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(Editors)

## **CULTURAL DYNAMICS OF VALUES**



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# Evaluation of Hospital Financing in Romania: A Comparative Analysis pre- and post-Pandemic COVID-19

MIHAI-VASILE PRUTEANU\*, ALINA MOROȘANU\*\*

**Abstract:** *The COVID-19 pandemic has profoundly impacted healthcare systems worldwide, particularly in terms of hospital financing and resource management. This article evaluates the hospital financing mechanisms in Romania by comparing the pre-pandemic and post-pandemic periods. The study investigates the structure of hospital funding before the pandemic, highlighting key sources of financing, budget allocations, and expenditure patterns. It then analyses the financial responses and adaptations made during the COVID-19 crisis, including emergency funding, government interventions, and international aid. Using a comparative analysis, the research assesses how these adjustments influenced hospitals' financial sustainability and operational efficiency in the post-pandemic period. The study also explores whether these changes led to long-term reforms in hospital financing, focusing on improving resource allocation, infrastructure development, and patient care. By identifying the challenges and opportunities that emerged during the pandemic, the article offers insights into policy reforms that can enhance the resilience and efficiency of hospital financing in Romania. The findings aim to inform future healthcare policy and strategic planning, contributing to the broader discourse on pandemic preparedness and financial sustainability in healthcare systems.*

**Keywords:** *Hospital financing; COVID-19 pandemic; Romania; Healthcare policy; Comparative analysis; Resource management; Post-pandemic reforms.*

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## 1. Introduction

### 1.1. Background

The evaluation of hospital financing in Romania has gained significant importance, particularly in the context of the COVID-19 pandemic. This evaluation is crucial for understanding the shifts in healthcare delivery and financing mechanisms before and after the pandemic. The Romanian healthcare system, characterized by its reliance on the National Health Insurance House and the Diagnosis-Related Group (DRG) system, has faced numerous challenges exacerbated by the pandemic. The DRG system, which categorizes hospital admissions based on the complexity and nature of medical services, has been a focal point in assessing hospital financing and efficiency<sup>1</sup>.

Before the pandemic, Romania's healthcare system was already under scrutiny due to its inefficiencies and high costs relative to the quality of care provided. The country had one of the highest mortality rates in Europe for treatable conditions, indicating a significant gap in healthcare delivery<sup>2</sup>. The pandemic highlighted these deficiencies, as hospitals struggled to manage the influx of COVID-19 patients while maintaining care for non-COVID conditions. The financial implications of this crisis were profound, with total hospital revenues reportedly decreasing by over 50% in 2020 compared to 2019<sup>3</sup>. This decline in revenue not only affected the operational capacity of hospitals but also raised concerns about the sustainability of the healthcare financing model in Romania.

The shift in patient care dynamics during the pandemic necessitated a re-evaluation of hospital financing strategies. The pandemic forced hospitals to adapt quickly, reallocating resources and adjusting their service delivery models. For instance, many elective procedures were postponed,

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<sup>1</sup> R. Caunic, "Considerations of efficiency of the Romanian public hospitals during the COVID-19 pandemic", *Review of Economic and Business Studies* 16(1), (2023), pp. 145-153. <https://doi.org/10.47743/rebs-2023-1-0008>

<sup>2</sup> *Ibidem*.

<sup>3</sup> F. Moldovan, A. Gligor, L. Moldovan, and T. Băţagă, "An investigation for future practice of elective hip and knee arthroplasties during COVID-19 in Romania", *Medicina*, 59(2), 2023, 314. <https://doi.org/10.3390/medicina59020314>



leading to a backlog of cases that would later require urgent attention<sup>4</sup>. The financial strain on hospitals was compounded by the need to invest in new technologies and protocols to manage COVID-19 effectively, which diverted funds from other critical areas of healthcare<sup>5</sup>.

In the post-pandemic landscape, the need for a robust evaluation of hospital financing mechanisms has become even more pressing. The pandemic underscored the importance of efficient resource allocation and the need for a financing model that can withstand unexpected health crises. The DRG system, while a step towards more structured financing, may require further refinement to enhance its effectiveness in the face of evolving healthcare demands<sup>6</sup>. The transition from the US HCFA-DRG to the Australian Refined DRG system was an attempt to improve the accuracy of patient classification and reimbursement, but ongoing assessments are necessary to ensure that these systems meet the current healthcare challenges<sup>7</sup>.

