

DOI: 10.5281/zenodo.7217467

HEALTH POLICIES IN CONTEMPORARY ROMANIA. CURRENT EMPIRICAL ELEMENTS AND DEVELOPMENT PERSPECTIVES

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Abstract: *The intention of this article is to highlight, by reporting, the empirical elements that circumscribe the time frame of recent developments in the Romanian national health system and the way health policies are configured and oriented. At the same time, its role is to identify possible prospects for the development of the system in the immediate future. In this sense, I evaluate, in the first section, how the public-private relationship has evolved in the national health system from the perspective of medical infrastructure, starting from the presentation of a comparative analysis regarding the construction of new hospitals in the European Union. In the second stage, I put under scrutiny both the legislative context and the projections regarding the construction of new hospitals in contemporary Romania in order to be able to later carry out a case study on the construction of regional hospitals from the perspective of feasibility studies, by reference for the project of the Regional Emergency Hospital to be built in Iași.*

Keywords: *health system, health policies, contemporary Romania, public-private relationship, development perspectives*

JEL Classification: *M54, O32*

1. Introduction

The intention of this article is to highlight, by referring to empirical elements that circumscribe the temporal framework of recent developments in the national health system, the manner in which health policies are configured and oriented in contemporary Romania. At the same time, its role is also to identify possible prospects for the development of the system in the immediate future.

In the first section, we assess how the public-private relationship in the national health system has evolved in terms of medical infrastructure, starting with a comparative analysis of the construction of new hospitals in the European Union. In a second stage, we put under the magnifying glass both the legislative context and the projections regarding the construction of new hospitals in contemporary Romania, in order to then carry out a case study on the construction of regional hospitals from the perspective of feasibility studies, with reference to the particular project of the Regional Emergency Hospital to be built in Iași Municipality.

The second section looks at the evolution of the public-private relationship in the national health system from the perspective of human resources and patient access to health services. In this direction we determine, in a first instance, the specificities of the human resources involved in the Romanian health system, taking into account the stages of training that medical staff must follow, as well as the conditions of attractiveness of a career in the national health system. Then, we focus our attention on patients' access to health services from the perspective of two main indicators, namely the cost of services and the ease of this access. Finally, the article concludes with a "forecast" type analysis, which aims to identify the main trends and projections regarding the evolution of the health system in contemporary Romania in relation to the evolution of training resources for medical staff and access to the services it provides to the population in the context of new European and global trends.

2. The literature review in the field of health policies

The speciality literature offers opinions of some specialists in the field of health related to the vulnerabilities of this field caused by gaps in knowledge, corruption, geopolitical evolutions, outbreaks of diseases existing at the global level, etc. There is enough information that leaders who work in the field of public health know and on the basis of which they can make decisions, may give opinions in order to take appropriate action. The level of resources that must be spent, how they are used to improve the health of the population, the management decisions that should be adopted to generate resources and public health activities that will reduce as much as possible the costs of treating diseases, are widely debated topics in the area of scientific publications in the field of health (Health and Medicine, 2012; Adeyi and Jamison, 2022). The non-egalitarian progress of the countries that are part of the European Union, the adoption of public social and/or health policies that cover the national interest, but also the remarkable progress of knowledge in the field of health are elements that make health can be approached from the perspective of the fact that it is a result of the health sector but also of the welfare state

(Dyakova *et al.*, 2017). The sustainable development goals of the ONU, the WHO strategy regarding the health workforce are other topics addressed in speciality literature and developed in the present work. The existence of key factors that obviously affect health care practices as well as the management of human resources, which must be managed correctly, are essential elements for ensuring appropriate quality medical care. The opinion that a reorientation of the management of human resources in the field of health leads to the development/adoption of new effective policies is part of the constant concerns of the authors of scientific articles and specialized books (Dussault and Dubois, 2003). A number of arguments are presented for improving the way in which human resources in the field of health are managed, namely: the importance of the labour force in the field of health, the challenges generated both by reforms in the system and by crises (in the field of health, regional conflicts, the food crisis, the energy crisis, etc.) from the last period, the social trends affecting the health system (Kabene *et al.*, 2006; Haakenstad *et al.*, 2022).

