy at birth compared to EU average, despite a 4.4 year increase in life expectancy in Romania during the interval 2000 – 2019 (from 71.2 to 75.6 years)<sup>6</sup> and 50% higher mortality for all causes, despite a 10% decline since 2010, compared to 5% decline in EU average (*Eurostat database*). More than this, the mortality is marked by preventable causes (the preventable and treatable mortality rates remain more than double compared to the EU average) and there is a high prevalence of some behavioral risk factors (detrimental diet, tobacco, alcohol), which still contribute to almost half of the deaths in Romania, and this prevalence continue to be noticed also in adolescents<sup>6</sup>. Also Romania lost during the COVID pandemic 1.4 year in life expectancy, which is double compared to EU average<sup>6</sup>.

As regard the health system functioning, the annual health spending is almost lowest in the EU as both proportion of the gross domestic product and average spending per inhabitant and, despite scarce, this financing is mainly directed to hospitals (44% in 2019), and meanwhile the outpatient care is underused and underdeveloped, despite the constant European Country Semester Recommendations to increase efficiency of the health system and to develop the outpatient care<sup>7</sup>.

Since its accession to the EU, Romania improved the national opportunities to reform and to develop the health system, and at present these opportunities are more promising than ever, due to the National Recovery and Resilience Plan<sup>8</sup> which include major objectives

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<sup>3</sup> Igor Sheiman, Sergey Shishkin, Vladimir Shevsky, “The evolving Semashko model of primary health care: the case of the Russian Federation,” *Risk Manag Healthc Policy* 2;11 (2018):209-20, doi: 10.2147/RMHP.S168399.

<sup>4</sup> Law regarding the reform in the health field no 95/2006 with subsequent amendments

<sup>7</sup> World Health Organization. Regional Office for Europe, *European Observatory on Health Systems and Policies*, Mladovsky, Philipa, Allin, Sara, Masseria, Cristina. et al. (2010). *Health in the European Union: trends and analysis*. World Health Organization. Regional Office for Europe.

<sup>8</sup> OECD/European Observatory on Health Systems and Policies (2021), *Romania: Country Health Profile 2021, State of Health in the EU*, OECD Publishing, Paris, 2022, <https://doi.org/10.1787/74ad9999-en>

<sup>9</sup> COUNCIL RECOMMENDATION (2014/C 247/21) on the National Reform Programme 2014 of Romania and delivering a Council opinion on the Convergence Programme of Romania, 2014, [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014H0729\(21\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014H0729(21)&from=EN)

<sup>10</sup>Ministry of Investment and European Projects. *Romania's National Recovery and Resilience Plan*. Bucharest: Directorate General for Recovery and Resilience Mechanism Management; 2021. <https://mfe.gov.ro/pnrr/>

related to health and also to a new operational program focused on health, under negotiation with the European Commission<sup>9</sup>.

Considering these tremendous opportunities for the country health system and the current health gap compared to EU, we aimed to describe the evolution of the concepts and methods used globally for the assessment of the health systems' performance (HSPA) and to explore the country context for creating a national framework for health system performance assessment. We performed a literature review oriented on two perspectives: on one hand we targeted the international scientific papers and grey literature which were considered relevant for the topic and on the other hand we explored the national legislation on health and health system and the health information system.

### **THE EVOLUTION OF THE HEALTH SYSTEM PERFORMANCE ASSESSMENT CONCEPTS AND TOOLS GLOBALLY**

More than 70 years passed since the time when the World Health Organization affirmed the multidimensional nature of health, as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"<sup>10</sup>. Since then, the commitment to protect people's health and the fundamental role of primary care have been recognized and enforced in many international assemblies, starting with the Alma Ata Declaration from 1978, which called for "urgent and effective national and international action to develop and implement primary health care", as an essential component of the health systems and in the benefit of all people.<sup>11</sup>

The first framework to conceptualize HSPA was developed in 1999, based on the three major perspectives related to health: equity, efficiency and quality.<sup>12</sup> The WHO Report from 2000 formalized first global exercise of health systems performance assessment for all WHO member states, based on this framework adapted to the three defined goals (improved health, fairness in financial contribution and responsiveness to people non-medical expectations) and four functions of the health systems (resource generation, financing, service delivery and stewardship)<sup>13</sup>. At that time, France, Italy, Malta, Singapore, Spain, Austria and Japan were among the first ten countries with the highest index of overall performance, the United States of America ranked on the 37<sup>th</sup> place, closely followed by countries from Central Europe like Slovenia (38<sup>th</sup> place), Croatia (43<sup>th</sup> place), Czech Republic (48<sup>th</sup> place) and Poland (50<sup>th</sup> place), meanwhile Romanian index ranked on the 98<sup>th</sup> place.

