

ORIGINAL RESEARCH

Overview of the main incremental health care reforms introduced between 2014 and 2020 in Romania

Silvia Gabriela Scintee¹ and Cristian Vladescu^{1,2}

¹ National School of Public Health, Management and Professional Development, Bucharest, Romania

² Titu Maiorescu University, Faculty of Medicine, Bucharest, Romania

Corresponding author: Silvia Gabriela Scintee National School of Public Health, Management and Professional Development 31 Vaselor Str., 21253 Bucharest, Romania E-mail: <u>sscintee@snspms.ro</u>



Abstract

Aim: On 2014 the Government of Romania has committed to improving health and health system through the implementation of the 2014–2020 National Health Strategy: Health for Prosperity. An official evaluation of the strategy implementation is not publicly available yet. This paper aims to provide an overview of the main incremental reforms taken during this period in Romania and to analyse the results from the perspective of the main Strategy goals.

Methods: Information was collected from legislative documents, statistical and scientific publications. The main implemented or initiated incremental reforms, during the assessed period, were assigned to five main clusters: "governance", "resources for health", "coverage and access", "organization of health care", "quality of care" and were analysed in accordance with the aim, the type, the implementation stage and the corresponding objectives of the Strategy.

Results: The 2014–2020 National Health Strategy has definitely not reached all its objectives, but one sign of prosperity, is that based on 2019 per capita income (of \$12,630) World Bank classified Romania, for the first time, as a high-income country. The health status of the population has increased in many aspects, yet Romanians' health has still remained among the poorest in the European Union (EU).

Conclusion: Incremental reforms might be successful, but the small steps should be taken in a holistic approach, and should be tailored to specific needs. Previous strengthening health systems resilience and plans for overcoming possible risks and obstacles might ensure successful implementation. Assessments of the reforms might draw lessons that help policymakers in shaping further health policies and designing of next strategies.

Keywords: Health care reform, health planning, health resources, quality of health care, Romania

Conflict of interest: None declared.



Introduction

Under the perspective of signing the 2014–2020 Partnership Agreement with the European Commission on funding through the European Structural and Investment Funds, the Government of Romania approved the 2014-2020 National Health Strategy "Health for Prosperity", as one of the ex-ante conditionalities to ensure the effective and efficient use of these funds. The Strategy development was based on the European Commission's country-specific recommendations for the health sector and a functional review of the Romanian health sector performed by the World Bank (WB). Besides following the aims of the European Commission growth strategy "Europe 2020", the document is aligned with the WHO health policy framework for the European region "Health 2020" (1). As well, even if not mentioned in the Strategy substantiation note, it fits the main principle of the South Eastern European 2020 strategy that integrates health as part of the broader economic growth strategy (2), pursuing the achieving of a healthy and productive nation through improving equity in health; strengthening human resources for health; and improving intersectoral cooperation and governance.

The National Health Strategy 2014–2020 provide a framework for improving the health of the population in Romania, ensuring equitable access to quality and cost-effective health services, and also highlights cross-cutting measures for ensuring health system sustainability and predictability (3). Each of the three main areas of intervention has general and specific objectives with subsequent measures. measures strategic The concerning improvements in population health are targeted to the main public health concerns in Romania: health and nutrition of mother child. and communicable diseases (including tuberculosis, HIV/AIDS, hepatitis B and C) and non-communicable diseases (including cardiovascular diseases. cancer, diabetes, mental health, rare diseases). The scope of the envisaged measures is wide, ranging from prevention and control to disease registries, treatment and rehabilitation. The measures in the area of health services are directed mainly towards shifting the balance of health care services from inpatient to ambulatory and community care, increasing access to quality health care and tailoring services to the needs. The cross-cutting measures include: strengthening planning capacity at all levels (national, regional, local), ensuring sustainability by mobilizing sufficient resources, increasing efficiency in the health system through e-health and reducing inequities in access by developing the health care infrastructure. The strategy is accompanied by an Action Plan which focuses on results and includes the estimated budget, financing sources, responsibilities and monitoring indicators (4). Reporting was due annually for the most of indicators, though the only publicly available implementation report is the one for 2015, which is too early to draw any conclusion on the Strategy results. The analysis of the strategy implementation could support the shaping of further health policies and the design of the next strategies.