Another important topic refers to the constraints and opportunities regarding the establishment of legislative frameworks that allow transparency of the national health system, its sustainability with effects on both individuals and the health system. The design, implementation, monitoring but also the evaluation and expansion of the legal provisions that lead to the improvement of the public health system. A number of five legal levers have been established in the field of health: access to evidence and expertise, expertise in the design of legal solutions, collaboration in the involvement of communities and the creation of political will, support for the implementation and defense of legal solutions, monitoring of public policies in health and their surveillance and evaluation (Burriss *et al.*, 2016; Lingri and Petelos, 2020).

3. Research methodology

The research methodology includes a quantitative analysis of the data describing the evolution of the national health system in the last period, the current orientation of the health policies adopted at the national level. The paper also presents a comparative analysis regarding the construction of new hospital complexes/complex health centres/emergency hospitals at the level of the European Union compared to the existing situation in Romania, but also a case study that demonstrates once again the importance of adopting public policies that to facilitate the construction of new hospitals, especially emergency hospitals, at the regional level as is the case of the Regional Emergency Hospital in Iași, Romania. A “forecast” type analysis shows the trends/projections of both the evolution of the health system in Romania which includes, in addition to the construction of hospitals and the training of medical

personnel, access to medical services for all age categories, presented from two perspectives, both regarding the situation within the European Union and related to the situation from Romania.

The paper is structured in nine sections, with bibliographic resources and includes: 1) Introduction, where the general structure of the paper is highlighted in the context of current developments at the level of the European Union and the situation in Romania; 2) The literature review in the field of health policies, which includes the points of view of some authors about the health management system expressed in books and scientific articles, as well as the legislative framework, which regulating public policies in the field of health; 3) Research methodology presents the research methods used during this paper; 4) Building new hospitals in the European context. A comparative analysis, a section that highlights the fact that hospitals are a very important component of the health system and a result of the new demographic reality (the aging of the population and its exposure to multiple chronic diseases), the costs of innovation in the field of technology and medicines, but also the unequal distribution of qualified personnel in the field of health, of inequities regarding access to medical assistance services, it is necessary not only to rehabilitate existing hospitals but also to build new multi-disciplinary hospitals that offer the best integrated health services; 5) Legislative background and projections on hospital construction in Romania, a section that highlight the concern of the Romanian legislature to include, as a priority objective, in the National Health Strategy the construction of new hospitals, to support major investments but also to monitor the implementation of such projects considered priority both at local and regional level; 6) Case study: the construction of regional hospitals in the European context from the perspective of feasibility studies - Regional Emergency Hospital of Iași, important regional objective financed from the Regional Operational Program 2014-2020, section presenting the current regional situation and perspective of this type of investment; 7) Specificities of human resources, stages of training of health personnel and career attractiveness in the national health system, accentuates aspects related to training, within the education system, and keeping qualified personnel, as well as the budgeting of medical and health institutions, alignment with new technologies, the use of artificial intelligence to make the time allocated to patient care more efficient; 8) Access to services of the national health system, from cost to facility, reveals, once more, the fact that the population's need for medical services must be accompanied by adequate financing, based on efficient expenses, a specialized workforce that to know how to use the latest new technologies, the section also presenting the main elements of the national masterplan, developed by the Ministry of Health from Romania for each development region; 9) Conclusions.

4. Building new hospitals in the European context. A comparative analysis

Hospitals are a basic and important component of the healthcare system, and spending on them is predominant in Romania: according to data from the European Statistical Service *Eurostat*, published in 2019 with reference to 2017, “more than 42% of health expenditure was still directed towards hospital services (compared to the EU average of 29%), although the total amount per capita remains low in absolute terms, totalling about half of EU expenditure as a whole” (Raport OECD, 2019). In fact, Romania spends less on health than any other EU country both per capita and as a proportion of GDP, even though health spending has increased systematically over the last decade.