Starting from the three goals and four functions of the health systems, the HSPA framework was been developed in 2007 to fourteen domains, by adding the goal of improved

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<sup>11</sup> Ministry of Investment and European Projects. Operational Programme Health 2021-2027. Bucharest: Directorate General for Recovery and Resilience Mechanism Management; 2021.

<sup>12</sup>World Health Organization. The WHO Constitution, adopted by the International Health Conference held in New York from 19 June to 22 July 1946, <https://apps.who.int/gb/bd/>

<sup>13</sup>World Health Organization. Declaration of Alma-Ata. Alma-Ata: WHO International Conference on Primary Health Care; 1978. [https://apps.who.int/iris/bitstream/handle/10665/52703/WH\\_1988\\_Aug-Sep\\_p16-17\\_eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/52703/WH_1988_Aug-Sep_p16-17_eng.pdf?sequence=1&isAllowed=y)

<sup>14</sup> Murray CJL, Frenk J. A WHO framework for health system performance assessment. Geneva: World Health Organization; 1999, <https://apps.who.int/iris/handle/10665/66267>

<sup>15</sup> World Health Organization. The World Health Report 2000. Health Systems: Improving performance. Geneva: World Health Organization; 2000, <https://www.who.int/publications/i/item/924156198X>

efficiency, two new functions (information and medical products, vaccines and technology) and four transversal domains (access, coverage, quality and safety).<sup>14</sup>

In 2008, the Tallinn Charter “Health Systems for Health and Wealth” reaffirmed the commitment of the member states to invest in the health systems and to focus on measurable health outcomes and on the accountability for health system performance<sup>15</sup>.

In close connection to the health systems performance, the 2030 Agenda for Sustainable Development<sup>16</sup>, adopted by all United Nations Member States in 2015 launched an urgent call for action by all countries, to act in the framework of a global partnership for achieving the 17 Sustainable Development Goals (SDGs). Among these goals, the third one is focused on ensuring healthy lives and promoting well-being for all at all ages, in full respect of the principle of living no one behind. Each goal has a set of targets and indicators – the health goal has 13 targets and almost 30 indicators, among which most are used to measure health outcomes, or health system performance. As an example, the target of achieving universal health coverage (UHC) is measured by two indicators – coverage of essential health services and proportion of population with large household expenditures on health as a share of total household expenditure or income.

The Astana Declaration<sup>17</sup> reaffirmed the commitment to build sustainable primary healthcare, driven by knowledge, capacity building, sufficient, well trained and motivated health staff, extended access to health technology, adequate financing and appropriate reimbursement systems for improving access to health and achieving better health outcomes.

An important trendsetter was OECD who launched in 2001 the program “Health Care Quality Indicators” (HCQI) and built on the original conceptualizations of health and health system performance measurement, by including the health determinants and a subdivision of the health care needs according to the life course approach<sup>18</sup>. The OECD framework has been extensively used for international comparisons, initially for the OECD countries and later on for the EU members in the series of publications “Health at a glance”.

At the European Union level, a key initiative in HSPA has been launched by the European Commission in 2014, by setting an Expert Group on Health Systems Performance Assessment, which was mandated to synthesize the work performed in HSPA and to provide tailored country assistance in countries that are interested in undertaking performance assessment at national level. This group focused initially to the review of the strategies to assess the quality of care across the EU and concluded that quality of care should be interpreted in the broader context of the overall health system performance, it should include also outcome indicators and should rely on well-functioning health information systems<sup>19</sup>.

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<sup>16</sup>World Health Organization. Everybody’s business: strengthening health systems to improve health outcomes: WHO’s framework for action. Geneva: World Health Organization; 2007 [https://apps.who.int/iris/bitstream/handle/10665/43918/9789241596077\\_eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/43918/9789241596077_eng.pdf)

<sup>17</sup>World Health Organization. The Tallinn Charter: Health Systems for Health and Wealth. Tallin: WHO European Ministerial Conference on Health Systems “Health Systems. Health and Wealth”; 2008.

<sup>18</sup> United Nations. 2022. “Sustainable Development Goals”, <https://sdgs.un.org/goals>

<sup>19</sup>World Health Organization. Declaration of Astana. Astana: WHO Global Conference on Primary Health Care; 2018. <https://www.who.int/teams/primary-health-care/conference/declaration>

<sup>20</sup>Carinci, F., Van Gool, K., Mainz, J., Veillard, J., Pichora, E. C., Januel, J. M., Arispe, I., Kim, S. M., Klazinga, N. S., & OECD Health Care Quality Indicators Expert Group (2015). Towards actionable international comparisons of health system performance: expert revision of the OECD framework and quality indicators. *International journal for quality in health care : journal of the International Society for Quality in Health Care*, 27(2), 137–146. <https://doi.org/10.1093/intqhc/mzv004>

<sup>21</sup>European Commission, the Expert Group on Health System Performance Assessment. So what? Strategies across Europe to assess quality of care. Report of the Expert Group Health System Performance Assessment.