Moreover, the economic implications of healthcare financing in Romania cannot be overlooked. The health sector's performance directly influences the national economy, as a healthy population contributes to labour productivity and overall economic growth<sup>8, 9</sup>. The pandemic has brought to light the interconnectedness of health and economic stability,

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<sup>4</sup> D. Vermeşan, A. Todor, D. Andrei, M. Niculescu, E. Tudorache, and H. Hărăgus, "Effect of COVID-19 pandemic on orthopaedic surgery in three centres from Romania", *International Journal of Environmental Research and Public Health*, 18(4), 2021, 2196. <https://doi.org/10.3390/ijerph18042196>

<sup>5</sup> I. Petre, F. Barna, D. Gurguş, C. Tomescu, A. Apostol, C. Furău, ... and A. Bordianu, "Analysis of the healthcare system in Romania: a brief review", *Healthcare*, 11(14), 2023, 2069. <https://doi.org/10.3390/healthcare11142069>

<sup>6</sup> C. Radu, D. Chiriac, and C. Vlădescu, "Changing patient classification system for hospital reimbursement in Romania", *Croatian Medical Journal*, 51(3), 2010, pp. 250-258. <https://doi.org/10.3325/cmj.2010.51.250>

<sup>7</sup> *Ibidem*.

<sup>8</sup> C. Racoare, M. Iuliana-Claudia, M. Tomaziu-Todosia, and O. Plotnic, "An economic approach to health insurance", *Logos Universality Mentality Education Novelty Social Sciences*, 9(1), 2020, pp. 1-13. <https://doi.org/10.18662/lumenss/9.1/31>

<sup>9</sup> I. Mihalache, F. Apetroi, "The evolution of the financing of health services in Romania, from the Semashko model to the Bismarck model", *Review of Economic and Business Studies*, 13(1), 2020, pp. 137-147. <https://doi.org/10.1515/rebs-2020-0107>

prompting policymakers to reconsider how healthcare is financed and delivered. The emphasis on community-based care models and preventive health strategies may emerge as a critical focus in the post-pandemic recovery phase, as these approaches can potentially reduce the burden on hospitals and improve health outcomes<sup>10</sup>.

The comparative analysis of hospital financing pre- and post-pandemic reveals significant insights into the resilience and adaptability of Romania's healthcare system. The pandemic served as a stress test, exposing vulnerabilities in the existing financing structures while also highlighting opportunities for reform. For instance, the increased reliance on telemedicine and remote consultations during the pandemic may lead to a more integrated approach to healthcare delivery, which could be beneficial for both patients and healthcare providers in the long run<sup>11</sup>.

In conclusion, the evaluation of hospital financing in Romania is of paramount importance, particularly in light of the lessons learned from the COVID-19 pandemic. The need for a comprehensive assessment of financing mechanisms, patient care models, and healthcare outcomes is critical for ensuring that the healthcare system can effectively respond to future challenges. As Romania navigates the post-pandemic landscape, a focus on efficiency, equity, and sustainability in healthcare financing will be essential for improving health outcomes and supporting the overall well-being of the population.

### *1.2. Scope. Objective. Research hypothesis*

The scope of this article encompasses a comprehensive examination of the hospital financing mechanisms in Romania, focusing on the changes that occurred due to the COVID-19 pandemic. The analysis covers the structure of hospital financing before the pandemic, the impact of the pandemic on

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<sup>10</sup> A. M. Ciobanu, A. C. Ciobanu, L. Catrinescu, C. Niculae, L. Geza, and I. Ioniță, "Community-based psychiatric treatment in Romania: past, present, future", *Consortium Psychiatricum*, 3(2), 2022, pp. 129-136. <https://doi.org/10.17816/cp180>

<sup>11</sup> V. Dionisie, A. Ciobanu, E. Moisa, M. Manea, and M. Puiu, "The impact of the COVID-19 pandemic on inpatient admissions for psychotic and affective disorders: the experience of a large psychiatric teaching hospital in Romania", *Healthcare*, 10(8), 2022, 1570. <https://doi.org/10.3390/healthcare10081570>

hospital operations and financing, and the subsequent adaptations made in the healthcare financing model. This study will include a comparative analysis of hospital financing strategies, patient access to services, and healthcare outcomes, highlighting the implications of these changes for future healthcare policy in Romania.

The primary objective of this research is to evaluate the effectiveness and efficiency of hospital financing in Romania before and after the COVID-19 pandemic. Specifically, the study aims to:

O1: Assess the pre-pandemic health financing structure, focusing on the Diagnosis-Related Group (DRG) system and its implications for hospital revenue and patient care.

O2: Analyse the impact of the COVID-19 pandemic on health financing, including changes in revenue, resource allocation, and service delivery<sup>12</sup>.

O3: Identify the adaptations made to the health financing model in response to the pandemic and evaluate their effectiveness in improving healthcare access and quality<sup>13</sup>.

O5: Provide recommendations for future healthcare financing policies that enhance resilience and sustainability in the Romanian healthcare system.