Public health systems are built to provide health care services that meet people’s needs. At European level, the challenges faced by health systems in recent years have tended to become more uniform, both as a consequence of globalisation and of health policies promoted at national level in line with the Community *acquis*, but above all as a result of demographic realities: The ageing of the population and its exposure to multiple chronic diseases (DG SANTE, 2022), the increasing costs of innovation in technology and medication, but also the uneven distribution of health professionals (e.g. in some areas there is a lack of specialists or insufficient numbers) and inequity in access to healthcare. In addition to these, as we have witnessed over the last two years, we have the challenge of discovering new diseases, such as COVID-19, which has required increased research work to find a cure (vaccine, drugs to combat symptoms, medicinal products to eliminate the virus causing the disease, etc.), new intervention protocols and the reorganisation of hospitals in terms of internal circuits. All these challenges inevitably entail additional expenditure, leading to significant fiscal pressure on both the health systems of developed European countries and, above all, on the health systems of countries such as Romania.

Among the solutions seen by European experts is “moving health systems away from the traditional hospital-centred model, giving primary care services a stronger access filtering and guiding role, and promoting coordination and integration within healthcare”. Until this goal is achieved, which again requires more in-depth reform, the authorities must focus their efforts not only on rehabilitating as many hospital units as possible (which meet the technical indicators and decent hospital conditions), but also on building multi-disciplinary hospitals that offer patients integrated services (laboratory, radiology and imaging, surgery and other medical specialities that can provide a multi-disciplinary approach to the patient presenting with a given pathology).

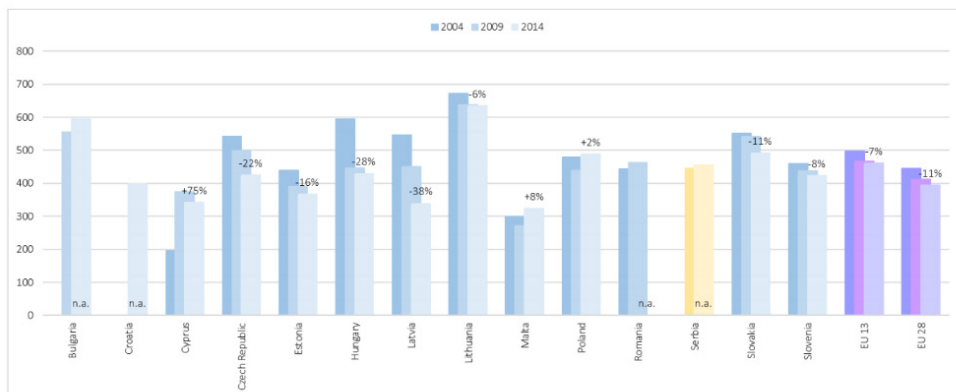
Within these hospitals, such as regional hospitals, emphasis will also be placed on increasing the volume of outpatient treatment.

Over the last 15 years, there has been a downward trend in Europe in both the number of hospitals and the total number of beds per 100,000 inhabitants. Between 2004 and 2014, the average number of hospitals decreased by about 7%, while the total number of hospital beds per 100,000 inhabitants decreased by about 12% over the same period, according to WHO statistics highlighted in the analysis *Hospitals in Europe HealthCare Data (2018)*, signed by the European Hospitals and HealthCare Federation. Thus, in 2014, there were on average 2.9 hospitals per 100,000 inhabitants in Europe (with quite wide variations from 1.4 in Slovenia to 9.8 in Cyprus) and 521 hospital beds per 100,000 inhabitants (with variations from around 254 in Sweden to 826 in Germany) (Garel, 2018). Of the total number of hospitals, “acute care” hospitals account for more than half (60%), and between 2004 and 2014 their number decreased significantly across Europe: for example, in Latvia it decreased by 57%, in Switzerland by 46%, and in Croatia by 45%; 25% in Slovakia and 17% in Luxembourg and Malta, 15% in Cyprus and Belgium. The number of acute hospital beds (reported per 100,000 inhabitants) decreased on average by 11%, the only exceptions being Poland (+2%), Malta (+8%) and Cyprus (+75%).

In Romania, by GD no. 212/2011, 67 hospitals were closed in order to be transformed into homes for the elderly .

