

IMPROVING THE PERFORMANCE OF ROMANIA'S HEALTHCARE SYSTEM: LESSONS FROM THE DUTCH MODEL

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ABSTRACT

Chronic underfunding and inequity in access have been regarded as the key issues of the Romanian healthcare system. Besides this, it shows a very high level of under-digitalization, which led to reduced efficiency and limited capability to provide integrated care solutions. This research represents a comparison between the healthcare systems of Romania and the Netherlands with a primary objective to focus on learning from the Dutch system. We highlighted, through key health performance indicators, how unsatisfactory the medical service outcomes are in Romania compared to those of the Netherlands's system. Knowing that the Dutch strategy is centered around compulsory health insurance, advanced funding mechanisms, and complete digitalization of healthcare, thereby it can act as a model for possible reforms in Romania.

KEYWORDS: *digitalization, Dutch healthcare model, efficiency, healthcare system, insurance, performance, underfunding.*

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1. INTRODUCTION

Globally, healthcare systems are experiencing a multitude of demographic, economic, technological, and social fluctuations, which have led to an increase in the level of per capita expenditure on healthcare, which states are obliged to control. Political environments and, in fact, systems as a whole, being affected by these changes, have begun to orient themselves towards changes in legislative frameworks and, respectively, specific areas of competition and business in terms of healthcare systems (Schneider, 2020).

A healthcare system is defined by the World Health Organization (2000) as a network of policies, institutions, individuals, and resources that deliver healthcare services to meet the population's medical needs in a coordinated way. A good health system is one that is structured and directed so that its services are provided at the right time, place and, by the right personnel, an aspect from which it absolutely requires a high level of accessibility and quality. At the same time, the responsibility of such a system is to determine decision-makers to provide health services in accordance with public policy objectives, a situation that must be achieved at an optimal cost level (Mikkers, 2016). In terms of the provision of medical services and, implicitly, health insurance, competition is an efficient tool through which the country's policy objectives can be achieved compared to a strong involvement of bureaucracy (Jeurissen & Maarse, 2022). Despite this, the competition that takes place between the public and private medical system can easily generate pressures from an economic perspective and at the same time waste (Schneider, 2020).

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Thus, medical competition is a double-edged sword that, in the hands of a state that knows how to use it in its favor, can generate extraordinary performance.

The difficulties encountered by European countries, such as population aging, management of medical systems, conversions to an ecological and digital environment, as well as challenges in the socio-economic sphere, have a strong impact on the health status of the current and future population, noting the budgetary, structural and effectiveness differences of the policies adopted between the member states, their health systems being very diverse (Santos et al., 2024).

Regarding Romania's healthcare system, it is currently facing major challenges, particularly in the area of health insurance fund resources and the financing of public healthcare units. Although efforts have been made in recent years to digitalize the healthcare system, and some progress was achieved during the pandemic, advancement in this area has since stagnated. Therefore, the Romanian healthcare system needs an essential improvement in the services provided to increase the satisfaction of patients who cross the threshold of its institutions and, above all, to optimize the use of its resources, which are generally financed from public funds (Petre et al., 2023). By analyzing the Dutch model, noted for its well-balanced blend of public and private sectors, regulated competition, and performance, this study seeks to underscore measures that could reinforce Romania's healthcare infrastructure. Our objective is to investigate how aspects of the Dutch strategy can meet Romania's particular healthcare requirements, enhancing overall system efficiency and patient outcomes. Given the unfortunate situation of the Romanian medical system, which tries but hardly manages to cope with the problems faced by the entire population, this paper aims to bring to light a series of good practices characteristic of the Dutch health system that, adapted to the possibilities of our country, would make a considerable contribution to improving the current situation. Integration of this type of practice into the Romanian healthcare model would not only streamline the general activity of medical units but could easily adequately respond to the needs of the majority of patients.

The degree of novelty of the work results from the fact that it comes with a novel approach, based on a comparative analysis between the Romanian and Dutch medical systems, the latter representing a model of performance and equity in the European space.

2. THE ROMANIAN HEALTHCARE SYSTEM: AN "AUTHORITARIAN" MODEL

In Romania, the healthcare system operates on a contractual framework, with its primary funding coming from public sources. Historically, the Romanian healthcare model was based on a Soviet system (Semashko system), which was marked by complete centralization of its financing and administration in order to offer free and accessible services, regardless of individual contributions. Theoretically, the idea of promoting equality was at the center of this model. In practice, the lack of financial resources needed for sustaining the spendings determined infrastructural damage, and supply shortages. These were the main causes for the rising of health inequity and the degradation of medical care (Rechel & McKee, 2009). After the fall of communism in 1989, the healthcare system went through significant changes with the most important being in 1999 a Bismarck-style social health insurance system was introduced, which was based on contribution (Andrei et al., 2009).

At the present moment, Romania's healthcare system is governed by Law 95/2006 (Vlădescu et al., 2016). The system is highly centralized, with the National Health Insurance Fund managed by the Ministry of Health (MoH) through the National Health Insurance House (NHIH). This fund is mainly supported by social insurance contributions from employees, employers, and other taxpayer categories. Furthermore, hospitals can generate income via paid medical services, co-

payments, donations, or external funding sources. The state budget also covers emergency costs for individuals without insurance (Vlădescu et al., 2016).

