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A Summary Prospecting of Possibilities of Providing Public Health Services at the Level of North-East Region of Romania

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Abstract: *This paper investigates issues related to the public health system in the North-East Region of Romania, focusing on possibilities for addressing/improving specific deficiencies/difficulties. The concerned region is characterized by the highest and densest population in the country, with a significant proportion of residents in rural areas (55%) and a high level of poverty. Population health indicators are among the weakest nationally, and the healthcare infrastructure is inadequate for the population's needs, with an uneven distribution that generates significant inequalities in access to medical services in the respective counties. Starting from the (statistical) certainty that Romania ranks among EU member states with the highest avoidable mortality, the paper addresses both preventable causes through public health interventions and treatable causes through quality care. After a brief introduction, the overall state of the public health system in Romania is examined, followed by a detailed analysis of the main issue stated in the title, highlighting multiple critical aspects based on data and information from official reports of prestigious institutions. Special attention is given to specific issues in local communities related to healthcare infrastructure and the provision of medical services, as well as possible solutions offered through the implementation of the General Regional Health Services Plan 2021-2027 in the North-East Region. The paper concludes with a section of conclusions, which includes perspectives on the future development of the analyzed sector.*

Keywords: *public health system; Romania; strategic options; North-East region; disadvantaged population; inequalities; spiral health infrastructure; regional health services plan.*

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Introduction

In the European Union, health policy plays a distinct role, aiming to ensure the highest level of human health protection. Basic responsibilities in this regard belong to the Member States, with the EU constantly focusing on „improving public health, preventing and managing diseases, mitigating sources of danger to human health, and harmonizing health strategies among countries." (EP, 2023).

In Romania, as a Member State of the EU, the recently established strategic objective is „strengthening the health sector's capacity to formulate and implement health policies to ensure equitable access to quality health services, reduce significant health inequalities, optimize resource utilization in health services under increased cost-effectiveness, using evidence-based medicine, closely tailored to the needs of individuals and communities." (GR, 2023a). Building on the past and present challenges of the analyzed system, the efforts to achieve this objective have been established by referencing a set of values presented in Figure 1.

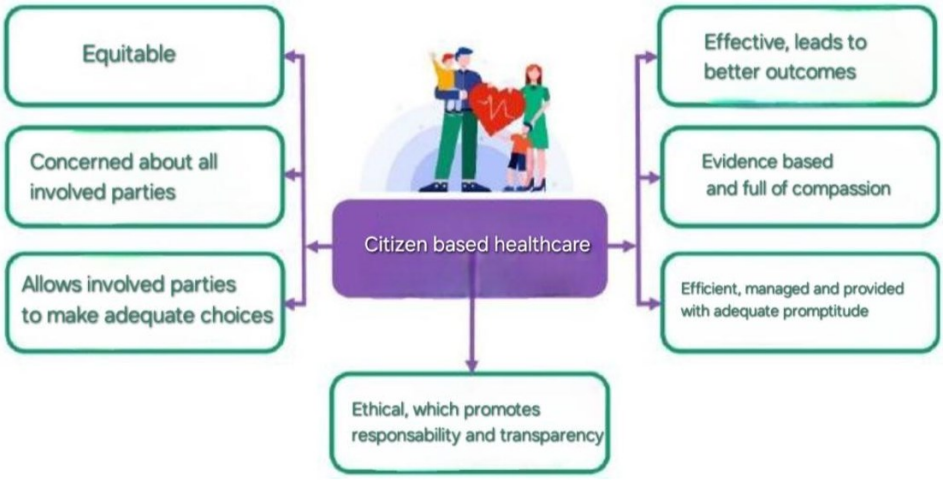


Figure 1. The set of values that underlies the strategic objective „strengthening the capacity of the health sector in Romania" (GR, 2023a)

In fact, any strategic orientation should take into consideration that Romania stands out within the European Union with a significantly elevated avoidable mortality, highlighting high figures for deaths that can be prevented through public health interventions, as well as treatable causes through ensuring adequate quality care. Similar to the other EU member states, the main reasons for avoidable mortality in Romania are represented by circulatory system diseases, cancer, and accidents, but with values recorded

over twice as high as the European Union 27-state average. In 2022, life expectancy at birth was 71.5 years for men and 79.3 years for women, resulting in an average of 75.3 years (OECD, 2023). This gender discrepancy can be largely explained by differences in tobacco and alcohol consumption patterns. The gap between the level of avoidable mortality in Romania and the EU average not only affects health status indicators but also generates „indirect consequences on the economy by reducing labor force productivity and influencing the families of patients who are forced to invest time and resources in informal care. The issue of avoidable mortality becomes even more acute as the demographic profile of the Romanian population is unfavorable, and morbidity is diversified, highlighting the coexistence of non-communicable and communicable diseases." (GR, 2023ab).