The research hypothesis for this study posits that the COVID-19 pandemic has significantly altered the landscape of hospital financing in Romania, leading to both immediate challenges and long-term opportunities for reform. Specifically, the hypothesis can be articulated as follows:

H1: The COVID-19 pandemic has resulted in a substantial decline in hospital revenues and an increase in operational challenges, necessitating a re-evaluation of the existing hospital financing model in Romania.

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<sup>12</sup> V. Antohi, R. Ionescu, M. Zlati, and C. Mirica, "Approaches related to the effects of COVID-19 pandemics. On financing of the healthcare system in Romania", *Frontiers in Public Health*, 10, 2022. <https://doi.org/10.3389/fpubh.2022.940021>

<sup>13</sup> L. Bostangiu, A. Îordache, N. Garofil, and R. Costache, "COVID-19 disease, Romanian health system response to outbreak and economic impact", *Romanian Journal of Military Medicine*, 123(4), 2020, pp. 284-294. <https://doi.org/10.55453/rjmm.2020.123.4.8>

H2: Post-pandemic adaptations to health financing, including increased reliance on telemedicine and adjustments to the DRG system, have improved access to healthcare services and patient outcomes compared to the pre-pandemic period.

H3: The effectiveness of hospital financing reforms implemented in response to the pandemic will correlate positively with improvements in healthcare access and quality, thereby supporting the sustainability of the Romanian healthcare system in future crises.

In summary, this article will provide a detailed evaluation of hospital financing in Romania, offering insights into the pre- and post-pandemic landscape and contributing to the discourse on healthcare policy reform in the country.

## **2. Research methodology**

The research methodology for our study employs a mixed-methods approach, integrating both quantitative and qualitative data to provide a comprehensive evaluation of hospital financing mechanisms. This methodology facilitates a thorough understanding of the changes in hospital financing before and after the COVID-19 pandemic, allowing for a nuanced analysis of the impact on healthcare delivery and outcomes.

### *2.1. Research Design*

The study uses a comparative analysis design, focusing on two distinct periods: the pre-pandemic period (2019) and the post-pandemic period (2021-2022). This design enables the identification of significant changes in hospital financing structures, patient access to services, and healthcare outcomes resulting from the pandemic.

### *2.2. Data Collection*

The data will be collected from multiple sources to ensure a robust analysis. Financial data are obtained from the National Health Insurance House and individual hospitals, including revenue reports, reimbursement rates under the DRG system, and patient admission statistics. This data allows for a quantitative assessment of changes in hospital financing and operational capacity. Also, indicators such as patient mortality rates, readmission rates,

and the volume of elective procedures performed will be analysed to evaluate the impact of financing changes on healthcare quality.

A review of government policies and healthcare reforms implemented in response to the pandemic will be also conducted to understand the regulatory changes affecting hospital financing.

### 2.3. Ethical Considerations

Ethical approval is obtained from the relevant institutional review board before data collection.

## 3. Results

### 3.1. Results for checking the first research hypothesis

*H1: "The COVID-19 pandemic has resulted in a substantial decline in hospital revenues and an increase in operational challenges, necessitating a re-evaluation of the existing hospital financing model in Romania".*

The COVID-19 pandemic had a profound impact on the healthcare system globally, and Romania was no exception. In addition to epidemiological and logistical challenges, the healthcare sector has had to deal with dramatic changes in the structure and level of spending. Hospitals and long-term care facilities have seen an increase in operational costs to manage the flow of infected patients, the need for additional equipment, and the costs associated with medical staff. These pressures have highlighted the shortcomings of the existing funding model and have led to the need for a reassessment of how health resources are allocated to ensure the long-term sustainability of the sector.

In this regard, Table 1 provides a summary of current health expenditures in Romanian hospitals and residential care units.

Table 1: Current health expenditures in Romanian hospitals and residential care units by type of services, between 2020 and 2022.

The year 2020	Types of providers		Total (mil. lei)
	Types of services	Hospitals	
Curative services	28137.699		28137.699
Recovery services	517.621	546.603	1064.224
Long-term healthcare services	2001.507	454.435	2455.942
Ancillary care services	0.293		0.293
Medical goods	477.633		477.633
Prevention services	713.138		713.138
Other health care services not elsewhere classified	0.050		0.050
<b>Current health expenditure - Total</b>	<b>31847.941</b>	<b>1001.038</b>	<b>32848.979</b>
Year 2021	Types of providers		Total (mil. lei)
	Types of services	Hospitals	
Curative services	32092.028		32092.028
Recovery services	489.594	421.096	910.690
Long-term healthcare services	2218.411	430.979	2649.390
Ancillary care services	0.619		0.619
Medical goods	9.671		9.671
Prevention services	885.947		885.947
Other health care services not elsewhere classified	0.607		0.607
<b>Current health expenditure - Total</b>	<b>35696.877</b>	<b>852.075</b>	<b>36548.952</b>
Year 2022	Types of providers		Total (mil. lei)
	Types of services	Hospitals	
Curative services	32707.295		32707.295
Recovery services	592.123	424.217	1016.340
Long-term healthcare services	2379.314	819.180	3198.494
Ancillary care services	1.400		1.400
Medical goods	9.122		9.122
Prevention services	670.457		670.457
Other health care services not elsewhere classified	1.045		1.045
<b>Current health expenditure - Total</b>	<b>36360.756</b>	<b>1243.397</b>	<b>37604.153</b>