Romania integrated in 2004 the Australian Diagnosis-Related Groups (DRG) classification system (Vlădescu et al., 2016). The DRG classifies patients based on their main diagnosis, comorbidities, and procedures undertaken, providing a predetermined budget for each treatment case (Chiriac et al., 2011). This system was introduced as a method of funding in order to promote efficiency and quality within healthcare services by allocating financial resources in a fair and transparent way (Cochrane, 1972). Unfortunately, although the DRG system is efficient, Romania implemented it almost without adapting it to its healthcare context (Antoși, 2017). As a result, in the healthcare units that treat complicated cases that require additional resources appeared the phenomenon of "upcoding" due to reduced flexibility in financing (Scott et al., 2006).

The digital transformation of the healthcare industry has become increasingly important in recent years. The introduction of the healthcare insurance card in 2015 and the plans of creating an electronic patient records system were intended to increase the efficiency and transparency of medical care delivery. The card offered the possibility of quick and simple verification of a patient's insurance status (Vlădescu et al., 2016). Even though it reduced the bureaucracy associated to the medical act, NHIH wanted to link the electronic patient records to these cards as well. This could have provided easy access to medical data, which is essential in facilitating rapid clinical decision-making. However, this plan was not achieved (Alexiu et al., 2015).

During the COVID-19 pandemic, telemedicine was widely adopted as a standard practice, facilitated by the continuity of patient care ensured by the crisis (Andronic et al., 2023). Nevertheless, these systems only being half-way incorporated, as well as difficulties in the compatibility of health care platforms, are the main factors that reduce their overall efficiency, thus it points out the need for digital coherence. According to Breazu et al. (2023), the entire pandemic period has put pressure on the sector, exposing its inherent vulnerabilities. Medical facilities have struggled with staff and resource shortages as the number of patients has increased exponentially, and employees of the system, as well as the entire population, have felt the negative effects on their mental health stemming from the high degree of stress and uncertainty specific to the period.

3. THE DUTCH SYSTEM: A “DEMOCRATIC” MODEL

The Dutch healthcare system offers to its citizens universal access and regulated competition and is recognized for its equity and efficiency. Before the 2006 reform, it worked as a binary system: a social health insurance (Bismarck based and funded through payroll contributions for the majority of people) and a private insurance fee (for higher-income individuals based on the Beveridge model). The old law led to inequalities since often those with private insurance had to spend more and were not allowed to use certain services (Maarse & Jeurissen, 2021). By enacting the 2006 Health Insurance Act, this was solved since the system was transitioned to one that included mandatory health insurance for all residents. As a result of this reform, everyone must purchase a basic health insurance policy from non-profit private insurers, which are government-regulated to maintain affordability and quality. In the Netherlands, health insurance costs include an average monthly premium of 147 euros and an annual deductible of 385 euros (Van Winssen et al., 2015). This policy has not only made it easy to access healthcare services for the population but also increased transparency and efficiency of the services. However, the reform created an increase in premiums in the private health sector which induced a financial burden for some middle and low-income families (Maarse & Jeurissen, 2024). In order to tackle it, the Dutch

government introduced the healthcare allowance that is a direct payment to individuals with low income in order to help them purchase their health insurance (Engelen et al., 2023).

In terms of financing, the Diagnosis Treatment Combination (DTC) model was launched in the Netherlands in 2005 as part of a program to enhance the efficiency and transparency of the fund distribution process to healthcare providers (Hooijmaijers, 2012). The DTC program is based on the DRG that the Dutch healthcare system adapted for its own needs (van Herwaarden et al., 2018). DTC differs from DRG through the way it sets care packages and pays for them. While DRG is based on case mix, DTC looks at the mix of diagnosis and treatment in each patient. This approach allows increased flexibility in reimbursement, as the DTC package reflects the patient's entire treatment path, not just the admission for a specific condition. Another advantage of the DTC system is that resource allocation to the hospitals becomes more transparent since it motivates the healthcare providers to improve their efficiency, reduce hospitalization length, and optimize their resources (Helderman, 2007).

In terms of digitalization, the Netherlands has made noteworthy progress in the area of upgrading the digital healthcare system through consistent legislation. This is observed through the implementation of electronic health records (EHR) and telemedicine becoming part of the daily clinical practice. The Electronic Patient Record (EPD) offers access to medical data in real-time to both public and private health providers, which makes care coordination easier and eliminates the need for the patients to carry paper health records between appointments ("Netherlands: Country Health Profile 2023," 2023b). The COVID-19 pandemic was the major drive for the introduction of telemedicine, which was incorporated within the conventional health systems. The digital solutions gave patients the opportunity to have online appointments with their doctors, thus lightening the burden on health facilities and reducing the risk of the coronavirus being transmitted ("Netherlands: Country Health Profile 2023," 2023b).

4. METHODOLOGICAL FRAMEWORK

The purpose of this paper is to conduct a comparative analysis from the perspective of demographic, socioeconomic and medical system-specific indices between Romania and the Netherlands, in order to identify good practices of the Dutch state for their adaptation in the public medical system of our country to increase organizational performance. The comparative approach between Romania and the Netherlands was chosen because the latter's health system has faced the same difficulties and challenges in the past as ours does now, managing to adapt by amending legislation to meet all the needs of the population. Also, from the point of view of demographic and social factors, the two countries are similar, which allowed the comparison.

The research process was based on the data collection on a series of variables from three perspectives, such as demographic and socioeconomic, the medical system and the quality and development of health. Subsequently, the data were processed and based on them a series of graphs to allow the observation of similarities and differences between the two medical systems. Table 1 presents the variables used in the analysis process, as well as the sources from which they come and the period under investigation.