Our paper, after presenting this brief introductory section, addresses the overall situation of the public health system in Romania and then effectively tackles the core issue stated in the title of the paper – „Possibilities of Providing Public Health Services at the Level of North-East Region of Romania", highlighting several critical aspects based on data and information from the official reports of prestigious institutions. Obviously, the paper concludes with a conclusive section, including some perspectives on the development of the analyzed sector.

An Overview of the Public Health System in Romania

In Romania, the hospital sector (368 public hospitals as of the end of 2020, categorized by development regions - Figure 2a, with associated physicians, Figure 2b) constituted the central axis of the healthcare system, marked by notable inefficiency in the distribution and utilization of resources.

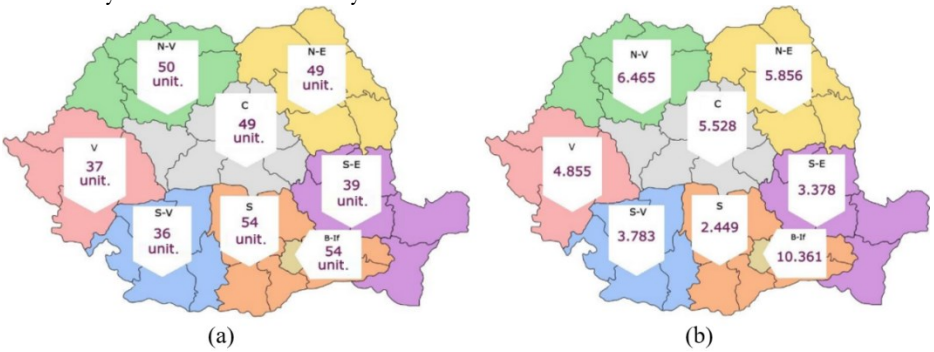


Figure 2. The distribution of public hospitals at the national level (a); the distribution by development regions of physicians (excluding dentists) in the public healthcare system (2020) (b) (CCR, 2022)

In 2021, hospital services absorbed the most significant portion of the health budget, reaching 44%, placing Romania at the forefront among EU countries in this regard, in contrast to the EU average of 28% (OECD, 2023). This substantial share of expenditures on hospital services starkly contrasts with the relatively low funding allocated to other areas: outpatient care received only 18% of the total budget, the lowest proportion in the EU and well below the average of 29%. Additionally, 25% of health expenditures are allocated to medications, mainly in the form of direct payments (Figure 3).

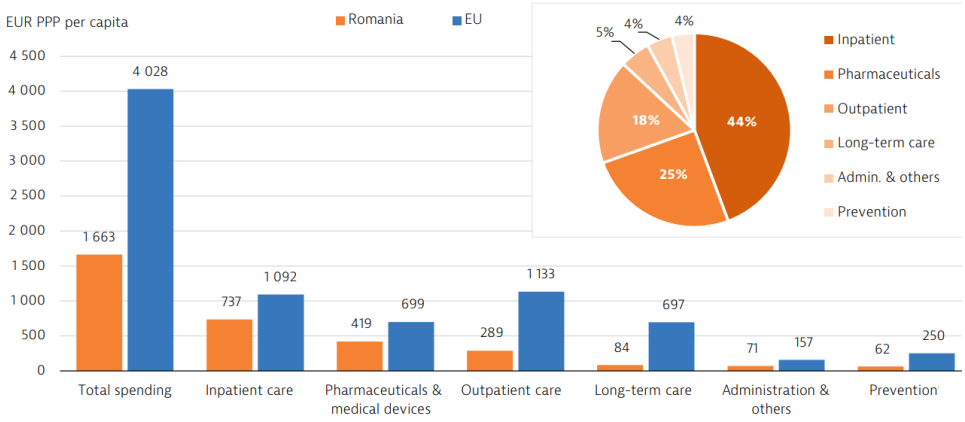


Figure 3. The structure of healthcare expenditures in Romania (2021) (OECD, 2023)