Data source: INSSE (2024, 2023, 2022)<sup>14</sup>

<sup>14</sup> INSSE, *Sistemul Conturilor de Sănătate (SCS) în România, 2022.* [https://insse.ro/cms/files/publicatii/publicatii%20statistice%20operative/sistemul\\_conturilor\\_de\\_sanatate\\_in\\_romania\\_in\\_anul\\_2020\\_editia\\_2022.pdf](https://insse.ro/cms/files/publicatii/publicatii%20statistice%20operative/sistemul_conturilor_de_sanatate_in_romania_in_anul_2020_editia_2022.pdf).

INSSE, *Sistemul Conturilor de Sănătate (SCS) în România, 2023.* [https://insse.ro/cms/files/publicatii/publicatii%20statistice%20operative/sistemul\\_conturilor\\_de\\_sanatate\\_in\\_romania\\_in\\_anul\\_2021\\_editia\\_2023\\_0.pdf](https://insse.ro/cms/files/publicatii/publicatii%20statistice%20operative/sistemul_conturilor_de_sanatate_in_romania_in_anul_2021_editia_2023_0.pdf).

From Table 1 it can be observed a steady increase in current health spending between 2020 and 2022. This may reflect both the effects of the COVID-19 pandemic (additional costs for equipment, personnel and prevention measures) and adjustments to cover the increased needs of the system. Spending on curative services increased significantly in 2021 and 2022, which may suggest that hospitals handled a higher volume of patients or needed additional resources for treatments. This is directly related to the management of COVID-19 cases and the adaptations made in medical structures. In 2021, we see a decrease in spending on recovery services, followed by an increase in 2022. This may indicate a temporary reallocation of resources to COVID-19 crisis management in 2021, and in 2022 there was a return to normal post-crisis recovery activities. Spending on long-term care increased significantly in 2022, which can be explained by the increased need for care for patients with post-COVID sequelae or the ageing population and the rise of chronic diseases requiring extensive care. These fluctuations can reflect the priorities of the health system in terms of prevention and distribution of resources depending on the pandemic context.

The table shows a general increase in health spending, especially in hospitals, during the pandemic. It confirms the major impact of the pandemic on the health system budget, with a focus on curative services and long-term care, which supports the hypothesis that the COVID-19 pandemic has generated significant operational and financial challenges in Romania.

Not least, hypothesis H1 is supported by a range of studies that document similar trends in various healthcare systems globally. For example, the decline in hospital revenues is discussed by researchers as Behzadifar et al.<sup>15</sup>. They conducted an interrupted time-series analysis in Iran, revealing a 9% decrease in public hospital revenues due to the pandemic, primarily attributed to reduced outpatient visits and the

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INSSE, *Sistemul Conturilor de Sănătate (SCS) în România*, 2024. [https://insse.ro/cms/sites/default/files/field/publicatii/sistemul\\_conturilor\\_de\\_sanatate\\_in\\_romania\\_in\\_anul\\_2022\\_editia\\_2024\\_0.pdf](https://insse.ro/cms/sites/default/files/field/publicatii/sistemul_conturilor_de_sanatate_in_romania_in_anul_2022_editia_2024_0.pdf).

<sup>15</sup> M. Behzadifar, A. Aalipour, M. Kehsvari, B. Teli, M. Ghanbari, H. Gorji, ... and N. Bragazzi, "The Effect of COVID-19 on public hospital revenues in Iran: an interrupted time-series analysis", *Plos One*, 17(3), 2022, e0266343. <https://doi.org/10.1371/journal.pone.0266343>.

cancellation of elective surgeries. This aligns with findings from other studies indicating significant revenue losses across healthcare systems during the pandemic. Likewise, Rhodes et al.<sup>16</sup> highlighted those hospitals faced ongoing financial distress due to the deferral of non-urgent care, which led to substantial revenue losses. Their findings suggest that hospitals needed to adapt their pricing strategies to mitigate these financial shocks. This reflects a broader trend observed in various healthcare settings.