Figure 1. Evolution of the number of beds in hospitals for acute diseases between 2004 and 2014

CHART 4: ACUTE CARE HOSPITAL BEDS PER 100,000 INHABITANTS IN EU-13 AND SERBIA. YEARS: 2004, 2009, 2014 (SOURCE: WHO).

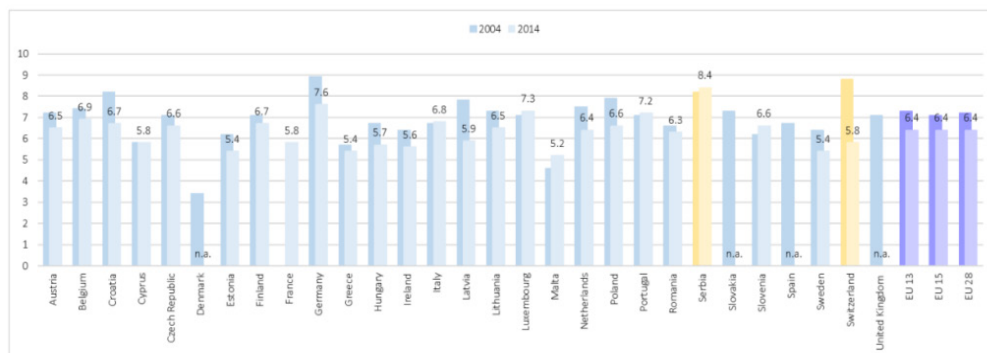


Source: *European Hospitals and HealthCare Federation*

Reducing the number of hospital days becomes a goal in itself in terms of cost efficiency (and, preferably, also in terms of quality of care), because a patient who has needed medical care is discharged in an improved state of health, with a high level of independence, so that they can follow the treatment at home (as well). In 2014, the average length of stay in acute care hospitals was 6.4 bed-days in the EU-28, with not very large variations, from 5.2 bed-days in Malta to 7.0 bed-days in Slovakia . Between 2004 and 2014, almost all European countries managed to reduce the length of hospitalisation on average by 1 bed day, except Italy, Portugal, Luxembourg, Serbia, Slovenia and Malta, where the indicator decreased on average by 0.3 bed days .

Figure 2. Evolution of the number of hospital days 2004 - 2014

CHART 6: AVERAGE LENGTH OF STAY IN ACUTE CARE HOSPITALS. YEARS: 2000-2014 (SOURCE: WHO).



Source: *European Hospitals and HealthCare Federation*

So, in recent years, health reforms across Europe “have been aimed at improving the quality of care provided in hospitals while rationalising the use of resources and reducing costs” .

Hospitals are under increasing pressure because, as the cornerstone of healthcare systems, making healthcare more efficient and responding appropriately to new social, economic, technological and demographic realities will provide stability, predictability and openness to innovation. Consequently, the trend at European level is for hospitals to work directly with both primary care services and home care departments, thereby reducing the length of hospital stays, as shown by the statistics presented above.

The construction of new hospitals has not stagnated at European level, with new buildings being designed to respect environmental conditions while ensuring the highest possible energy efficiency. In the third quarter of 2021, according to the Global Data construction projects database, five major

projects were underway with a total value of \$1.42 billion: 1) Redevelopment of the Hospitacite Hospital Complex - USD 493 million (construction of a hospital complex on 10 ha of land in the municipality of Woluwe-Saint-Lambert, located in the Brussels Capital Region, Belgium, which will bring together the activities of the future King Albert II Institute, located on the Alma site, and the Oncology and Haematology activities of the Saint-Luc University Clinics); works started in the third quarter of 2021; 2) Development of the Lörrach Central Hospital campus - USD 418 million (construction of the Central Hospital campus with a net area of 47.000 m² in Lörrach, Baden-Wuerttemberg, Germany, a mental health centre and a medical store with parking); 3) Galliera Hospital, Genoa, Italy - USD 185 million (hospital with a capacity of 400 beds); 4) Albacete University Hospital Complex - USD 170 million (University Hospital Complex with a total net area of 76.000 m² in Albacete, Castilla-La Mancha, Spain, to meet growing demand in the area); 5) Grunwald Central Integrated Clinical Hospital - \$158 million (45,000 m² central hospital on 2.8 ha of land in the Voivodship of Wielkopolska, Poland, which will take over all emergency admissions from the University Hospital). With the exception of the hospital in Poland, which is expected to be completed in 2029, the other hospitals are scheduled for completion in 2024/2025.