Regarding Romania's public health system, we highlight that the deficiencies recorded in the last two decades are diverse and significant. In comparison to established market economies, notable discrepancies persist in terms of morbidity rates for certain social and contagious diseases, infant mortality, life expectancy at birth, and quality of life in health terms (Pavelescu, 2018). In addition to the insufficient allocation of human and financial resources, which could lead to a significant improvement in healthcare, deficiencies have long persisted in the salary system for various categories of medical personnel. This issue has negatively impacted the quality of medical care, incentivizing the migration of medical staff to developed countries (Bostan et al., 2022), thereby causing workforce overload and limiting the availability of health services. It is important to note that in 2021, the ratio was 3.5 practicing doctors per 1,000 inhabitants, one of the lowest rates in the EU (EU average being 4.1 per 1,000 inhabitants). The number of nurses was also below the EU average, at 8.0 per 1,000 inhabitants, compared to the EU average of 8.5 per 1,000 inhabitants (OECD, 2023). Other issues were related to the absence of

efficient mechanisms or ways of organizing medical activities to facilitate an adequate distribution between family medicine and specialized medicine (Pavelescu, 2018). Concerning funding, health social insurance in Romania is supported by salary contributions, with exceptions for those not professionally active; the treatment costs for these categories exempt from contributions are covered by the state budget. In 2021, Romania allocated 1,663 EUR per capita (adjusted for purchasing power) for health, representing less than half of the EU average (4,030 EUR) and the lowest rate in the EU, accounting for 6.5% of GDP (Figure 4).

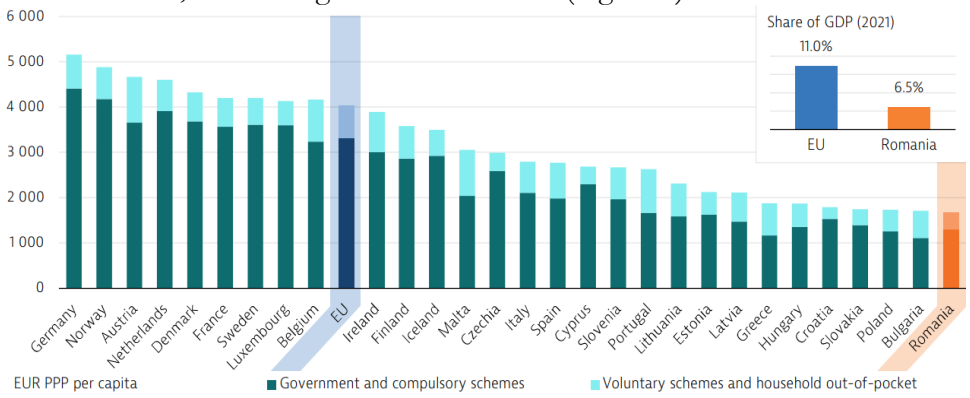


Figure 4. Health expenditures per capita in Romania (2021) (OECD, 2023).
Note: The EU average is weighted.

We observe a consistent increase in current health expenditures, both in 2020 (6.5%) and in 2021 (10.2%), attributed to costs associated with the Covid-19 pandemic. Healthcare funding is provided by the health social insurance system, which offers a comprehensive package of benefits. Compared to other EU member states, Romania has more limited coverage for medications and dental services. Although insurance is mandatory, 14% of the population does not benefit from it (GR, 2023b), including individuals working abroad, those employed in the informal sector, and unemployed individuals not registered with social work services (Scîntee et al., 2022; Apostu, 2018; 2023). Effecting a significant change in the effectiveness of the healthcare system and improving the population's health must remain constant objectives, receiving due attention from public authorities and other economic and social actors (Pavelescu, 2018). Disparities from ideal conditions remain significant, and in 2022, 4.9% of Romanians stated they had unmet healthcare needs, either due to costs, distance, or waiting periods (more than twice the EU average of 2.2%), with three-quarters of them highlighting costs as the primary impediment. Direct

healthcare expenses accounted for 21% of total expenditures in 2021, surpassing the EU average of 15% (OECD, 2023). The main contribution to these expenses is the costs of outpatient prescribed medications, and dental services have a significant impact. Concerning the total healthcare service expenses, they have increased more rapidly than nominal GDP in the last five years, with notable issues arising from the high proportion of the population not covered by insurance (14%). This situation leads to „excessive use of emergency services and late detection of chronic conditions, having negative effects on health and the efficiency of public funds usage. Over half of the resources from the National Health Insurance Fund are allocated to hospital care, leaving less than half for primary healthcare, specialized outpatient care, medications, other services, and medical technologies. Mechanisms for contracting and paying for medical services are not aligned with estimated needs at the county level and do not encourage provider behavior supporting the achievement of national health objectives. Reimbursement rates for contracted medical services are not synchronized with providers' actual costs..." (GR, 2023b). Public healthcare infrastructure is deficient, with significant variations at the county, regional, and national levels, and investments in the last five years have been insufficient to reach adequate performance standards.