The evaluation of the National Health Strategy 2014–2020 and the development of the National Health Strategy 2021– 2027 are planned within a larger Structural Funds financed project on "Developing the strategic and operational framework for planning and reorganization of health services at



national and local levels" run over 2019–2022 (5). The current paper is not an evaluation of the implementation of the National Health Strategy 2014 - 2020, but it aims to provide an overview of the main incremental reforms implemented over the same period, framing each of them within the objectives of the National Health Strategy and its expected results.

Methods

The methodology was inspired by the one used by the European Observatory on Health Systems and Policies in a study comparing the 2018-2019 reforms in 31 high-income countries, but much simplified, given that it concerns only one country (6).

The implemented or initiated incremental reforms, during 2014 - 2020, were listed, then assigned to five main clusters: "governance", "resources for health", "coverage and access", "organization of health care", "quality of care".

- "Governance" refers to the changes at the decision making level, either concerning governing bodies or the governance process in healthcare.
- "Resources for health" category includes reforms that attempt to increase the general level of financial, physical and human resources for health, but also to ensure better allocation and efficient spending.
- "Coverage and access" category refers to the reforms aiming to increase the number of people covered with services, or to the increase of the types or number of services provided. This category includes also coverage and access of people to the public health services (health promotion, disease prevention and other interventions aiming at improving health and prolonging life).

- "Organization of health care" category refers to changes in the model of service delivery including the interface between outpatient/inpatient care, primary/specialized care, rehabilitation/palliative care. continuity of care and any other dimensions of health care provision.
- "Quality of care" includes all the changes introduced with the aim of providing more effective, peoplecentred, timely, equitable, integrated, efficient and safer health services.

For each cluster were chosen five reforms (see Table 1). Each reform was described as content, aim, type (e.g. legislation, implemented plan. project) and implementation status and it was matched to one of the objectives under the three main strategic directions of the National Health Strategy 2014–2020, respectively: improving the health of the population, ensuring equitable access to quality and cost-effective health services. and ensuring health system sustainability and predictability (see Box 1). The reforms were then analysed in terms of common characteristics regarding the aim, the type and the implementation stage, the extent to which they replied to the objectives of the National Health Strategy 2014–2020 and, were data available, the possible impact on the expected results of the Strategy. Information on the incremental reforms during the assessed period was collected from the legislative documents published in the Official Gazette, documents on planned changes and funded programmes and projects from the official websites of the Ministry of Health (www.ms.ro), National Health Insurance House (www.casan.ro), and the National Institute of Public Health (www.insp.ro). Information on current population health status and health services were collected



from the World Bank and Eurostat databases, as well as from other reports and publications listed in References. The limitation of the study is given by the data collection based on publicly available data only, not taking any deeper investigation on the way the reforms were put on the policy agenda, the implementation process and resources, the major obstacles or the impact evaluation.

BOX 1

THE NATIONAL HEALTH STRATEGY 2014 - 2020 GENERAL OBJECTIVES. PRIORITY STRATEGIC AREAS

INTERVENTION STRATEGIC AREA 1: "PUBLIC HEALTH"

GO 1. Improving the health and nutrition of mother and child

GO 2. Decreasing morbidity and mortality due to communicable diseases, and their impact at individual and social level

GO 3. Reducing the rate of increase in morbidity and mortality from non-communicable diseases and reducing their burden on the population through national, regional and local preventive health programs

INTERVENTION STRATEGIC AREA 2: "HEALTH SERVICES"

GO 4. Ensuring equitable access to all citizens, especially to vulnerable groups, to quality, cost-effective health services

INTERVENTION STRATEGIC AREA 3: "CROSS-CUTTING MEASURES FOR A SUSTAINABLE AND PREDICTABLE HEALTH SYSTEM"

GO 5. An inclusive, sustainable and predictable health system through the implementation of priority cross-cutting policies and programs

GO 6. Increasing efficiency of the health system through e-health solutions

Results

The incremental reforms were considered for this study, as there was no major change existing institutions. to organizational structures and define management systems that structural reforms over the assessed period (7). The predominant type of reform was a legislative change (88%), while 22% of reforms were initiated through WB or European Union (EU) structural funds financed projects. Some 32% of reforms were mixing legislation

with project implementation.