Table 1. Research process variables

Perspective	Variables	Source	Analyzed period
<i>Demographic & Socioeconomic</i>	Population	OECD (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)	2015 - 2022
	Share of Population Over Age 65		
	Fertility Rate (Children per Women Aged 15-49)		
	GDP per Capita		
	Relative Poverty Rate		
	Unemployment Rate		
<i>Medical System</i>	Life Expectancy at Birth	OECD (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)	2015 - 2022
	Preventable Deaths		
	Doctors per 1000 people		
	Nurses per 1000 people		
	Health Spending per Capita	OECD (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)	2015 - 2021
	Health Spending as Share of GDP		
	Percentage of Population with SHI Coverage		
	Percentage of Public Health Spending		
	Out-of-Pocket Spending		
	Unmet Medical Needs		
Overall Share of Health Spending	Prevention	OECD (2019a, 2019b, 2021a, 2021b, 2023a, 2023b)	2017 - 2021
	Long-term care		
	Outpatient care		
	Pharma & medical devices		
	Inpatient care		
<i>Quality and Development Health</i>	Healthcare Access and Quality Index (HAQ)	Haakenstad et al. (2022)	2019
	Human Development Index (HDI)	Global Economy. (2024)	2022

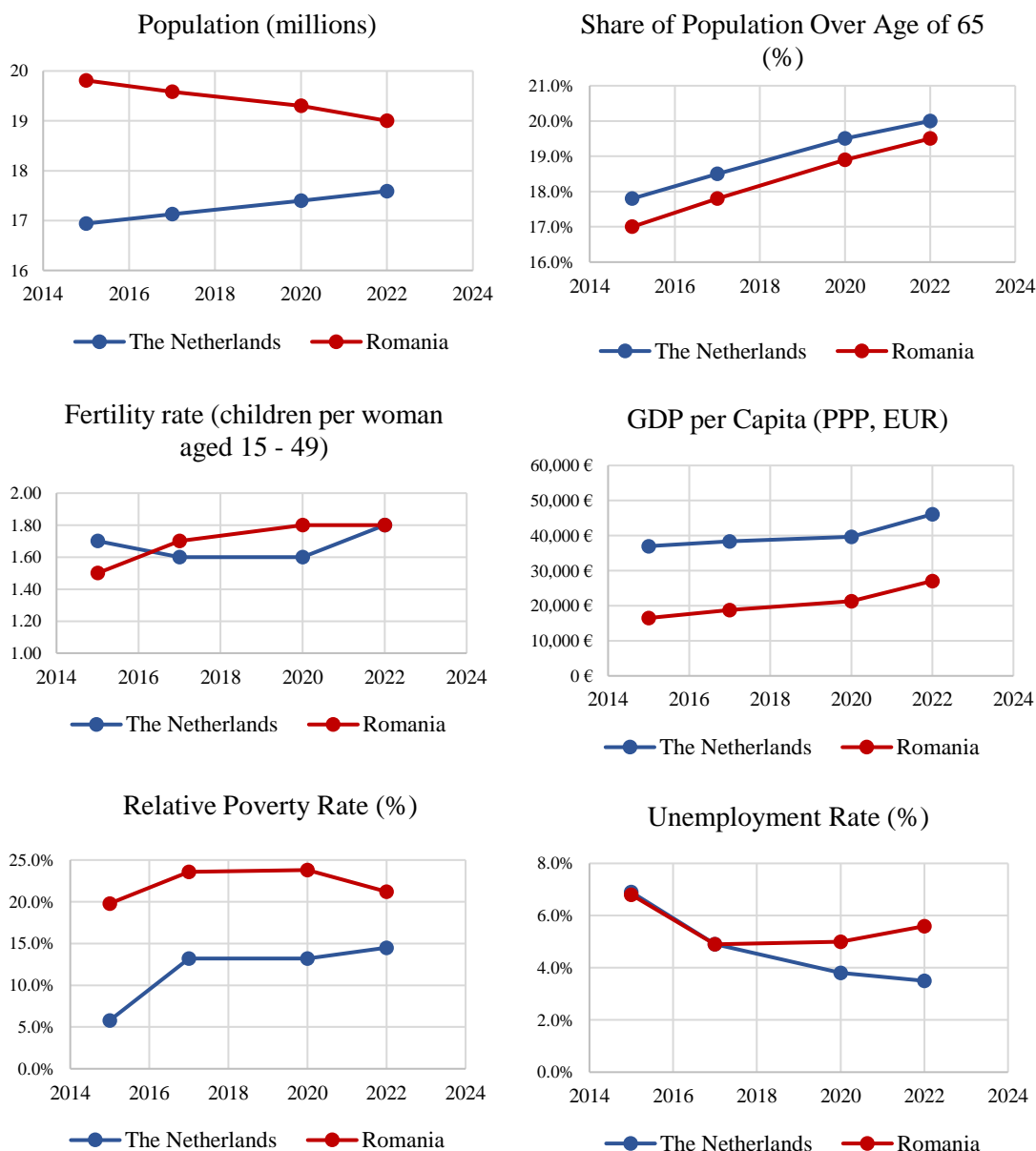
Source: author's processing based on mentioned sources