The Public Health System in the North-East Region of Romania

Brief presentation of the North-East Region

This region has a population of 3,221,819 inhabitants (2022) and consists of six counties: Bacău, Botoşani, Iaşi, Neamţ, Suceava, and Vaslui (Figure 5), holding the highest number of residents, with a share of 16.9% in the country's total population (ADRNE, 2023; Bursa, 2023).



Figure 5. Geographical positioning of the North-East Region (https://www.adrnordest.ro/regiunea-nord-est/localizare-istorica-si-geografica/)

The North-East Region stands out with the most numerous and compact population in the entire country, with a significant proportion of residents in rural areas (55%) and a high level of poverty. Population health indicators show among the weakest performances nationwide, and the medical infrastructure is insufficient for the population's needs, with an uneven distribution that generates significant inequalities in access to medical services in the counties of this region (Ministry of Health, 2018).

The urban population in this region totals 1.83 million inhabitants (45% of the total population), concentrated in 46 municipalities and cities.

„Here, there are 6 large urban settlements (county seat municipalities), 3 medium-sized urban settlements (Bârlad, Onești, and Roman), 25 small urban settlements (Moinești, Dorohoi, Pașcani, Rădăuți, Fălticeni, Câmpulung Moldovenesc, Vatra Dornei, Huși, Buhuși, Comănești, Dârmanești, Târgu Ocna, Darabani, Flămânzi, Târgu Frumos, Podu Iloaiei, Târgu Neamț, Roznov, Gura Humorului, Vicovu de Sus, Dolhasca, Salcea, Liteni, Negrești, and Hârlău), and 12 very small urban settlements (Slănic Moldova, Săveni, Ștefănești, Bucecea, Bicaz, Siret, Cajvana, Frasin, Broșteni, Milișăuți, Solca, and Murgeni).” (ADRNE, 2023).

As a negative aspect, according to the latest demographic projections, it is estimated that the population aged 65 and over will constitute approximately 1/5 of the total population in the year 2025 (Figure 6).

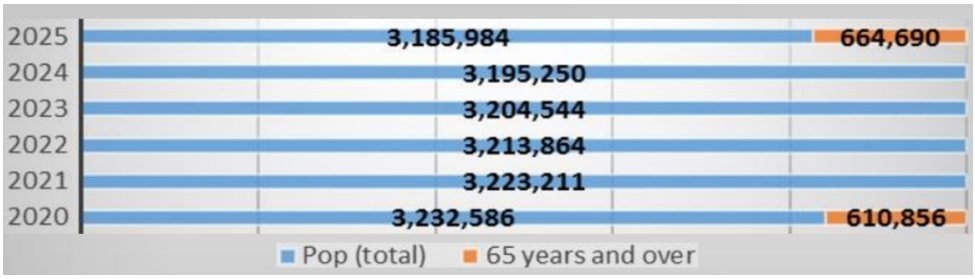


Figure 6. Demographic projections and the number of residents in the North-East Region aged 65 and over (Ministry of Health, 2018)

Some assessments on the state of health and the main health determinants

Before the outbreak of the pandemic, the North-East region was primarily affected by the following types of illnesses: respiratory system conditions, digestive system diseases, nervous system and sensory organ disorders, musculoskeletal system issues, genitourinary system diseases, skin and connective tissue disorders, as well as circulatory system conditions (Ministry of Health, 2018). In 2018, the highest prevalence rates were recorded for the following disease categories: hypertensive conditions, ischemic heart diseases, diabetes mellitus, cirrhosis and other chronic hepatitis, obesity, chronic obstructive pulmonary disease, and mental disorders (Table 1).

Table 1. Prevalence of major chronic diseases in the North-East Region of Romania - pre-pandemic period (cases per 100,000 inhabitants) (Ministry of Health, 2018)

Disease	RO	RNE	BC	BT	IS	NT	SV	VS
Disease related to hypertension	13 425.5	13 404.9	13 386.1	13 623.8	11 877.4	17 605.2	13 585.8	11 168.0
Ischemic diseases	6 321.1	5 659.1	7 284.6	5 706.1	3 373.9	6996.2	6484.8	4930.4
Diabetes	4 311.5	40 62.1	3 391.2	2 733.0	4 704.9	4 490.2	4 840.0	3 310.1
Cirrhosis and other chronic hepatitis	1 622.5	2 306.0	2 493.8	2 368.2	2 197.9	2 190.9	1 839.6	3 087.5
Obesity	1 710.9	2 324.5	1 287.5	1 807.2	2 754.2	2 725.6	2 598.4	2 636.4