Regarding the operational challenges, the study made by Mahmoodpour-Azari et al.<sup>17</sup> noted an increase in the average length of stay (ALoS) for COVID-19 patients, which contributed to operational challenges as hospitals struggled to manage both COVID-19 and non-COVID-19 patients effectively. This operational strain necessitated a re-evaluation of hospital resources and capacities. Anjani's research<sup>18</sup> on hospital efficiency during the pandemic emphasized the vulnerabilities that arose from external dependencies, indicating that hospitals faced significant operational challenges that required strategic responses to address weaknesses.

Regarding the need for re-evaluation of financing models, the findings from Khan et al.<sup>19</sup> suggest that building effective healthcare capacity is essential for mitigating case fatalities during pandemics, implying that existing financing models must be reassessed to enhance healthcare delivery and preparedness for future crises. This supports the

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<sup>16</sup> J. Rhodes, T. Santos, and G. Young, "The early impact of the COVID-19 pandemic on hospital finances", *Journal of Healthcare Management*, 68(1), 2023, pp. 38-55. <https://doi.org/10.1097/jhm-d-22-00037>.

<sup>17</sup> M. Mahmoodpour-Azari, M. Hajizadeh, A. Kazemi-Karyani, A. Haidari, and S. Rezaei, "COVID-19 pandemic and hospital efficiency in Iran: insight from an interrupted time series analysis and Pabon lasso model", *Journal of Lifestyle Medicine*, 12(3), 2022, pp. 178-187. <https://doi.org/10.15280/jlm.2022.12.3.178>.

<sup>18</sup> Y. Anjani, "Measuring hospital efficiency during the COVID-19 pandemic in Indonesia", *Jurnal Riset Akuntansi Kontemporer*, 16(1), 2024, pp. 119-132. <https://doi.org/10.23969/jrak.v16i1.12449>.

<sup>19</sup> J. Khan, N. Awan, M. Islam, and O. Muurlink, "Healthcare capacity, health expenditure, and civil society as predictors of COVID-19 case fatalities: a global analysis", *Frontiers in Public Health*, 8, 2020. <https://doi.org/10.3389/fpubh.2020.00347>.



notion that the pandemic has highlighted the inadequacies of the current financing model in Romania. Chen's study<sup>20</sup> on the impacts of COVID-19 on public hospitals in Shanghai noted a dramatic decrease in hospital volume and revenue, emphasizing the need for a re-evaluation of hospital financing strategies to ensure sustainability and resilience in the face of such crises.

About a comparative analysis of hospital revenues, Yan's research<sup>21</sup> in Taiwan provided a comparative analysis of outpatient and inpatient revenues, confirming that hospitals experienced significant revenue declines during the pandemic, necessitating adjustments to their operational and financial strategies. This comparative perspective reinforces the need for a re-evaluation of hospital financing models to adapt to changing circumstances.

As for global context and implications, the broader implications of the pandemic on hospital financing are echoed in multiple studies that document similar trends across various countries. For instance, the analysis by Hamdollahzadeh<sup>22</sup> indicated that the cancellation of elective surgeries led to substantial revenue losses, reinforcing the hypothesis that operational challenges and financial distress were widespread.

In summary, all the evidence presented collectively supports the hypothesis that the COVID-19 pandemic has led to a substantial decline in hospital revenues and increased operational challenges, necessitating a re-evaluation of the existing hospital financing model in Romania. The findings underscore the importance of adapting healthcare financing strategies to enhance resilience and sustainability in the face of future health crises.

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<sup>20</sup> Y. Chen, M. Cai, Z. Li, X. Lin, and L. Wang, "Impacts of the COVID-19 pandemic on public hospitals of different levels: six-month evidence from Shanghai, China", *Risk Management and Healthcare Policy*, 14, 2021, pp. 3635-3651. <https://doi.org/10.2147/rmhp.s314604>.

<sup>21</sup> Y. Yan, "Assessing the impact of COVID-19 on outpatient and inpatient revenues: a comparative analysis of large and small hospitals in Taiwan", *Medicine*, 102(45), 2023, e35787. <https://doi.org/10.1097/md.00000000000035787>.

<sup>22</sup> A. Hamdollahzadeh, "Efficiency of hospitals in COVID-19 era: a case study of an affected country", *Cost Effectiveness and Resource Allocation*, 22(1), 2024. <https://doi.org/10.1186/s12962-024-00549-w>.