5. KEY HEALTHCARE SYSTEM FACE OFF: THE NETHERLANDS VS. ROMANIA

5.1 Comparison between demographic and socioeconomic factors

As noted by the World Health Organization (2019), demographic and socioeconomic factors play a key role in shaping people's health. We conducted a comparative analysis based on the eight State of Health in the EU - Country Health Profiles reports (OECD 2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b) and observed the following differences (Figure 1). The Netherlands' population, which was estimated to be 17.5 million in 2022, has been steadily growing in recent years. With an estimated 19 million people, Romania is experiencing a demographic loss, mostly as a result of migration after EU membership (Mîndrican & Matei, 2023). The current population in Romania places relatively greater pressure on the sustainability of the healthcare system because of a smaller number of contributors. The age distribution for both countries indicates that 20% of the Netherlands' population is aged 65 and older, compared to 19.5% in Romania. As stated by Guillemot, Zhang, and Warner (2024), the aging population develops advanced healthcare needs and requires long-term and assisted residential care, both of which consume important resources. The distribution of GDP per capita additionally points out economic disparities. In 2022, Romania's GDP per capita was 27073 euros, while the Netherlands' totaled 46093 euros. This increasing gap indicates that the Netherlands is better equipped financially to meet the medical needs of its aging population.

Figure 1. Demographic and Socioeconomic Indicators: Netherlands vs. Romania (2015-2022)



Source: author processing based on OECD data (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)

In 2022, the fertility rates for women aged 15-49 in both states were corresponding to 1.8 children for women in the age group of 15-49. The data suggests that this two countries are yet to overcome the problem of having an aging population thus the need for working population to support elderly people. This may be seen in the decline in retirement fund contributions, which places the long-term sustainability of the healthcare systems at risk.

In 2022, the relative poverty rate was 14.5% in the Netherlands, having increased slightly in recent years, while Romania's poverty rate stood at 21.2%, indicating more pronounced economic inequality and greater barriers to healthcare access for vulnerable groups. Despite some increases, the poverty rate in the Netherlands remains comparatively low, supporting more stable healthcare funding and wider access. Similarly, the unemployment rate in the Netherlands was 3.5% in 2022,

showing a steady decline from previous years, while Romania's rate was higher at 5.6%, affecting the country's base of taxpayers and, consequently, its healthcare funding stability.

The study conducted by Damian et al. (2022) reveals that demographic changes generate transformations in needs in relation to medical infrastructure, fluctuations in trends in birth rates, fertility, mortality, age structure of citizens, as well as emigration and immigration processes representing primary problems for the health sector. Likewise, the authors emphasize that the decline in the birth rate, the aging of the population and external migration have led to an alignment of our national situation with that of other European states, with significant efforts currently being made to reduce gaps and inequalities in the medical system. Thus, the demographic crisis that certain European states, and implicitly the Romanian one, are going through, constitutes a challenging element for their future (Muntele et al., 2021).

5.2 Comparison between health system indicators

Life expectancy at birth (Figure 2) serves as a measure of the overall health status of a country. In the Netherlands, the life expectancy is relatively high, between 81.6-81.7 years. In contrast, in Romania the range is significantly lower, 75-75.3 years. The accessibility and effectiveness of resources across the healthcare system might be reasons for the variation.

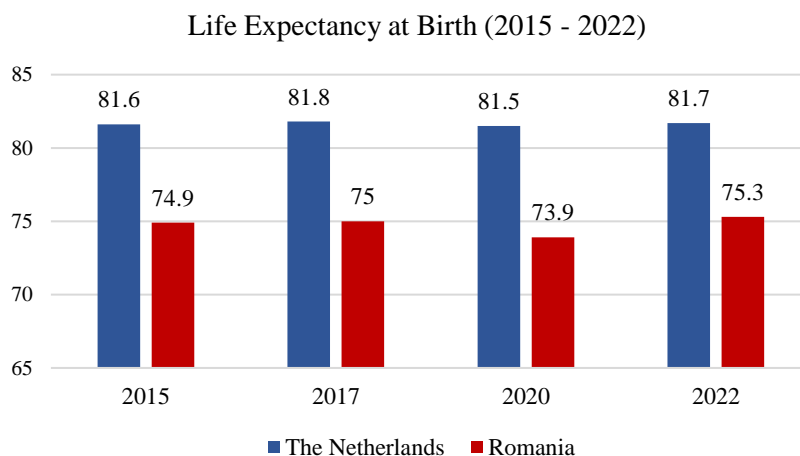


Figure 2. Life Expectancy at Birth (2015-2022)

Source: author processing based on OECD data (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)

The potential of the Dutch healthcare system to minimize unnecessary mortality through effective procedures is demonstrated by the differences on preventable deaths (Figure 3). In the Netherlands, the number of preventable deaths has slightly increased from 88 to 141 over the analyzed period, but it remains substantially lower than in Romania, where preventable deaths range from 306 to 358. This high level of preventable mortality in Romania suggests limitations in access to preventive services and in the system's ability to identify and address risk factors within the population.

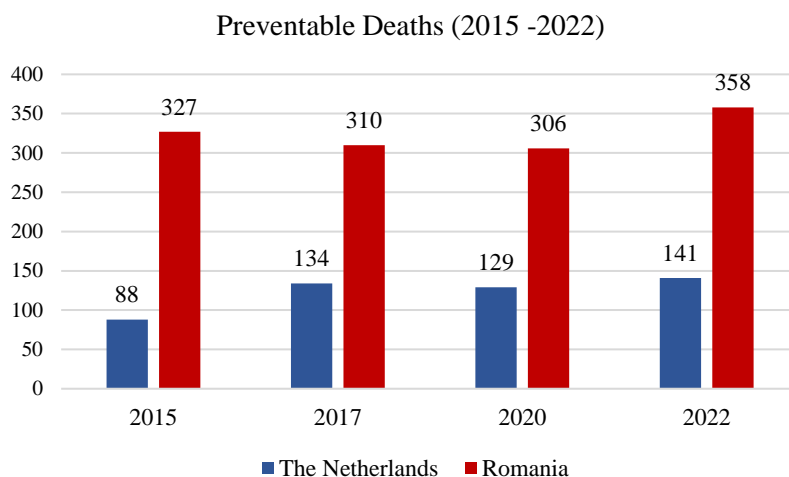


Figure 3. Preventable Deaths (2015-2022)
 Source: author processing based on OECD data
 (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)