In Romania, the construction of public hospitals “from scratch”, in line with international standards after 1989, is limited to only three cases: the current Regional Institute of Oncology Iasi (300 beds per ward, operational since 2012, it also has a hotel space and a research centre), the Municipal Hospital of Mioveni, inaugurated in 2019 (capacity of 250 beds, being arranged on 6 floors) and the Municipal Hospital of Fălticeni (started in 1991 and inaugurated 30 years later, in September 2021, it has 240 beds and state-of-the-art facilities). However, there have also been buildings financed from the state budget (Filantropia Hospital in Craiova) and from European funds (Orthopaedics, Traumatology and Osteoarticular TB Hospital “Foişor” and Children’s Hospital “Victor Gomoiu” Bucharest). As such, it can be seen that the infrastructure of the Romanian health system is still underdeveloped, having been designed for the most part 50 years ago and often fragmented, so that many hospitals have wards located at a distance from each other, which makes it difficult to optimally integrate hospital circuits, requiring ambulance transport when transferring patients between wards (see, for example, the case of the Iasi Pneumophthisiology Hospital, which operates in four locations).

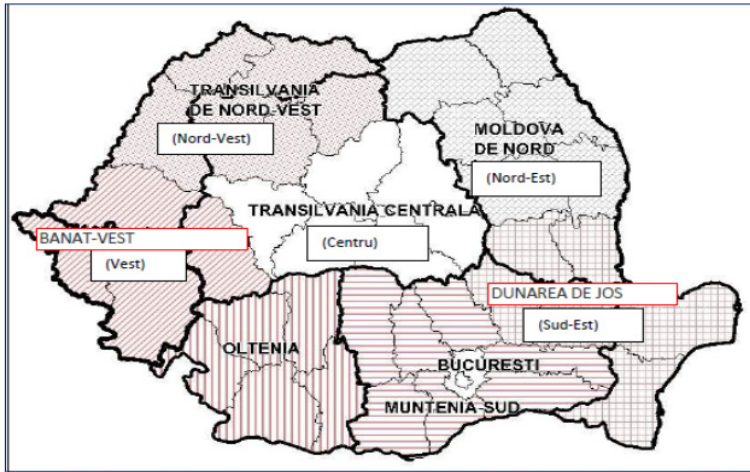
The need to build new hospitals in Romania is also supported by a 2018 report signed by the Ministry of Internal Affairs and published on the official website of the Chamber of Deputies, which showed that almost a third

of the 375 hospital units have buildings on the red list of buildings at risk of collapse in the event of an earthquake similar to that of 1977. The reality of the hospital infrastructure in our country can therefore be summarised as follows: old buildings, some of which are as much as 100 years old, many with a high seismic risk, not rehabilitated, with major losses in terms of energy efficiency and with walls that hide dangerous intra-hospital infections that can lead to death, overcrowded wards and operating theatres that are unsuitable for medical care and the use of innovative medical equipment. Consequently, as the Ministry of Health's specialists point out, building hospitals from scratch can cost even less than adapting the current infrastructure to quality requirements.

The implementation of priority projects for regional hospitals to be built with funds from the European Union through the National Recovery and Resilience Plan also requires the adoption of additional legislation to those already in place, not only in terms of defining the concepts and design in construction, but also in terms of aligning with environmental requirements and those of operating the premises from a medical point of view, because multidisciplinary also requires maximum efficiency of space and time in performing the medical act.