Most of the reforms (60%) responded to the third strategic direction of the National Health Strategy 2014–2020, which includes measures aiming at ensuring health system sustainability and predictability. Fewer reforms were oriented towards the other two directions of the strategy: ensuring equitable access to health services (24%) and improving the health of the population (16%).

The reforms contributing to the third strategic direction were concentrated



mainly on improving the quality of health strengthening services, planning capacity, ensuring sufficient financial and human resources for health and developing the infrastructure of the hospital and ambulatory care. Reforms oriented towards improving the quality of health services, consisted either of measures stated by the Strategy, as implementing Health Technology Assessment fighting (HTA) and nosocomial infections, or measures not specified by the Strategy, but leading to the specific objective of assurance and monitoring of health services quality. Strengthening planning capacity consisted mainly in training and learning by doing through technical assistance within EU structural funds financed projects. The development of health care infrastructure has also been beneficiating by these funds. Mobilization of resources was done through specific legislation that mainly increased the budget for health, including the threefold increase of health personnel salaries.

The reforms corresponding to the health services development strategic direction, consisted in measures over the governance of some sectors of care (palliative and home care), organizational measures in other sectors (primary health care, community care) and measures to increase the coverage and access to health services. The reforms in this category listed governance under the and organization of healthcare clusters can be found as specific measures in the Plan of action for the implementation of the 2014–2020 National Health Strategy,

while the measures for better coverage and improved access to health services are not specified in the Strategy, but contribute to the achievement of the general objective of this strategic direction – ensuring equitable access to quality, cost-effective health services to all citizens.

The reforms related to the improvements in population health strategic direction included also governance measures addressing the incomplete through legislation to ensure better intersectoral collaboration for controlling environment-related risk factors and better transplant services and measures to increase coverage and access such as improving screening and treatment for cancer and ensuring access to the innovative treatment of Chronic Hepatitis C. Most of the reforms (64%) are still ongoing. They consist of projects still under implementation or main legislation that need subsequent implementation norms development. Several legislative have measures been already implemented: increase of health financing and health personnel salaries, the establishment of new institutions or organizational structures (the National Authority for Quality Management in Health Care, the National Centre for Human Resources) or provisions related to coverage and access.

In what concern the changes in the state of health, the 2014 data were compared to 2019. The period 2020–2021 was not eligible for comparison due to COVID-19 pandemics that influenced the trend of most indicators.



Table 1. Incremental reform clusters, 2014-2020

Starting Year	Reform content	Aim of the reform	Type of reform	Strategic direction*	Implementation status**
		GOVERNANCE	1		
2016	Setting specific tasks and responsibilities on the management of the risks for health; setting the national register for environment- related risks factors for health	Intersectoral collaboration for controlling the risks for health	Government Decision (2016) Government Decision (2019)	1	0
2016	Improving MoH capacity for strategic planning and management of the national health programmes	Better implementation and increased impact of the national health programmes	EU structural funds financed project (2016)	3	0
2016	Reorganization of organ transplantation services	Addresses the incomplete legislation in the field of organ transplantation, the lack of registries, guides, protocols and a transplant code	Additions and modification of existing legislation (2016) EU structural funds financed project (2019)	1	0
2017	Development of national coordinated palliative and home care services	Development of national policies in palliative and home care area, development of implementing capacity and development of proper legislation	WB financed project (2017) Legislation (2018) EU structural funds financed project (2020)	2	0
2019	Developing the strategic and operational framework for planning and reorganization of health services at national and local levels	Development of the National Health Strategy 2021 – 2027 and of the regional health masterplans	EU structural funds financed project (2019)	3	0
	I	RESOURCES FOR HEALTH	[
2015	Over threefold increase in the salaries of health personnel	Measures to alleviate the shortage of human resources in the Romanian health system	Emergency Ordinance to increase the salaries of health personnel by 25% (2015) Emergency Ordin- ance to the salaries of health personnel during 2018 to the value projected for 2022 (2017)	3	F
2016	First centralized procurement for drugs (antibiotics and for treatment of cancer)	Reducing costs	Emergency Ordinance appointing MoH as centralized procurement unit (2012) MoH Order establishing the list of	3	0