The Netherlands understood that human resource was essential for an effective healthcare system. (Figure 4). The Dutch healthcare system had 3.9 doctors and 11.4 nurses per 1000 people in 2022. These numbers increased since 2015. Despite generating a large number of specialists, Romania is experiencing a high rate of emigration since the EU integration. In 2022, there were 3.5 doctors per 1000 people, and only 8 nurses per 1000 people.

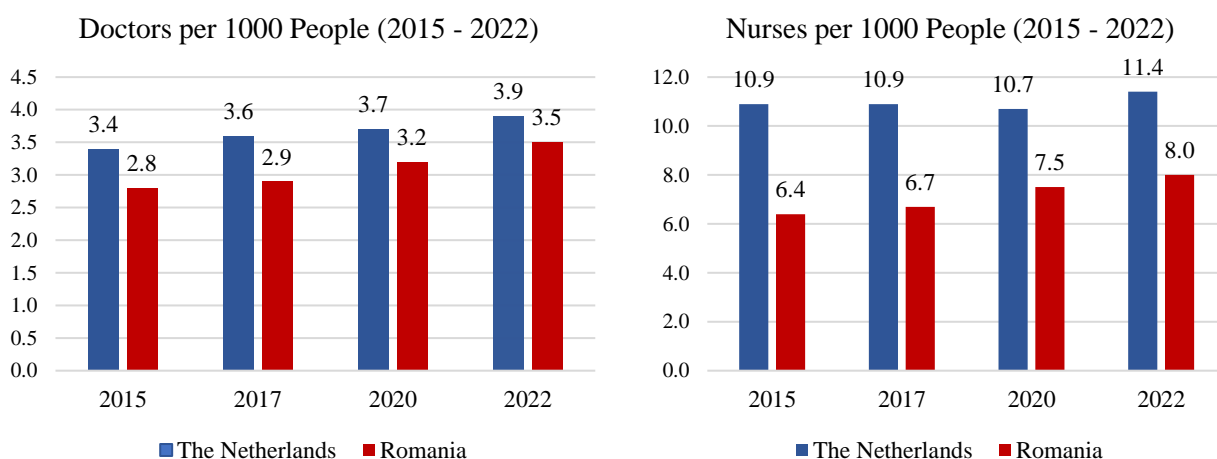


Figure 4. Doctors and Nurses per 1000 people (2015-2022)
 Source: author processing based on OECD data (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)

Per capita healthcare expenditure (Figure 5) reveals differences between the two systems. In the Netherlands, the amount spent on healthcare per person rose from 3954 euros in 2015 to 4570 euros in 2021, showing that the government prioritizes high-quality healthcare. Romania, on the other hand, spends significantly fewer resources, and in 2021, the cost per person grew from 815 euros in 2015 to 1663 euros. Romania has difficulties in providing quality care due to its limited resources, although its spending on healthcare has more than doubled in the six years prior.

According to Jaba et al. (2014), a country has a health system with higher performance than another if it manages to generate better results for the same level of resources or comparable results with fewer resources. Their study shows the importance of the relationship between resources and outcomes in assessing the performance of a health system model, revealing that inequalities in healthcare spending explain the different outcomes of various systems. Therefore, the results of this research show that in the case of developed countries, per capita medical expenses increased with increasing longevity, with European countries being among with the highest longevity.

The share of GDP allocated to healthcare is high and constant in the Netherlands, ranging from 10.7% to 11.3%, above the European average of 9.9%. Romania, on the other hand, allocates a smaller portion of its GDP, between 4.9%-6.5% to healthcare. Our country, although it has managed to join the European Union, and the quality of life of its citizens has improved as a result of this fact, is among states that allocate lower percentages of GDP to health (Breazu et al., 2023). At any rate, all countries are facing increasing health spending, which effectively presents a major challenge to the sustainability of national health systems, even in countries with significant incomes and the percentages of GDP allocated to health differ between developing and developed countries (Stepovic, 2019).

In the Netherlands, 99.9% of people have insurance. Romania's lower health insurance rates (ranging from 86% to 89%) indicate that a significant percentage of people may not have access to essential medical care, which could lead to unequal access. In Romania, the out-of-pocket spending costs remain high (20-21%), creating a substantial financial burden on patients. In contrast, in the Netherlands, out-of-pocket expenses are much lower, having declined from 12.3% in 2015 to 9.3% in 2021. This decreased dependence on out-of-pocket expenses illustrates the effectiveness of the Dutch insurance system in covering healthcare expenses, consequently reducing financial burden for patients. The share of unmet medical needs in the Netherlands is at a very low level, ranging between 0.2 and 0.4%. In Romania, however, the unmet medical needs are much higher (4.9% in 2021). Despite improvements, unmet medical needs in Romania remain higher than in the Netherlands, highlighting ongoing difficulties in realizing universal access to healthcare.