The concept of *regionalisation* has been promoted mainly out of a will to achieve a decentralisation process which, on the one hand, could improve economic performance through projects carried out at regional level and, on the other hand, reduce the costs of the extremely cumbersome bureaucratic apparatus at county level. At the same time, regional development also requires good governance at local and regional level, transparency in decision-making and efficient management of European funds (European funds can be accessed at regional level, but the population criteria, among others, must be met). These advantages of administrative reform have been presented many times in the public space, and in 2013 an administrative division into seven regions was launched for public debate (Figure 3), which have even been (re)named: 1. Muntenia Sud/South Muntenia, a region that could include the Bucharest region (Region 8); 2. Dunărea de Jos/Lower Danube or, renamed, South-East Region; 3. Northern Moldova or, renamed, North-East Region; 4. Central Transylvania or the Centre Region; 5. North-Western Transylvania or North-Western Region; 6. West Banat or West Region; 7. Oltenia, and the document has been assumed by the Advisory Council for Regionalisation CONREG.

Figure 3. Development regions and historical regions



Development regions (marked by hatching) and historical regions (marked by sharp contours). For the development regions, the official names are noted down in brackets and the suggested names in capital letters.

Source: Advisory Council for Regionalisation CONREG, *Disparities and flows in the social and economic foundations of Romania's administrative regionalisation*, Report coordinator: Prof. Dumitru Sandu, Bucharest, April 2013.

Even though, over the last few years, this administrative reform has been presented as one of the solutions to remove social and economic disparities between counties, there has not been a unanimous political commitment (which would imply amending the country's fundamental law), so, at least for the time being, the decision has been at least postponed, if not abandoned for the next few years. However, in Romania, with a view to accession to the European Union, a "division" into several regions, corresponding to the level divisions of the EU's Common Nomenclature of Territorial Units for Statistics NUTS – II was necessary. This resulted in eight development regions without administrative status, without legal personality, made possible by the association and free agreement of the county councils. The annex to Law 315/2004 specifies both the name and the composition of the regions: North-East Development Region, South-East Development Region, South-Muntenia Development Region, South-West Oltenia Development Region; West Development Region; North-West Development Region; Centre Development Region and Bucharest - Ilfov Development Region. At the level of each region there is: 1) a regional development council, the main role of which is to "analyse, support and approve regional development projects"; 2) a regional

development agency, a non-governmental, non-profit, public utility body, with legal personality, whose tasks include the drafting of the regional development strategy, plan and programmes, attracting resources, monitoring projects carried out with European funds, identifying and promoting, in partnership, projects of regional and local interest, as well as intra-regional cooperation projects.

The Regional Health Services Plans, drawn up under the coordination of the Ministry of Health in partnership with the National School of Public Health, Management and Training in the Health Sector in Bucharest (SNSPMPDSB) and the National Institute of Public Health (INSP), have been updated, taking into account changes in the structure of hospitals, legislative changes that have occurred in the four-year period (2016-2020), as well as following the steps taken in the regional hospital projects, namely the “completion of feasibility studies for the SRU Iasi, Cluj, Craiova and the approval of the technical-economic indicators, by which the configuration of the structure of these hospitals was established”.

5. Case study: the construction of regional hospitals in the European context from the perspective of feasibility studies - Regional Emergency Hospital of Iasi

In 2019, the network of health units in Romania included 532 hospitals and hospital-like units (public and private) that provided inpatient and day services, while another 161 hospital-like units provided only day services, according to the data centralized by the National Institute of Statistics (2020) in the report “*Activity of health units in 2019*”. The hospital infrastructure also included 10,866 independent family medicine practices, 728 general medicine practices, 2040 school and student medical practices, 15542 independent dental practices, 504 school and student dental practices, 12034 independent specialist medical practices, 491 specialist and hospital-integrated outpatient clinics, as well as polyclinics, medical dispensaries, specialist medical centres. Of the total number of hospitals and hospital-like medical units operating in 2019, only 344 hospitals were large units with more than 100 beds (for continuous or day hospitalisation), and 268 hospitals were small units (with less than 50 beds). These data, combined with an ageing and fragmented hospital infrastructure, such as the case of the current “regional hospital”, the “Sf. Spiridon” County Emergency Hospital in Iasi, 260 years old, with standards of equipment and new medical technologies below those of the European Union countries, to which an increasingly high degree of addressability of the population and

increasingly complex pathologies requiring a multidisciplinary approach can be added, were just some of the reasons behind the decision to build a hospital called “regional” for each region of development of the country.