At a later stage, the group focused on HSPA in primary care, emphasizing the core aspects of the well-performing primary care systems and their key functions such as access, coordination and continuity of care; it was underlined that HSPA in primary care paves the way for better health outcomes and improves the overall health system, recognizing however the wide variations across the EU countries and the difficulties in advancing in performance assessment of primary care due to the complexity of the performance aspects in primary care<sup>20</sup>. For implementing HSPA in primary care the Group recommended to consider a combination of these seven essential elements: improving primary care information systems, embedding performance assessment in a legal framework, institutionalising performance system by designating roles and responsibilities, ensuring accountability, considering patients experience, taking advantage from adaptability and support goal-oriented approach through a better use of professional and contextual evidence<sup>20</sup>. Additionally, this report proposes ten domains that need to be evaluated constantly in order to ensure a well-performing primary care sector: universality and accessibility, integration, person-centeredness, comprehensiveness and community orientation, the presence of a team of professionals that addresses the larger majority of personal health needs – quality, the presence of a sustained partnership with patients and informal care givers, coordination of people's care, continuity of people's care, primary care organisation and human resources. All the domains and aspects listed above come with their sets of comparative key-indicators.

An additional domain included in the concept of health system performance in the recent years was the resilience of the health systems, defined as “capacity to proactively foresee, absorb, and adapt to shocks and structural changes in a way that allows it to sustain required operations, resume optimal performance as quickly as possible, transform its structure and functions to strengthen the system, and reduce its vulnerability to similar shocks and structural changes in the future as much as possible”<sup>21</sup>. The adequacy of this domain was strengthened by the structural fragilities of the health systems revealed by the COVID-19 pandemic and the consequent health-crisis. The HSPA Expert Group performed a survey among the EU members prior of the pandemic and, out of 30 questioned countries, 18 responded and half of them used to perform assessments for the resilience of the health system.

Another survey dedicated to the use of HSPA was performed during 2016-2017 in the European Region (53 countries), by reviewing all publicly available online resources from the websites of national health authorities, boards, institutes or agencies, and the documents published by international organizations (EU, OECD, WHO, World Bank). HSPA reports in English have been identified for 30 out of the 53 countries<sup>22</sup>. These countries have shown a

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Luxembourg: Publications Office of the European Union; 2015. [https://health.ec.europa.eu/health-systems-performance-assessment/priority-areas-hspa\\_en](https://health.ec.europa.eu/health-systems-performance-assessment/priority-areas-hspa_en)

<sup>22</sup>European Commission, the Expert Group on Health System Performance Assessment. A new drive for primary care in Europe – Rethinking the assessment tools and methodologies. Report of the Expert Group Health System Performance Assessment. Luxembourg: Publications Office of the European Union; 2018. [https://health.ec.europa.eu/system/files/2020-03/2018\\_primarycare\\_eg\\_en\\_0.pdf](https://health.ec.europa.eu/system/files/2020-03/2018_primarycare_eg_en_0.pdf)

<sup>23</sup>European Commission, the Expert Groups on Health System Performance Assessment. Assessing the resilience of health systems in Europe. An overview of the theory, current practice and strategies for improvement. Report by the Expert Group Health System Performance Assessment. Luxembourg: Publications Office of the European Union; 2020. [https://health.ec.europa.eu/system/files/2021-10/2020\\_resilience\\_en\\_0.pdf](https://health.ec.europa.eu/system/files/2021-10/2020_resilience_en_0.pdf)

<sup>24</sup>Fekri O, Macarayan ER, Klazinga N. Health system performance assessment in the WHO European Region: which domains and indicators have been used by Member States for its measurement? Copenhagen: WHO Regional Office for Europe; 2018 (Health Evidence Network (HEN) synthesis report 55). <https://www.ncbi.nlm.nih.gov/books/NBK519096/>

high heterogeneity in their HSPA frameworks, by focusing on a various number of HSPA domains of HSPA and by using various numbers of indicators belonging to different domains; overall 1485 indicators have been identified and categorized upon the 14 domains of HSPA stated by the WHO 2007 report and the countries shown to assess between 3 and 13 domains, by using between 9 and 146 indicators.