There is a significant increase compared to the national average for hypertensive disease in the counties of Neamţ, Botoşani, and Suceava, while the regional average is below the national average. Cirrhosis and other chronic hepatitis record rates well above the national average both in the region and in all counties, with the highest rate recorded in Vaslui County (Ministry of Health, 2018). Obesity exceeds the national average in the

region, except for Bacău County, which has a below-average rate both nationally and regionally. Currently, the healthcare sector in the North-East Region faces various challenges, including (Ministry of Health, 2018) the lack of effective integration between various categories of services – „primary care being insufficiently correlated with hospital care, and promotion and prevention services requiring closer integration with curative care, these deficiencies having a negative impact on the continuity of care." Primary care has shortcomings in providing preventive services, early disease detection, and patient monitoring, contributing to the overload of the hospital system, and „community healthcare services are still insufficient, including in terms of human resources and infrastructure development." The care model is fragmented in some cases, relying on separate specialized services, and access to care varies significantly depending on geographic areas, generating inequalities in access to medical services. These challenges, despite some commonalities with other regions, interact significantly with the socio-economic conditions typical of the region, accentuating deficiencies in healthcare delivery, with two major consequences. Firstly, there is an unmet need for healthcare services, especially among rural and marginalized populations. Secondly, significant inequalities in access to services are exacerbated between urban and rural populations, as well as between marginalized and non-marginalized individuals.

The infrastructure of the public healthcare system in the North-East Region of Romania

The North-East Region has 9,117 healthcare units, distributed across the territory as per the following Table (2):

Table 2. The distribution by counties, residence environments, and ownership type of healthcare units in the North-East Region of Romania (ADRNE, 2021); U=urban, R=rural

Categories of units	Form of ownership	BC U/R	BT U/R	IS U/R	NT U/R	SV U/R	VS U/R	NER U/R
Hospitals	Public/	7/0	4/0	18/1	5/1	9/0	4/0	47/2
	Private	6/1	0/0	7/1	1/0	1/2	1/0	16/4
Medical and	Public/	0/0	3/4	1/2	0/1	2/3	0/2	6/12
social units	Private	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Dispensary	Public/	2/0	0/0	0/0	0/0	0/0	0/0	2/0
	Private	0/0	0/0	0/0	0/0	0/0	7/0	7/0
Outpatient	Public/	9/0	4/0	18/0	4/1	10/0	3/0	48/1
	Private	4/2	0/0	5/0	0/0	0/0	0/0	9/2
Total units	Public/	142/1	104/8	323/11	69/16	151/5	116/4	905/45
	Private	1047/344	431/251	1762/565	1094/350	1235/481	501/174	6070/2165

At the county level, Iaşi ranks first with a total of 2,653 healthcare units, followed by Suceava in second place with 1,863 units. Iaşi holds approximately one-third of the total healthcare units in the region. This substantial number of healthcare units, specializing in various fields such as neurosurgery, infectious diseases, emergency services, and psychiatry, is attributed to both the extended population in the county and the fact that the city of Iaşi is a longstanding medical university center, hosting the „Grigore T. Popa" University of Medicine and Pharmacy, „Sfântul Spiridon" University Hospital, and research centers in the medical field. The next positions in the ranking of the number of units are occupied by Suceava and Bacău counties, with 20% and 16%, respectively, of the total medical units (ADRNE, 2021). However, „in many situations, the healthcare infrastructure is in a precarious situation, with the risk that some hospitals may no longer receive operating permits. In addition, the specialized medical equipment in some publicly owned hospitals is physically and morally worn out and no longer meets current requirements and standards." (ADRNE, 2021).

According to the same source, in the North-East Region in 2018, a total of 7,954 doctors were active in medical units, representing 13.13% of the national total, and an average health personnel consisting of 22,390 assistants, representing 15.41% of the national total. Among all active doctors at the regional level, the majority are in Iaşi (48.62%) and Bacău (14.08%), while the fewest are in Botoşani (8.02%) and Vaslui (6.60%) counties. Table 3 reflects how medical personnel are distributed across the counties of the region and by residence environments.