			items that can be centrally		
2017	Increased budget for health	Ensuring financial sustainability in the health sector	procured (2013) The budget law (2017)	3	F
2017	Establishment of a National Centre for Human Resources	Better human resources for health planning	Government Decision (2017)	3	F
2018	Employer SHI contributions abolished	Increased collection of health insurance contributions by eliminating the problem of employers not paying SHI premiums for their workers	Emergency Ordinance (2017) to amend that Fiscal Code Law	3	F
		COVERAGE AND ACCESS			
2014	Pensioners living in EU/EEC countries; EU/EEC citizens not insured in another member state; cross border workers (at own request) covered by health insurance	Extension of NHIH coverage	Amended Law 95/2006 (2014)	2	F
2015	Interferon-Free Treatment of Chronic Hepatitis C	Access to new innovative treatments	MoH and NHIH order (yearly updated)	1	0
2016	Improving screening and treatment for cancer	Decreasing the burden of cancer by early detection and better treatment	National Cancer Plan (2016) EU structural funds financed project (2018)	1	0
2018	Reimbursement of new services (home care, speech therapy, psychological counselling, kinesitherapy, breast reconstruction after cancer surgery) provided to specific vulnerable people (under palliative care, people with autism)	Extension of NHIH benefits	Government Decision setting the terms under which health services are provided under NHIH (2018, 2020)	2	F
2018	Removal of referral from the family physician to hospital oncology services for people enrolled in the National Cancer Treatment Programme; New exemptions from co- payments: victims of human trafficking; detainee, arrested and imprisoned people without income; Telemedicine 2020	Improving access to health services	Government Decision setting the terms under which health services are provided under NHIH (2018) Amended Law 95/2006 for co-payment exemptions and telemedicine (2019, 2020)	2	F
	ORG	ANIZATION OF HEALTH C	ARE		
2014	Building 8 regional hospitals	Reorganization of hospitals on level of care and redistribution of extra acute beds as long-term care beds	Government Decisions (2014) WB and EU Structural funds financed projects (2014)	3	Ο
2014	Improving the infrastructure of ambulatory, community and PHC	Increasing the use of outpatient services	Government Decisions (2014) WB and EU Structural funds financed projects (2014)	3	Ο



2016					
2016	Development of regional masterplans for health services	Tailoring provision of health services to the needs	Government Decision (2016) EU Structural funds financed project (2019)	3	0
2017	Increased financing for continuity care centres	Ensuring delivery of primary health care an ongoing basis	MoH Order to increase provider payment (2017) Emergency Ordinance on increasing budget for continuity of primary health care (2018)	2	F
2017	Implementing community care	Developing community care services	Emergency Ordinance (2017) Inter-institutional Collaboration Protocol (2017) Government Decision (2019) EU structural funds financed project (2019)	2	0
		QUALITY OF CARE			
2014	HTA was introduced to inform the selection of benefits	Improved quality of services by practising evidence-based medicine	Government Decision (2014) WB financed projects (2016, 2020)	3	0
2015	Establishment of the National Authority for Quality Management in Health Care	Ensuring quality of health services	Governmental Decision 629/2015	3	F
2016	Strategic Plan for Prevention and Fighting of Nosocomial Infections; setting a Multisectoral National Committee to control antibiotic resistance	Improving the control and surveillance of nosocomial infections and reducing antimicrobial resistance	Strategic Plan for Preve- ntion and Fighting of Nosocomial infections 2016–2018 Government Decision (2017)	3	0
2017	More specialization opportunities for nurses	Increasing quality of care through better training of health personnel	MoH Order (2017)	3	0
2019	Improving quality and performance of hospital services through costs evaluation and standardization	Updating the DRG system and developing tools for ensuring increased quality and performance of hospital services	EU structural funds financed project (2019)	3	0