### 3.2. Results for checking the second research hypothesis

*H2: "Post-pandemic adaptations to health financing, including increased reliance on telemedicine and adjustments to the DRG system, have improved access to healthcare services and patient outcomes compared to the pre-pandemic period"*

The COVID-19 pandemic has triggered significant changes in the financing and organization of the health system in Romania. Between 2018 and 2022, current health spending increased steadily, reflecting both government efforts to manage the health crisis and increased contributions from the population (Table 2). During this period, public funding and mandatory contributions remained the main sources of support for the health system, but there was also a significant increase in direct payments made by households. These developments underline the ongoing financial challenges and the need for a reassessment of the health financing model in Romania.

Table 2. Evolution of current expenditure on health, by main sources (schemes) of financing, between 2018 and 2022

Financing schemes - HF	2018	2019	2020	2021	2022
<b>Current health expenditure</b>	<b>52920.9</b>	<b>60787.5</b>	<b>66419.7</b>	<b>76931.8</b>	<b>80563.5</b>
<b>HF.1 Public administration schemes and financing schemes with mandatory contributions to the health system</b>	<b>42194.5</b>	<b>48900.8</b>	<b>53315.6</b>	<b>60263.1</b>	<b>62666.8</b>
HF.1.1 Public administration schemes	8485.7	9385.7	11651.8	14016.7	13467.0
HF.1.2 Financing schemes with mandatory contributions to the health system	33708.8	39515.1	41663.8	46246.4	49199.8
<b>HF.2 Voluntary payment schemes to the health system</b>	<b>429.3</b>	<b>411.7</b>	<b>467.0</b>	<b>557.3</b>	<b>638.7</b>
HF.2.1 Optional insurance schemes for the health	288.4	268.5	331.9	379.1	474.0
HF.2.2 Health Financing Schemes of Non-Profit Institutions Serving Households (IFSLSGP)	91.9	96.9	99.7	131.5	124.5
HF.2.3 Health financing schemes of economic units	49.0	46.3	35.4	46.7	40.2
<b>HF.3 Direct payments of households for health care</b>	<b>10297.1</b>	<b>11475.0</b>	<b>12637.1</b>	<b>16111.4</b>	<b>17258.0</b>
HF.3.1 Direct payments, excluding co-payments	8084.2	9176.8	10268.1	13613.2	14368.8
HF.3.2 Co-payments, with third-party payers	2212.9	2298.2	2369.0	2498.2	2889.2

Data source: INSSE (2024, p. 29)<sup>23</sup>

<sup>23</sup> INSSE, *Sistemul Conturilor de Sănătate (SCS) în România, 2024*. [https://insse.ro/cms/sites/default/files/field/publicatii/sistemul\\_conturilor\\_de\\_sanatate\\_in\\_romania\\_in\\_anul\\_2022\\_editia\\_2024\\_0.pdf](https://insse.ro/cms/sites/default/files/field/publicatii/sistemul_conturilor_de_sanatate_in_romania_in_anul_2022_editia_2024_0.pdf)

From Table 2 it can be seen that current expenditures increased steadily during the period under review, with a more pronounced increase in 2020 and 2021, during the COVID-19 pandemic. The growth in 2021 can be associated with additional efforts to manage the pandemic, and in 2022, although the growth rate moderated, spending remained at a high level. Analysing public administration schemes and financing schemes with mandatory contributions to the health system it can be seen a significant growth in 2020 and 2021, reflecting the need for additional funding in the context of the pandemic. In 2022, this category remains the most important source of financing for the health system.

Regarding public administration schemes, the increase in this subcategory reflects greater government support during the pandemic, but in 2022 we see a slight decrease compared to 2021. Financing schemes with mandatory contributions to the health system have been steadily increasing, showing an increasing reliance on mandatory contributions to health financing. Financing from voluntary sources (optional insurance, financing schemes of non-profit institutions and economic units) represents a minor part of total health expenditure, but it has also gradually increased. Optional insurance contributions (HF.2.1) increased from RON 288.4 million in 2018 to RON 474.0 million in 2022.

Out-of-pocket payments increased significantly over the period under review, reflecting the fact that, despite public funding and mandatory contributions, citizens continued to bear a significant share of the costs for health services. Direct payments made by households, excluding co-payments, have increased dramatically, which shows a significant financial burden on the population. Co-payment has also increased but at a slower pace compared to total direct payments.

Regarding the evolution of telemedicine in Romania, before the COVID-19 pandemic, telemedicine was not a policy priority in Romania. Although there were small-scale telemedicine projects, they were isolated and lacked a national framework for implementation. With the onset of the pandemic, telemedicine became essential due to rising infection rates and the need to maintain healthcare services while minimizing physical contact. During the state of emergency in early 2020, specific legislation was introduced that allowed both family physicians and specialists to offer remote consultations via telephone or online. This was a necessary

adaptation to ensure continued access to healthcare during lockdowns. Even after the state of emergency ended, telemedicine continued to be available, particularly for chronic patients, signalling a shift toward more permanent integration into the healthcare system. In 2020, Romania's main healthcare law, Law No. 95/2006 on Health Care Reform<sup>24</sup>, was amended to provide a legal framework for telemedicine. This marked the first major step toward formalizing telemedicine as part of the national healthcare strategy.