Table 3. Distribution of medical personnel by counties in the North-East Region and by residence environments (ADRNE, 2021)

County	Environment of residence	Medical personnel (no doctors)	Physicians	Total medical personnel/ 10,000 inhabitants	Med. personnel (no doctors)/10,000 inhabitants	Physicians / 10,000 inhabitants
BC	Total	3 783	1 120	83.36	64.32	19.04
	Urban	3 340	972	169.91	131.61	38.30
	Rural	443	148	17.67	13.25	4.43
BT	Total	2 605	638	84.80	68.12	16.68
	Urban	2 168	530	172.60	138.70	33.91
	Rural	437	108	24.10	19.33	4.78
IS	Total	6 179	3 867	126.77	77.97	48.80
	Urban	5 778	3 612	255.19	157.03	98.16
	Rural	401	255	15.45	9.45	6.01
NT	Total	3 262	851	92.52	73.38	19.14
	Urban	2 773	673	219.50	176.63	42.87
	Rural	489	178	23.19	17.00	6.19
SV	Total	4 180	953	82.03	66.80	15.23
	Urban	3 437	786	165.78	134.92	30.86
	Rural	743	167	24.53	20.02	4.50
VS	Total	2 381	525	77.08	63.15	13.92
	Urban	2 075	430	162.24	134.39	27.85
	Rural	306	95	18.01	13.75	4.27
NER	Total	22 390	7 954	94.52	69.74	24.78
	Urban	19 571	7 003	197.70	145.60	52.10
	Rural	2 819	951	20.20	15.10	5.10

Analyzing the distribution based on the residence environment, it is noteworthy that both the majority of physicians and technical staff work in urban areas, approximately 88%. Despite approximately 58% of the region's population residing in rural areas, only 12% of the total medical personnel serve this area. This means that many residents in rural areas are compelled to travel to neighboring urban localities to access medical services. Using the indicator expressing the effective medical staff per 10,000 inhabitants, we can assess the level of coverage of the population with personnel and medical services. Thus, in 2018, at the regional level, for every 10,000 inhabitants, there were 25 doctors and 70 nurses. In urban areas, the ratio is significantly higher than in rural areas, by a factor of ten: 52.1 doctors compared to 5.1 doctors per 10,000 inhabitants (ADRNE, 2021). Regarding the number of hospital beds, at the end of 2018 (Table 4), the North-East Region ranked second among the eight regions (after Bucharest-Ilfov), with a total of 20,358 units, representing 15.29% of the national total.

Table 4. The number of hospital beds and physicians (2018) (ADRNE, 2021); U=urban, R=rural

The territorial administrative unit	Beds in hospitals	Physicians
Bacău	3 292	1 120
Botoşani	2 191	638
Iaşi	7 499	3 867
Neamţ	2 340	851
Suceava	3 041	953
Vaslui	1 995	525
North-East Region	20 358	7 954
Romania	133 181	60 585
% North-East Region/Romania	15.29%	13.13%

The Iaşi County stands out notably by having a significantly higher number of hospital beds and employed physicians compared to the regional average, also leading in the total number of hospitals in the region. The number of available beds in its medical facilities is from 2 to almost 4 times higher than in other counties (such as Botoşani, Vaslui), while the number of employed physicians exceeds figures in other counties by up to seven times.

Specific issues of local communities identified at the level of healthcare infrastructure and provision of medical services. Possible resolutions through the implementation of the General Regional Healthcare Services Plan 2021-2027 in the North-East Region

The identification of the mentioned issues was conducted by the North-East Regional Development Agency during the monitoring of the North-East Regional Development Plan 2014-2020. In this regard, the findings were as follows:

„• Shortage of qualified medical staff: Barlad, Bicaz, Brosteni, Comanesti, Darabani, Darmanesti, Dolhasca, Dorohoi, Flamanzi, Frasin, Gura Humorului, Husi, Liteni, Milisauti, Murgeni, Pascani, Radauti, Salcea, Targu Neamt, Vatra Dornei, Vicovu de Sus;

• Need for hospital expansion: Barlad, Campulung Moldovenesc, Roman, Vatra Dornei;

• Need for re-establishment of hospital units: Negresti;

• Hospitals without operating licenses: Pascani (CFR Hospital);

• Need for establishment/expansion of emergency reception units: Darabani, Pascani, Targu Neamt, Vatra Dornei;

• Need for establishment of a medical center: Darmanesti;