### **CONTEXT AND POSSIBLE DEVELOPMENTS OF HSPA IN ROMANIA**

In Romania, the accountability for quality of care is shared among authorities, professional organization and health care providers. The Ministry of Health is generally accountable for policy, regulation and quality control and the National Health Insurance House (the public payer) is accountable for the “assessment” of all the health care providers which are contracted (through its territorial branches). This assessment assumes the compliance with a (minimal) set of standards and conditions which are considered essential for the adequate provision of the medical services, but in practice it is mostly oriented to the verification of a set of documents. The National Authority for Quality Management in Health is accountable for defining the quality standards and for the quality assessment of the medical providers in the view of accreditation (compulsory by law for the health care providers contracted by the insurance houses) and during the intervals between successive accreditations.

There is a special law regarding the quality assurance in health, recently revised and improved.<sup>23</sup> In practice the accreditation and the quality assessment are more developed for the hospitals, which were the first health care providers targeted by accreditation. There is a complex process of evaluation prior to accreditation, based on a set of standards and indicators focused on three main domains: strategic and organizational management, clinical management, medical ethics and patient rights.<sup>24</sup> Recently, accreditation was extended to some types of outpatient clinics.

At the level of the health care providers, quality is explicitly stipulated for hospitals – each hospital has a medical board, having responsibilities related to quality and patient safety.

Overall, the focus on quality assessment seems to be more linked to the accreditation, which opens the scene for contracting with the health insurance house, rather than to provide a picture of the performance of the health system. Also the link to the health outcomes seems to be fragile.

An exploration of the health legislation and national databases related to health revealed few major flows of health data within the system: the informatics platform of the health insurance, coordinated by the National Health Insurance House, mainly oriented to financial data, including mostly the health care providers contracted by the insurance house and with moderate transparency; the routine health information system, coordinated by the Ministry of Health – National Institute for Public Health, collecting mainly data relevant for public health, but outdated in some areas and with limited capacity for data validation and quality assurance; the direct reporting from the medical providers to the National Institute of Statistics. Beyond these main flows of data there are many additional circuits and data collection requirements which may be very relevant for the performance of the health system, but they are generally underused or not centralized. Overall, the information system is fragmented, with some discontinuities or overlaps within different institutions and data flows,

<sup>23</sup>Law regarding the quality assurance in health no. 185/2017 with subsequent amendments

<sup>26</sup>Standards for hospitals’ accreditation, second edition, approved by the Order of the Minister of Health no 446/2017, <https://anmcs.gov.ro/web/acreditarea-spitalelor/standarde-de-acreditare/>

the collected data is underused for analytic purposes and for creating national evidence for health policy; the data quality remains under question and there is a limited focus for the health outcomes.

A strength point is the fact that the Governing Program pays a special focus on the performance and, in particular on the resilience of the health system, stipulating explicitly an objective on improving the health system resilience and ensuring a safe access to good quality medical services, for every citizen.<sup>25</sup>

As mentioned previously, the country has exceptional opportunities to improve its health system through two major programs: a. the National Recovery and Resilience Plan which includes a health chapter (2.5 billion EUR) focused on three pillars (improved capacity for managing the public funds in health; improved infrastructure and improved capacity for managing the health services and the human resources for health) and the Health Operational Program (4 billion EUR) with seven priorities for improving equity, access, quality, research and digitalization in health.<sup>26, 27</sup>

## CONCLUSION

HSPA is a topic of huge interest at international level and in EU. Many examples of frameworks for HSPA have been developed during the last two decades, having in common the goals and the functions of the health systems, and many countries are performing HSPA at present, by using a variable number of indicators from different domains of HSPA. One topic included recently in HSPA is health system's resilience, which became even more important after the COVID pandemic. In Romania there are some well stated processes related to quality assessment in the health system, mostly for the hospital level and they could provide a very useful starting point for the HSPA and for linking the resources and processes within the health system to the health outcomes.

One major strength is the political commitment for improving health system resilience and performance. In addition, the country has excellent opportunities to finance the reform of the health system and its digitalization through different EU funded programs. Thus, there is an extremely favorable momentum to develop a national HSPA framework and to implement it within the health system, in the benefit of all citizens and in line with the programmatic documents of the country.

## ACKNOWLEDGEMENT

All authors had the same contribution.

<sup>27</sup>Governing Program 2021 – 2021. Ministry of health Chapter, 68-72, [https://gov.ro/fisiere/programe\\_fisiere/Program\\_de\\_Guvernare\\_2021%E2%80%94942024.pdf](https://gov.ro/fisiere/programe_fisiere/Program_de_Guvernare_2021%E2%80%94942024.pdf)

<sup>28</sup>Romania's National Recovery and Resilience Plan – Component 12. Health, <https://mfe.gov.ro/pnrr/>

<sup>29</sup>Romania's Health Operational Program <https://oportunitati-ue.gov.ro/programul-operational-sanatate-3/>



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