Important steps towards this goal (also included in the National Public Health Strategy for the next eight years) have been taken in the case of three regional hospitals to be built in Iasi, Cluj Napoca and Craiova. In the case of the regional hospital in Iasi, the design of the investment will be completed by the end of 2022 and the tender for its execution will be launched, and if these deadlines are met, work is expected to start during 2023. The Iasi Regional Hospital project will be financed through the Regional Operational Programme 2014-2020, *Priority Axis 14: Construction of infrastructures for regional emergency hospitals*, Objective 1 “Improving the quality and efficiency of emergency hospital care” of Investment Priority 14.1 “Investments in health and social infrastructure contributing to national, regional and local development, reducing health inequalities and promoting social inclusion by improving access to social, cultural and recreational services, as well as the shift from institutional to locally provided services”. The total value of the project is 2,379,575,202 lei, of which: the total eligible amount is 684,906,513 lei, of which the total non-reimbursable ERDF amount is 223,320,500 lei, the non-reimbursable eligible amount from the state budget is 458,296,407 lei (the Romanian authorities have contracted a loan from the European Investment Bank of 250 million euro for a period of 27 years).

The most complex and urgent cases requiring experience, state-of-the-art technologies and high qualification of the best specialists will be directed to SRU (Regional Emergency Hospital) Iasi. The main objective of the project is to improve emergency, secondary and tertiary care, while ensuring an efficient multidisciplinary approach in treating complex cases. At the same time, it aims to reduce health inequalities by increasing access to health services for people in deprived areas. Therefore, the hospital planned to be built in Iasi, which will serve the entire North-East region, will be based, according to the Feasibility Study, on an organisational concept of clusters of medical specialties closely linked to structured divisions or “centres”, six in number:

The Regional Emergency Hospital in Iasi will have 764 acute care hospital beds and 86 critical care beds, including intensive care (intermediate and post-operative) and a burns care unit, as well as a medical and health staffing requirement of around 3,000 employees. Although a division was made in the feasibility study, representatives of the Ministry of Health admitted that there are possible permutations between wards in terms of the number of inpatient beds. SRU Iasi will also offer services in integrated ambulatory centres,

pharmacy, radiology, laboratory and nutritional support services. As a novelty for the Romanian healthcare system, in the new SRU outpatient clinics will be organised according to three different models. For ENT, ophthalmology and dentistry, the clinics will include outpatient clinics.

A very important aspect in the design of the future hospital is the circulation of people (inpatients/outpatients, medical staff, visitors) and materials. The patient circuits have been designed according to the pathology, their state of health and addressability, and it is proposed to “create a robust, sufficient and clear network of general circulation corridors (between departments on each floor), functionally combined with an adequate number of vertical circulation nodes”. Independently, the feasibility study foresees separate access at ground floor level for: emergency department patients (and their attendants), women in labour, hospital staff. From a technical point of view, the Regional Hospital will have a total built-up area of 148,885 sqm and a total net area of 70,108 sqm, not including “technical spaces or major circulation areas”. The land on which the hospital will be built is of 120,000 sqm and is located at 225 Moara de Vânt Street, Moara de Vânt - Podgoria Copou Area, Iasi Municipality, Iasi County.

The hospital complex will have seven levels, two of which will be underground and two floors will be common. As specified in the Feasibility Study, “the basement will mainly include support services (e.g. laundry), mortuary services, maintenance and materials management areas, while the ground and first floors will house diagnostic and therapeutic services, outpatient clinics and teaching areas

The new SRU building will have minimal impact on the environment and will be built according to the “green building” concept - sustainable, durable and non-toxic: a) an advanced building management system (BMS), which controls and monitors the building’s mechanical and electrical equipment such as ventilation, lighting, power systems, fire systems and security systems; b) closed loop water heat pump systems will be provided; c) approximately 9,600 photovoltaic panels with a total installed capacity of up to 2400 kWh, producing an average of 2,600 MWh of energy per year; d) green spaces and plantings will be made with local species and a green space management system will be provided to reduce the impact of water consumption and with minimum maintenance; e) building envelope systems will be made with high efficiency insulating materials to reduce air conditioning consumption; f) the location of the buildings will provide natural lighting”. The hospital will also have 1,497 car parking spaces, of which more than 4% will be designed and allocated for people with disabilities.