• *Investment needs in health infrastructure, rehabilitation works (including thermal), modernization, equipment: Barlad, Bicaz, Brosteni, Buhusi, Cajvana, Campulung Moldovenesc, Comanesti, Dorohoi, Flamanzi;*
• *Harlau, Liteni, Milisauti, Moinesti, Murgeni, Onesti, Pascani, Podu Iloaiei, Radauti, Roman, Roznov, Salcea, Siret, Vatra Dornei, Stefanesti, Targu Neamt, Targu Frumos, Vicovu de Sus;*
• *Lack of emergency centers: Dolhasca, Frasin, Husi, Liteni, Slanic Moldova, Stefanesti;*
• *Need for establishment/expansion of medical-social units: Harlau, Liteni, Saveni;*
• *Need for establishment of medical dispensaries: Solca;*
• *Need for establishment of a mental health center: Siret;*
• *Accessibility issues to medical services: Gura Humorului, Roznov, Slanic Moldova, Solca;*
• *Lack of medical cabinets (and medical staff) in school units: Husi." (ADRNE, 2021).*

In the mentioned context, the General Regional Health Services Plan 2021-2027 for the North-East Region (https://oldsite.ms.ro/wp-content/uploads/2020/03/Anexa-NE-MASTER-PLAN.pdf) proposes significant actions to improve medical services provided by family doctors, community and hospital care, the development of the Emergency Services network, as well as clinical and paraclinical outpatient care facilities, etc. The initiatives aim to significantly increase the number of family doctors by approximately 4%, focusing especially on communities without family doctors and rural areas, particularly in Botoşani (which has the lowest coverage index), Suceava, Neamţ, and Vaslui. The plan envisions expanding the role of family doctors in maternity care, including prenatal and postnatal care, family planning, child care (including immunization), health counseling and education, chronic disease management, aging management, population screening for cancer (especially breast and cervical cancers, colon), assessing the needs of palliative care for patients with progressive chronic illnesses, and providing basic palliative care, etc. Regarding community healthcare, the plan aims to develop a minimum of 40 new integrated community teams by 2027, focused in areas with a significant density of vulnerable populations. The number of employees in this field will increase by 20% from 2021 to 2027. To improve hospital care services, an efficient approach to complex and acute cases within hospital services is proposed, with the transfer of other cases to primary, outpatient, and long-term/rehabilitation care, as needed. Additionally, „The hospital network in the region will undergo a reconfiguration to ensure profitability and optimal utilization of services. Acute hospital care beds in continuous hospitalization in the region will be reconfigured by 2026-2027, with a simultaneous increase in the number of

beds for chronic patients and the development of services provided in day hospitalization and specialized outpatient care." (Ministry of Health, 2018).

Starting with an average hospitalization duration of 6 days (anticipating that, due to the development of a regional integrated healthcare system, hospitals with diagnostic and treatment capacities and human resources will be able to handle complex cases requiring longer stays), the proposed optimizations include (Ministry of Health, 2018):

• Reducing the number of acute cases in continuous hospitalization from the current 18.1 per 100 inhabitants to a proposed target of 17.5 per 100 inhabitants by 2026-2027.

• Supporting the transition from continuous hospitalization services to day hospitalization and outpatient services, through their development and adequate funding.

• Increasing the hospital bed occupancy rate to 80% (considered an optimal and economically viable occupancy rate for acute care hospitals/sections).

In Iaşi, a new regional hospital will be built, modern and well-equipped, in accordance with the National Health Strategy 2014-2020, aiming to improve hospital infrastructure through restructuring and rationalization. The new facility will be a vital center for the hospital network in the North-East Region, specializing in the treatment of critical patients and cases requiring high-level technology and expertise. The project aligns with strategic direction 7.1, imposed by ADRNE in 2021, for the construction and equipping of three regional emergency hospitals (Iaşi, Cluj, Craiova). The structure of the future hospital will be designed to optimize operations and improve efficiency and performance economies. Activities scattered today will be centralized, new clinical governance arrangements will be developed, including organizing medical „poles" and general hospitalization centers will be optimized. The complex will have seven levels, a surface area of 148,885 m^2, and 850 beds, organized around six specialized centers. These will focus on: head and neck; chest; abdomen; spine, joints, and trauma; internal medicine; and maternal and child care. The hospital will have 2,923 employees and will serve approximately 100,000 patients annually. The total investment for the project is 500,350,739 EUR, of which the EU's European Regional Development Fund contributes 47,000,000 EUR.