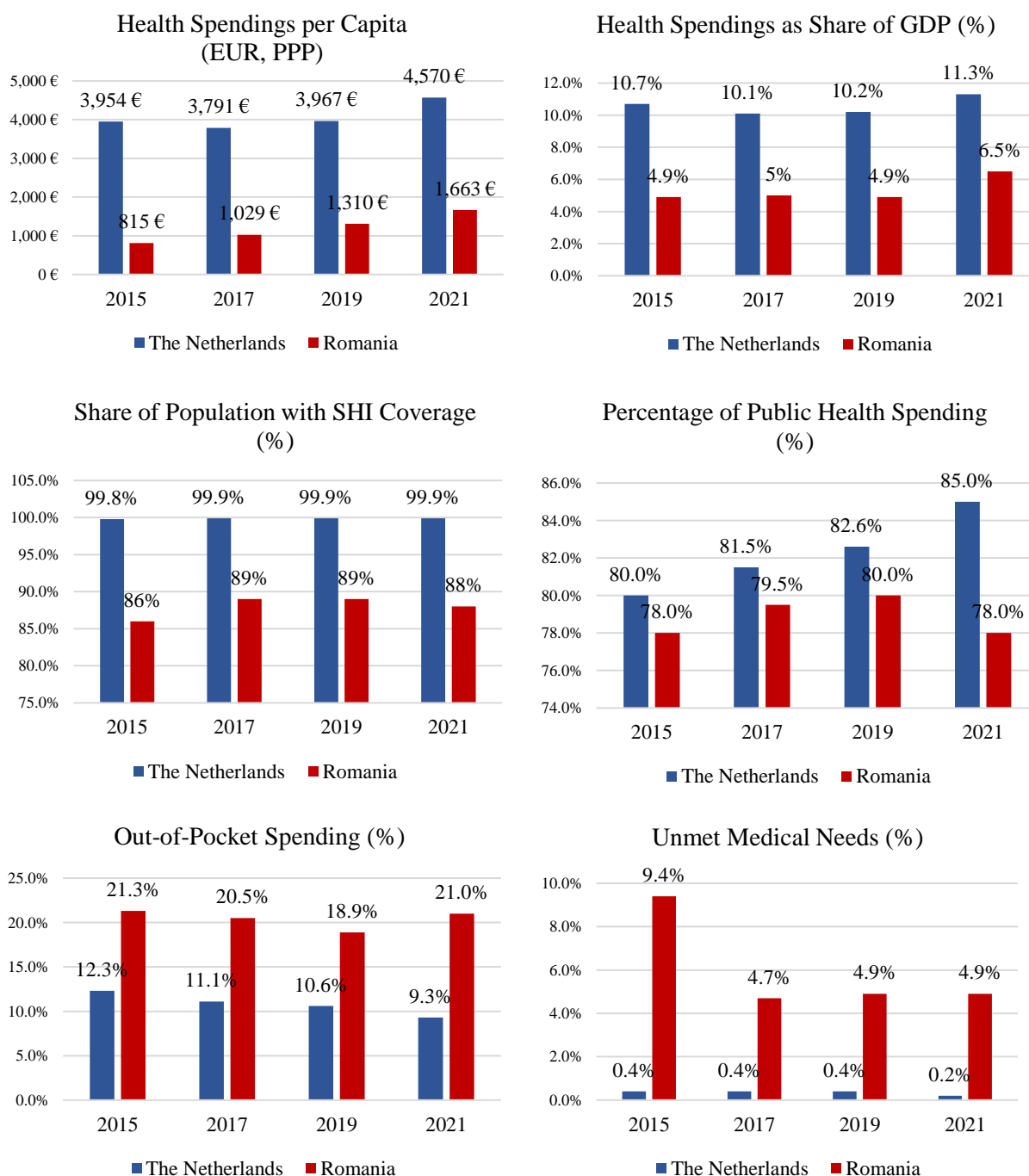


Figure 5. Comparative Healthcare Indicators: Romania vs. The Netherlands (2015-2021)

Source: author processing based on OECD data (2017a, 2017b, 2019a, 2019b, 2021a, 2021b, 2023a, 2023b)

In our country, there is a phenomenon of increasing hospital expenses due to conditions that can be treated through primary health care at the right time and effectively. However, social insurance in our country has determined an increase in total health expenses, without leading to improvements in the mortality score. This aspect shows especially the gaps in coverage of the need for medical services among poor, rural and ethnic minority groups, in general, as a result of physical barriers, which reduce accessibility. Therefore, addressing barriers arising from both the supply side (insufficient medical

personnel, underfinancing) and the demand side (distance) for quality primary health care is a crucial aspect for the universal coverage of medical needs in Romania (Wang et al., 2021).

There are noticeable variations in the priorities of Romania and the Netherlands when it comes to the allocation of health care expenditures. Figure 6 presents, through three graphs for the years 2017, 2019 and, respectively, 2021, the evolution of the total share of expenditures allocated to health for the two countries analyzed. Inpatient care takes a significantly greater part of Romania's healthcare budget, consistently in the range of 40%. The need to use more inpatient services indicates that the healthcare system prioritizes this type of treatment, perhaps as a consequence of limited access to alternative forms of care services. The Netherlands, on the other hand, spends just 20-25% of its budget on inpatient treatment and allocates its healthcare spending more fairly among other categories. Pharmaceuticals and medical devices represent another substantial share of spending for both countries, but Romania allocates a higher percentage, around 25-27%, compared to the Netherlands.