*1- improving the health of the population, 2- ensuring equitable access to quality and cost-effective health services, 3- ensuring health system sustainability and predictability **F-finalized, O-Ongoing

A sign of prosperity, the ultimate goal of the Strategy, that might have been influenced, among other factors, by the incremental reforms taken during 2014–2020, was the increase of per capita income from \$10,044 in 2014 to \$12,630 in 2019, thus World Bank classified Romania, for the first time, as a

high-income country (8). Unfortunately, the economic impact of the coronavirus crisis pushed back Romania, in 2020, among the upper-middle-income countries with a per capita income of \$12,570. Life expectancy at birth increased from 75.0 years in 2014 to 75.6 years in 2019 but fell to 74.2 in 2020 (9).



The healthy life years at birth increased from 59.0 in 2014 to 60.2 in 2019 (9). Infant mortality had a spectacular decrease over 2014–2019, from 8.2 to 5.8 deaths per 1000 live births (9). The preventable mortality decreased from 310 to 306 deaths per 100,000 population over the 2016–2018 period, while treatable mortality increased from 208 to 210 deaths per 100,000 population over the same period (10, 11).

Despite the highest annual average growth rate in per capita health spending in the EU, 7.8 over the 2013–2019 period, Romania still had the lowest health expenditure per capita, of 1,292 EUR PPP, almost half of the EU average of 2,572 EUR (12).

Considering that the main vision of the Strategy is to shift the balance of health care services from inpatient to ambulatory and community care, from the services utilization perspective there were some achievements: the hospital discharges per 1000 population decreased slightly from 213 in 2014 to 211 in 2018, but the number of outpatient consultations also decreased from 5.3 to 5.2 (12, 13). The self-reported unmet medical care needs also decreased from 9.4% in 2014 to 4.9% in 2018 (12, 13). The share of hospital expenditure has increased from 39% to 46% of total health expenditure, but the increase might have been due to the increase of day-care provision (12, 13). As well, an important and costly measure aiming to alleviate the shortage of human resources was the threefold increase in health personnel salaries. This could be also related to the increase in the availability of both doctors and nurses per 1000 population, from 2.7 to 3.1, respectively from 6.2 to 7.2 over 2014-2018 (12, 13).

Discussion

Reforming the health system in Romania has started in the early 1990s once with the general social and political restructuring after the fall of communism. The main structural

reforms consisted of the introduction of the social health insurance system and the purchaser-provider split (14). Their implementation was a lengthy (1994-1999) and difficult process and they were followed by many incremental reforms. There were also reform initiatives that were abandoned. Comparing the implementation of the reforms in different periods in Romania, a first observation is that the EU support, which for the assessed period represented the programming and accession of 2014-2020 Structural Investments Funds, was an important driver for change. Besides the commitments represented by the signature on the programming documents, adequate financial resources were available. Some reforms were favoured by EU legislation that applies to all member states. One example is the implementation of HTA that after several unsuccessful attempts was introduced into Romanian law following the European Union Directive 2011/24/ on the application of patients' rights in cross-border health care (15). Other reforms were initiated by the EU policy agenda, such as the use of digital technologies and online services (16). Increasing efficiency of the health system through e-health solutions was included as the general objective of the Strategy, but until 2020 there have been only several isolated projects on telemedicine covering emergency services in remote areas and on the further development of electronic solutions such as Electronic Health Records (17). Real big steps in the implementation of e-health were taken when this turned into a "must" by the COVID-19 pandemics. It is difficult to say if the Strategy objectives have all been reached since they are not accompanied bv measurable targets and performance monitoring (18). The health status of the population has been improved in many aspects, including the self-reported unmet medical care needs, yet Romanians' health has remained among the poorest in the EU.