Thus, the hospitals in the North-East Region will undergo a three-level reorganization (Ministry of Health, 2018):

I. Regional Hospital in Iaşi. It will function as a high-performance regional and emergency hospital, providing comprehensive care services, including advanced diagnostic and treatment technologies for the entire

region. Other hospital units in Iaşi - the Emergency Clinical Hospital for Children, the Emergency Clinical Hospital „Nicolae Oblu" Iaşi, the Institute of Cardiovascular Diseases, the Clinical Hospital of Obstetrics and Gynecology „Cuza Voda", the Regional Oncology Institute, the Institute of Psychiatry „Socola" and the Clinical Hospital of Infectious Diseases - will continue to offer complex tertiary services.

II. County Hospitals. Five county hospitals, with the status of emergency hospitals, „will provide complex medical and surgical assistance, including day hospitalization and intensive care services. These hospitals will also offer integrated outpatient services and advanced diagnostic and treatment facilities, complemented by municipal and monospecialty hospitals."

III. Community Hospitals. As hospitals dedicated to the local community, they will provide „at least basic hospital services, outpatient alternatives, day hospital care, and basic clinical investigations for diagnosis and treatment."

Regarding the emergency network, it will be strengthened to reduce pressure on the regional hospital in Iaşi. Intensive care unit (ICU) capacities will be consolidated in county and municipal hospitals, with a focus on Suceava and Bacău to ensure uniform coverage of the region. Telemedicine will continue to be developed for emergency medical assistance. Outpatient clinical and paraclinical care facilities will be developed through the rehabilitation, retechnologization, and equipping of integrated outpatient clinics, with a focus on counties with a limited number of units (Botoşani, Vaslui, Suceava, and Neamț) or with poor infrastructure. The priority will be to strengthen the delivery of services, especially in basic clinical specialties and specialties with high regional demand and low accessibility, such as rheumatology, oncology, and pediatric neurology.

To prioritize the investment program in outpatient clinic development, a series of criteria are proposed, taking into account the following aspects (Ministry of Health, 2018):

• Counties with a low number of contracted outpatient services with the Health Insurance Fund;

• Localities where the outpatient clinic is the sole provider of public services;

• Commitment and support from local authorities and the local community;

• Existence/identification of specialized staff necessary for the functioning of outpatient clinics;

• Assessment of infrastructure status, evaluation of capital investment history, and cost-effectiveness analysis.

These criteria are complemented by the need to invest in strengthening service delivery capacities in clinical specialties characterized by high demand or a notable deficit. This approach aligns with the highlighted health needs and available services in the corresponding coverage area.

Conclusion

The public health system of the North-East Region in Romania faces significant challenges, largely reflecting issues encountered by other regions. The region stands out for having the largest and most dense population, with a significant proportion living in rural areas (55%) and notable poverty growth. The healthcare infrastructure, insufficient for the population's needs, is unevenly distributed, leading to serious inequities in access to medical services across the region's counties.

Specific issues in local communities, identified in healthcare infrastructure and service delivery, include deficiencies such as a shortage of qualified medical staff, the need for hospital expansions, the reinstatement of hospital units, investment requirements in health infrastructure, rehabilitation works (including thermal), modernization, equipment, lack of emergency centers, the need to establish mental health centers, issues of accessibility to medical services, and the absence of medical offices (and medical staff) in school units, etc.

The difficulties and challenges of the system, although sharing similarities with other regions, interact significantly with the specific socio-economic conditions of the North-East Region, accentuating deficiencies in healthcare delivery, with two major consequences. Firstly, there is an unmet need for healthcare services, especially among rural and marginalized populations. Secondly, significant inequalities in access to services are accentuated between urban and rural groups, as well as between non-marginalized and marginalized groups.

Possible solutions will come through the implementation of the General Regional Health Services Plan 2021-2027 in the North-East Region. This plan addresses the following strategic directions:

• Ensuring better access to the network of medical services in rural areas and reducing disparities compared to urban areas, considering the large percentage of residents living in villages in the region.

• Developing the community care system for small and isolated communities.

• Reducing inequalities between counties in terms of outpatient care.

Through the implementation of this plan, the aim is to improve the services provided by family doctors, strengthen community healthcare services, develop the Emergency Services network, and outpatient care facilities, etc.

Also, mentioning the project for the new emergency hospital for the North-East Region of Romania, it is noted that its implementation will bring about a significant transformation in the regional emergency hospital network, focusing on patients and adopting a safe and effective multidisciplinary approach in treating complex cases. The construction of this facility will contribute to optimizing care services and will facilitate better alignment of hospital infrastructure with the healthcare system in Romania.

All these initiatives will reduce health inequalities by expanding access for people in isolated or economically disadvantaged areas to healthcare services. This expanded access will increase the chances of early diagnosis and successful treatment, preventing severe diseases and saving lives.

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