6. Conclusions

The COVID pandemic has had a major impact on the public health system in Romania, which in a very short time has had to adapt (by rebuilding and rethinking circuits) and adopt effective measures to limit the spread of the virus. After the first case of COVID-19 which appeared in our country on February 26, 2020, the authorities issued numerous legislative acts with an impact on the economic, social and medical environments. Order no. 555/2020 on the approval of the Plan of measures for hospital preparedness in the context of the COVID-19 coronavirus epidemic divided hospitals into several categories, namely phase I hospitals (infectious disease hospitals where symptomatic COVID-19 patients with medium, severe and critical forms of the disease were admitted), phase II hospitals (where patients with mild, medium or severe (and critical) forms were admitted in the case of those with intensive care departments) and the network of hospitals and health-support units (support hospitals; support-maternities; out-of-hospital isolation and treatment units). Scheduled admissions (especially surgery) and outpatient activity have also been reduced by up to 80%.

The COVID-19 pandemic highlighted, if it was still needed, the shortcomings that hospitals in Romania are still facing today: reduced capacity of intensive care departments, insufficient medical staff (especially in ICU), inadequate medical circuits, to which we can add the insufficient testing capacity. The number of doctors, nurses and other specialised medical staff in intensive care units has been insufficient. “In the spring of 2020, health workers were redeployed from other specialties, but this was not a sustainable long-term solution. Romania hired and trained more staff, creating 2000 temporary jobs. Funds were allocated for bonuses and in-kind incentives to attract professionals. However, the pre-pandemic shortfall persisted, especially after autumn 2020,” says the *State of Health in the EU. Romania report. Health Country Profile 2021*. Even though the number of ICU beds has been increased to cope with the avalanche of serious cases, in some cases these improvisations have revealed inadequate conditions in the hospital infrastructure (inadequate spaces to carry out certain medical interventions, irregularities in electrical installations, non-existence of fire detectors).

Under these circumstances, the strategy to combat SARS-CoV-2 was rethought in the sense that, in addition to the emphasis on vaccination, family doctors were increasingly involved, so that people with mild or moderate forms could be treated at home under medical supervision. Also, in the pandemic, as a result of limited access to the outpatient system, a new concept that could

revolutionise the sector was introduced: *telemedicine* - a modern form of low-cost healthcare delivery. Thus, without having to physically go to the doctor's practice, patients benefited from doctors' advice, guidance, disease surveillance and prescriptions via modern technology: telephone (video call), email, apps on digital platforms, etc. The COVID-19 pandemic also prompted the legalisation of the concept of telemedicine, which previously referred only to 'rural telemedicine'. Thus, in November 2020, the Government approved, at the request of the Ministry of Health, an emergency ordinance (for supplementing Law no. 95/2006 on health care reform) which regulates the possibility of remote provision of medical services via telemedicine by all health professionals. The authorities, through the Minister of Health at the time, considered that the new regulations had been adopted to respond to the health crisis and, therefore, "to the real health needs of the population in the communities", but also "for the efficient management of human and financial resources in the field", which shows a concern for the future of this sector. Telemedicine can provide the following services: teleconsultation; teleexpertise; teleassistance; teleradiology; telepathology; telemonitoring. The ordinance, which introduced eleven new articles on the subject, defines each service individually and introduces the obligation to maintain doctor/patient confidentiality for this type of medicine as well.

Acknowledgement: This work is supported by project POCU 153770, entitled "Accessibility of advanced research for sustainable economic development - ACADEMIKA", co-financed by the European Social Fund under the Human Capital Operational Program 2014-2020.

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