Page 10 | 13



By and large, better health could be related to better living, as shows the increase of per capita income in 2019. The question is how equitable were the health and wealth distributed knowing that, in 2019, 23.8% of Romanians were at risk of poverty (9). The Strategy's main vision of shifting the balance of health care by increasing the volume of services provided in primary and community care settings and rationalizing the use of hospital services is still far away from its achievement. This will take as long as it needs for implementing the necessary changes not only in the health sector but also in other sectors, knowing that among the factors that prevent the use of ambulatory services are poor road infrastructure, lack of public transport and high travel costs. The 2019 increased indicators showing slight improvements in health status and health services provision were reversed by the COVID-19 pandemics. This reflects the need for further reforms toward ensuring a more resilient, sustainable and predictable health system. A great opportunity for this is the European Commission Recovery and Resilience Facility key instrument that aims to support member states to mitigate the and impact of the economic social coronavirus pandemic (19). Romania's recovery and resilience plan, with a total budget of €14.2 billion in grants and €14.9 billion in loans, includes three main reforms in the health sector: Increased capacity for the management of public health funds; Increased capacity to undertake investments in health infrastructure; and Increased capacity for health management and human resources in health. These build on the 2014-2020 Health Strategy achievements, having available by 2026, as specific examples, €470 million for developing an integrated e-Health system, connecting over 25,000 healthcare providers and telemedicine systems, and $\in 2$ billion to strengthen the resilience of the health system: investing in modern hospital infrastructure to ensure patient safety and reduce the risk of healthcare-associated infections in hospital settings (20). The main factor slowing down the reforms has been the political environment, characterised by high instability (changing 8 ministers of health during 2014-2020) and lack of consensus reaching. This led to delays in passing the necessary legislation, implementation of projects or reaching consensus among different stakeholders.

Conclusions

Even if no structural major reform was implemented 2014-2020, during the incremental reforms undertaken over this period could make a difference in health and wellbeing, as some indicators have shown. This reveals that not always radical structural changes are needed to improve health status, but rather to take small steps in a holistic approach. As well, reforms tailored to solving problems in specific populations, areas or regions could have a greater impact than the ones oriented towards the whole population, health sector or to the entire country. The resilience of health systems is an important aspect that should be taken into account, together with any other risk factor that might constitute an obstacle for health reform. As a consequence, strengthening health systems resilience should be a precondition for any planned reform together with all the necessary diligence for ensuring human, financial and political resources and adequate plans for overcoming possible risks and implementation obstacles. As well, milestones and targets should be set up to be used for a proper reform implementation assessment, from which to draw lessons and to build evidence for further reforms.

References

1. Guvernul Romaniei [Government of Romania], Nota de fundamentare la Hotararea Guvernului nr. 1028/2014



privind aprobarea Strategiei nationale de sanatate 2014 -2020 si a Planului de actiuni pe perioada 2014 – 2020 pentru implementarea Strategiei nationale [Substatiation note for the Government Decision no. 1028/2014 on approval of the National health strategy 2014-2020 and the Action plan for the implementation of the National health strategy 2014-2020] https://www.gov.ro/ro/guvernul/procesu I-legislativ/note-de-fundamentare/notade-fundamentare-hg-nr-1028-18-11-2014&page=35 (accessed: November 4, 2021).

- Wiskow C, Ruseva M. and Laaser U. Ten years onwards: Comparison of the South Eastern European regional public health strategy 2004 and the South Eastern European 2020 strategy, South Eastern European Journal of Public Health (SEEJPH). 2016; Vol. 5:1-18. doi: 10.4119/seejph-1826
- Ministerul Sanatatii [Ministry of Health], Strategia Nationala de Sanatate 2014-2020. Sanatate pentru prosperitate [National Health Strategy 2014-2020, Health for Prosperity] <u>http://www.ms.ro/wpcontent/uploads/2016/10/Anexa-1-Strategia-Nationala-de-Sanatate-2014-2020.pdf</u> (Accessed: November 4, 2021).
- 4. Ministerul Sanatatii [Ministry of Health], Planul de actiuni pe perioada 2014-2020 pentru implementarea Strategiei Nationale [Action plan of 2014-2020 National Health Strategy], <u>http://www.ms.ro/wp-</u> <u>content/uploads/2016/10/Anexa-2-Plan-</u> <u>de-actiuni.pdf</u> (accessed: November 4, 2021).
- 5. Ministerul Sanatatii [Ministry of Health], Ministerul Sanatatii lanseaza