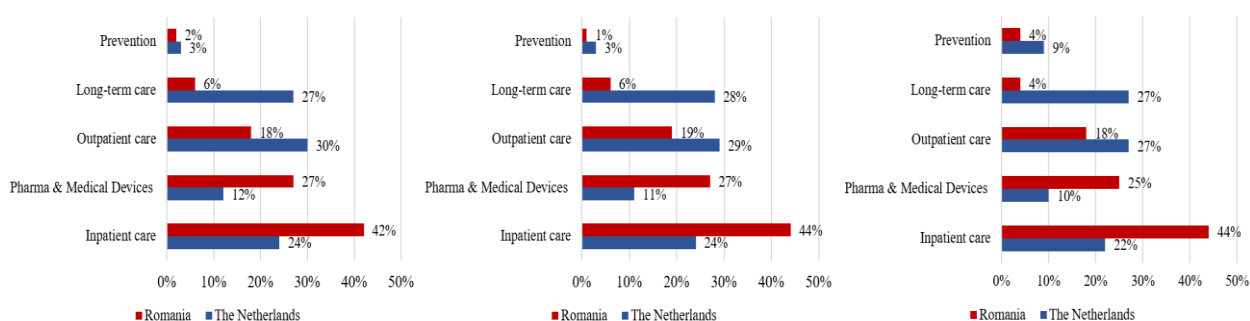


Figure 6. Comparative Overall Share of Health Spending: Romania vs. The Netherlands (2017-2021)

Source: author processing based on OECD data (2019a, 2019b, 2021a, 2021b, 2023a, 2023b)

Outpatient care receives 15-20% of the Netherlands' budget, which is more than Romania's 18%. In addition, the Dutch government constantly invests about 10-15% on long-term care, compared to Romania's 4-6% allocation. The difference reflects the Netherlands' commitment for elderly treatment infrastructure, which is especially important because of its aging population. The absence of investment in this sector shows that Romania's long-term care facilities have been neglected and overlooked, which could impact the quality and accessibility of healthcare for seniors or for patients with chronic illnesses.

Neither country invests enough money on prevention. However, Romania spends smaller amount, around 1-2% of its budget, than the Netherlands' 4%. This gap suggests that the Dutch system put more value on preventative healthcare, which could result in a reduction of long-term spending and better health outcomes with earlier intervention.

The study by Lorenzoni et al. (2019) estimates that by 2015-2030, the Netherlands will experience a decrease in health expenditure per capita compared to the period 2000-2015, but this reaches a level of around 0.2%, which does not show an impressive change. Furthermore, based on a perspective until 2030, it seems that for the Dutch state the most important key factor contributing to the average annual change in health expenditure is income, followed by demographic factors and time, with the last place being occupied by the Baumol effect which shows the influence of lower productivity growth in medicine compared to other sectors. The study, however, does not comment on our country.

5.3 Quality and development health indexes

The Healthcare Access and Quality Index (HAQ) is a tool designed to assess and compare the availability and standard of healthcare services across various nations or regions. Its central purpose

is to offer an indicator that mirrors crucial facets of healthcare system performance, particularly in meeting the basic health necessities of the population efficiently. The HAQ Index relies on patient survival rates for 32 health conditions that should not lead to death when adequate and timely healthcare is provided (Haakenstad, 2022). In the Romanian case, for individuals aged 0-74, the HAQ Index is 69.7 (67.2-72.1) and the index for individuals in the working-age group (15-64 years) is 67.3 (64.0-70.4). The score falls to 63.2 (59.1-66.7) for seniors 65-74, indicating challenges in delivering quality care for a population that often requires more intensive medical treatment, especially in controlling chronic diseases and providing long-term care services.

The Netherlands is among the most successful countries in the world for healthcare access and quality, with the HAQ Index showing superior results across all age groups. For the group aged 0-74 years, the index is 91.1 (88.7-92.6), illustrating that the Dutch healthcare system delivers thorough and fair services. Among the working-age residents, the index rises to 92.7 (89.8-94.4), signifying a well-distributed access and quality for the economically active populace. For the 65-74 age group, the HAQ Index is 80.5 (76.9-83.5), which indicates effective long-term and chronic care services, although it is slightly lower than for younger groups (Haakenstad, 2022).

The Human Development Index (HDI) is a combined metric used to rank countries based on achievements in three core aspects of human development: life expectancy and health, educational access, and standard of living (United Nations Development Programme, 2024). The Netherlands shows strong HDI Index results, achieving a score of 0,946 in 2022, ranking 11th worldwide, with a high average score of 0,892 and scores ranging from 0,783 to 0,946. The small decrease from a peak of 0,944 in 2020 to 0,941 in 2021 might suggest minor challenges, due to the COVID-19 pandemic, but the index continues its upward path in 2022, even exceeding the 2020 value, the highest up to that time.

Romania's 2022 score of 0.827, which places it 52nd internationally, indicates a moderate performance when compared to countries with more advanced healthcare systems. With values ranging from 0.678 to 0.828, Romania's average HDI Index is 0.754, indicating notable progress over time. The decline from a peak score of 0.828 in 2020 to 0.821 in 2021, however, may indicate difficulties maintaining these improvements, maybe as a result of the pandemic as well as the Netherlands, but similarly it resumes its upward trend (Global Economy, 2024).

6. PATHWAY TO PERFORMANCE: ADAPTING DUTCH PRACTICES FOR A ROMANIAN HEALTHCARE REFORM

Reforming Romania's healthcare system requires a multi-faceted approach that simultaneously addresses improvements in insurance coverage, changes in hospital financing, and modernization of digital healthcare infrastructure. This combination of reforms has the potential to transform the healthcare system, providing more equitable access and more efficient services. Implementing these changes requires a well-organized strategy that addresses Romania's particular requirements, but incorporating elements of the Dutch model might provide a clear path.