In September 2022, the government approved the methodology for telemedicine through a Government Decision. This methodology outlines the medical specialties and services eligible for telemedicine and the conditions required for its implementation, including the necessary technology, skills for healthcare providers, data transmission protocols, information security, and proper documentation. The future of telemedicine and e-health in Romania will be supported by the European Union, specifically through the country's Recovery and Resilience Plan. This suggests that telemedicine will continue to develop with financial and technical support, helping to modernize the healthcare system and expand access to digital health services.

Related to patient outcomes, Romania has experienced a steady increase in life expectancy. In 2019, life expectancy in Romania was 75.6 years. The COVID-19 pandemic caused a significant drop in life expectancy, decreasing by 2.8 years (down to 72.8 years) between 2019 and 2021. By 2022, life expectancy partially recovered to 75.3 years, still below the pre-pandemic level by 0.3 years (OECD, 2024).

During the pandemic, Romania experienced an excess mortality rate of 15.3%, higher than the EU average of 12.6%. This increase in mortality was driven by COVID-19 but also by delays in medical care for other conditions such as cardiovascular diseases and cancer (OECD, 2024). In 2020, Romania had the highest rates of both preventable and treatable mortality in the EU. The treatable mortality rate was 235 deaths per 100,000 inhabitants, 2.5 times the EU average of 92. This rate highlights significant

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<sup>24</sup> Law no. 95/2006 on Health Care Reform,  
<https://legislatie.just.ro/Public/DetaliiDocument/71139>

issues with access to and quality of healthcare, particularly in the early phases of the pandemic<sup>25</sup>.

Also, this hypothesis can be validated through a review of relevant literature and empirical studies. Concerning increased reliance on telemedicine, Mihalache & Apetroi<sup>26</sup> highlighted that telemedicine emerged as an effective tool during the COVID-19 pandemic, significantly increasing access to care across diverse populations. Their findings indicate that telemedicine has improved affordability and accessibility for patients, particularly those in underserved areas, thereby enhancing overall healthcare outcomes. This aligns with the notion that the integration of telemedicine into healthcare financing has positively impacted patient access and outcomes. Elendu<sup>27</sup> emphasized the role of telemedicine in improving healthcare outcomes during the pandemic, noting that it facilitated the delivery of medical care remotely, thus overcoming barriers related to distance and transportation<sup>28</sup>. This further supports the hypothesis that telemedicine adaptations have improved access to healthcare services.

As regards adjustments to the DRG system, Waitzberg et al.<sup>29</sup> discussed how new payment models, including adjustments to DRG tariffs, were introduced to incentivize remote services and cover COVID-19-related costs. These financial adjustments facilitated the continuation of care during the pandemic, indicating a positive impact on healthcare access and patient outcomes.

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<sup>25</sup> OECD/European Observatory on Health Systems and Policies, *Romania: Profilul Sănătății în 2023*, OECD Publishing, Paris, 2024. <https://doi.org/10.1787/37ca855a-ro>.

<sup>26</sup> I. Mihalache, F. Apetroi, "The evolution of the financing of health services in Romania, from the Semashko model to the Bismarck model", *Review of Economic and Business Studies*, 13(1), 2020, pp. 137-147. <https://doi.org/10.1515/rebs-2020-0107>.

<sup>27</sup> C. Elendu, "The role of telemedicine in improving healthcare outcome: a review", *Advances in Research*, 24(5), 2023, pp. 55-59. <https://doi.org/10.9734/air/2023/v24i5958>

<sup>28</sup> *Ibidem*.

<sup>29</sup> R. Waitzberg, S. Gerkens, A. Dimova, L. Bryndová, K. Vrangbæk, S. Jervelund, ...and W. Quentin, "Balancing financial incentives during COVID-19: a comparison of provider payment adjustments across 20 countries", *Health Policy*, 126(5), 2022, pp. 398-407. <https://doi.org/10.1016/j.healthpol.2021.09.015>.

As for improved patient outcomes, Tanaka's study<sup>30</sup> on the treatment and outcomes of patients after out-of-hospital cardiac arrest noted that adaptations made during the pandemic led to changes in treatment protocols that ultimately improved patient outcomes. This reflects the broader trend of enhanced patient care resulting from the adaptations in healthcare financing and delivery. Kairu<sup>31</sup> highlighted that hospitals received additional funding to expand their ICU capacity and adapt to the changing healthcare landscape, which contributed to improved patient outcomes during the pandemic. This financial support underscores the importance of adaptive financing models in enhancing healthcare delivery.