Proiectul "Crearea cadrului strategic si operational pentru planificarea si reorganizarea la nivel national si regional a serviciilor de sanatate" cod SMIS 129165 [Ministry of Health launches the Project "Developing the strategic and operational framework for planing and reorganization of health services at national and local levels"] http://www.ms.ro/2020/01/31/ministerul -sanatatii-lanseaza-proiectul-creareacadrului-strategic-si-operational-pentruplanificarea-si-reorganizarea-la-nivelnational-si-regional-a-serviciilor-desanatate-cod-smi/ (accessed: November 4, 2021)

- Polin K, Hjortland M, Maresso A, van Ginneken E, Busse R, Quentin W, the HSPM network. "Top-Three" health reforms in 31 high-income countries in 2018 and 2019: An expert informed overview, *Health policy* 2021;125: 815–32, doi: 10.1016/j.healthpol.2021.04.005.
- Saltman RB and Figueras J. European health care reform: analysis of current strategies. European Observatory on Health Systems and Policies, WHO Regional Publications, European Series, No. 72, WHO Regional Office for Europe, Copenhagen 1977
- World Bank. World Bank Open Data, <u>https://data.worldbank.org/</u> (Accessed: January 11, 2022)
- 9. European Commission. Eurostat Data base, <u>https://ec.europa.eu/eurostat/data/databa</u> <u>se</u> (accessed: January 11, 2022)
- 10. OECD/European Observatory on Health Systems and Policies (2019), Romania: Country Health Profile 2019, State of Health in the EU, OECD Publishing, Paris/European Observatory on Health

SEEIPH

Systems and Policies, Brussels, doi: 10.1787/f345b1db-en.

- OECD/European Observatory on Health Systems and Policies (2021), Romania: Country Health Profile 2021, State of Health in the EU, OECD Publishing, Paris, doi: 10.1787/74ad9999-en.
- OECD/European Union (2020), Health at a Glance: Europe 2020: State of Health in the EU Cycle, OECD Publishing, Paris, doi: 10.1787/82129230-en.
- 13. OECD/European Union (2016), Health at a Glance: Europe 2016: State of Health in the EU Cycle, OECD Publishing, Paris, doi: 10.1787/9789264265592-en.
- Scintee SG, Vladescu C. Recent issues of the Romanian health financing system. *J Public Health* 2006; 14: 237– 45, doi: 10.1007/s10389-006-0045-5.
- Scintee SG, Ciutan M. Development of Health Technology Assessment in Romania. Int J Technol Assess Health Care. 2017; 33(3):371-5. doi: 10.1017/S0266462317000095.
- 16. Bozikov, J. E-health and m-health: Great potentials for health and wellbeing, but also for harmonization

and European integration in health, South Eastern European Journal of Public Health (SEEJPH). 2015; Vol.4:1-7. doi: 10.4119/seejph-1807.

- 17. Vladescu C, Scintee SG, Olsavszky V, Hernández-Quevedo C, Sagan A. Romania: Health system review. Health Systems in Transition, 2016; 18(4):1– 170.
- Donev, D. (2022) "Pay-for-performance and tools for quality assurance in health care", South Eastern European Journal of Public Health (SEEJPH). doi: 10.11576/seejph-5115.
- 19. European Commission Business, Economy, Euro - Recovery from the coronavirus - Recovery and Resilience Facility, <u>https://ec.europa.eu/info/business-</u> <u>economy-euro/recovery-</u> <u>coronavirus/recovery-and-resilience-</u> <u>facility_en</u> (accessed: January 11, 2022)
- 20. European Commission, Factsheet: Romania's recovery and resilience plan, #NextGenEU | SEPTEMBER 2021, <u>https://ec.europa.eu/info/sites/default/fil</u> <u>es/factsheet-romania_en.pdf</u> (accessed: January 11, 2022)

© 2022 Scintee et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.