The foundation of a successful healthcare system is an efficient and equitable health insurance plan. It is known that about 86-89% of Romanians are covered by health insurance, which operates on a centralized public model (OECD, 2023b). The substantial number of co-insured people, usually family members, who obtain insurance benefits without making direct contributions to the national fund, however, reduces this coverage. On the other hand, the Netherlands has a state-regulated, non-profit private system of required health insurance. The government helps individuals with low incomes pay for the basic insurance coverage that everyone must purchase. Rethinking the contribution system and including the private sector into the insurance chain are mandatory steps that must be taken for Romania to adopt a similar approach. However, strict regulation is necessary to provide fair access and stop private insurers from being profit-oriented.

Another essential element for reforming Romania's healthcare system is to change the way hospitals are funded. Currently, the DRG system suffers from rigidity and cannot adapt to patients' specific needs. The Netherlands with its DTC system offers a more detailed and flexible solution. Implementing a similar system in Romania could be achieved through a phased approach, starting with pilot projects in selected hospitals and later expanding nationwide. Furthermore, by establishing a risk equalization fund based on the Dutch model, inequalities between healthcare units might be reduced and equitable support for high-cost patients guaranteed.

An essential aspect of increasing efficiency and transparency in providing quality care is digital change. The lack of a coordinated system is still a prominent issue in Romania, despite the implementation of policies like healthcare insurance cards and electronic prescriptions. Because hospitals use different software solutions, there is more bureaucracy and reduced access to patient files. With its digital healthcare system, which allows quick access to patient medical records for both public and private healthcare providers, the Netherlands has seen enormous growth. It would be necessary to develop a national platform, integrate the current software, and fortify the IT infrastructure in order to set up a system like this one in Romania. Funds from the European Union and partnerships between public and private organizations may provide financing for this initiative. Another essential element is the expansion of telemedicine. Including telemedicine in everyday healthcare practices could reduce the pressure on healthcare facilities by reducing the transfers of critical patients and make it easier for the ones in isolated areas to access healthcare services.

Lee's (2016) study argues that the increase in equipment of the nature of medical technologies and devices will invariably lead to increased health spending in the case of medical systems characterized by inefficiency, being recommended that they focus more on important resources for healthcare services. Thus, there is an absolute need for innovative thinking among decision-makers to identify and implement strategies that aim to increase the efficiency of the use of resources such as medical personnel, equipment, available beds. It is also worth noting that the use of information technology can lead to improved working environments, operational efficiency and cost reduction. Moreover, the research by Stefan et al. (2016) addresses the competitiveness of organizations in the medical field, stating that this can be achieved as an advantage of a superior level of financial performance, the use of resources and the development of management processes in an efficient manner, all of these under the impact of factors from the internal and external environment. Thus, it identifies four dimensions that prove representative for achieving competitiveness in the healthcare sector, namely economic, qualitative, social and strategic.

7. CONCLUSIONS

Over time, Romania has been faced with the obligation to implement measures imposed by health policies adopted through outdated or conflicting regulatory frameworks. Therefore, medical units have been stimulated towards excessive and inefficient infrastructure, insufficient capacities associated with financial, operational, decision-making and strategic management, as well as limitations imposed by the DRG system model (Duran et al., 2019). The present study reinforces the importance of the Romanian medical system problems, trying to highlight an example of a model that can be adopted in our area, of course taking into account its particularities, in order to achieve a clean, efficient, well-organized infrastructure that responds appropriately to the medical care needs of the population.

For meaningful change, consistent legislation, considerable financial investments, and active involvement from all stakeholders in the healthcare sector are required. We could create a healthcare system that is more patient-centered, efficient, and democratic by adapting the Dutch model to Romania's particular demands. Successfully implementing these reforms may diminish disparities, improve the quality of care, and ensure long-term sustainability. Romania has the chance to turn its

present challenges into opportunities, developing a healthcare framework capable of addressing the evolving needs of its population.

From the perspective of *theoretical implications*, this study is the first to approach a comparative analysis between Romania and the Netherlands on the way their medical systems are organized and coordinated, thus enriching the academic literature by providing a comparative framework between the way a developing country and a developed one in the European Union relate to managerial practices in the field of medicine, especially public ones.

As *managerial implications*, this study can serve as a starting point for a good practice guide for public health systems in countries similar to the two studied. The medical units in Romania, through the decisions of the Ministry of Health, are targeted by this study to take a positive example from the Netherlands in which they can adapt to their specifics in order to improve and streamline organizational processes. The contemporary Dutch health system represents proof that recovery is possible as it has managed to cope with the challenges and difficulties our country faces over time, transforming the entire system into a successful one, through which the population and its needs can be reached.

Regarding the *research limitations*, they consist of the fact that, since the reports studied did not contain sufficient data on the variables used at the European Union level, they were not used, the comparative framework being composed exclusively of information on the Romanian and Dutch medical systems. The last time point reflected by the data is 2022, as those relating to the later period have not yet been published and, at the same time, since no work on this topic has been elaborated on to date, information on the two systems was studied in parallel, without having an example of a comparative analysis between them.

Future research directions may consider expanding the comparative analysis, including the European level in order to be able to, which is in the middle of the distance between the two studied countries. Furthermore, it would be of great help to complete this study to find out the perceptions of Romanian healthcare system employees, as well as patients, regarding a series of possible future practices borrowed from the Netherlands and, implicitly, how they consider themselves willing to embrace them and whether they will really translate into a performance improvement.

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