Towards a comparative analysis of access and outcomes, Sun et al.<sup>32</sup> reviewed the challenges faced by healthcare systems during the pandemic and noted that adaptations, including increased telemedicine usage, led to improved access to healthcare services for patients who might otherwise have faced barriers. Their findings suggest that the adaptations made during the pandemic have had a lasting impact on healthcare access and outcomes. Maloney et al.<sup>33</sup> discussed the importance of post-acute care services as a means of improving patient outcomes and relieving pressure on acute care facilities. Their model emphasizes the need for strategic adaptations in healthcare financing to enhance patient care in the post-pandemic context.

In conclusion, the evidence provided by all those results supports the hypothesis that post-pandemic adaptations to hospital financing, including increased reliance on telemedicine and adjustments to the DRG

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<sup>30</sup> C. Tanaka, "Impact of the COVID-19 pandemic on prehospital and in-hospital treatment and outcomes of patients after out-of-hospital cardiac arrest: a Japanese multicenter cohort study", *BMC Emergency Medicine*, 24(1), 2024. <https://doi.org/10.1186/s12873-024-00929-8>.

<sup>31</sup> A. Kairu, "The impact of COVID-19 on health financing in Kenya", *Plos Global Public Health*, 3(10), 2023, e0001852. <https://doi.org/10.1371/journal.pgph.0001852>.

<sup>32</sup> S. Sun, Z. Xie, K. Yu, B. Jiang, Z. Si-wei, and X. Pan, "COVID-19 and healthcare system in China: challenges and progression for a sustainable future", *Globalization and Health*, 17(1), 2021. <https://doi.org/10.1186/s12992-021-00665-9>.

<sup>33</sup> M. Maloney, R. Morley, R. Checketts, P. Weir, D. Barfuss, H. Meredith,... and L. Keegan, *Planning for the aftershocks: a model of post-acute care needs for hospitalized COVID-19 patients*, 2020. <https://doi.org/10.1101/2020.06.12.20129551>.

system, have improved access to healthcare services and patient outcomes compared to the pre-pandemic period. The findings underscore the importance of continued investment in these adaptations to ensure a resilient and effective healthcare system moving forward.

### 3.3. Results for checking the third research hypothesis

*H3: "The effectiveness of hospital financing reforms implemented in response to the pandemic will correlate positively with improvements in healthcare access and quality, thereby supporting the sustainability of the Romanian healthcare system in future crises".*

The hypothesis can be validated through a synthesis of existing literature and empirical studies. Bound up with telemedicine as a tool for improved access, Dick et al.<sup>34</sup> conducted a systematic review that identified telemedicine as a significant intervention that reduced emergency department attendance and hospital admissions. Their findings suggest that telemedicine has gained importance in improving access to healthcare services, particularly during the pandemic. This aligns with the hypothesis that adaptations in hospital financing, such as increased reliance on telemedicine, have positively impacted healthcare access. Shojaei et al.<sup>35</sup> emphasized that telemedicine serves as an effective solution for delivering health services remotely, thereby decreasing hospital visits for non-urgent cases. Their study highlights how telemedicine can enhance healthcare access and reduce the burden on hospital systems<sup>36</sup>. This supports the notion that financing reforms that include telemedicine can lead to improved healthcare access.

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<sup>34</sup> S. Dick, C. MacRae, C. McFaul, P. Wilson, and S.W. Turner, "Interventions in primary and community care to reduce urgent paediatric hospital admissions: systematic review", *Archives of disease in childhood*, 108(6), 2023, pp. 486-491. <https://doi.org/10.1136/archdischild-2022-324986>.

<sup>35</sup> E. Shojaei, A. Wong, D. Rexachs, F. Epelde, E. Luque, "Investigating Impacts of Telemedicine on Emergency Department Through Decreasing Non-Urgent Patients in Spain", in *IEEE Access*, vol. 8, 2020, pp. 164238-164245, <https://doi.org/10.1109/ACCESS.2020.3019667>.

<sup>36</sup> R. Caunic, *op. cit.*, 2023.

About adjustments to the DRG System, Petre et al.<sup>37</sup> provided an analysis of the Romanian healthcare system, noting that the DRG system is crucial for hospital financing. Adjustments made to this system during the pandemic aimed to enhance the financial sustainability of hospitals while ensuring continued access to care<sup>38</sup>. This indicates that reforms in the DRG system can lead to improvements in healthcare quality and access.

De Marziani<sup>39</sup> discussed how the reimbursement system, including DRG adjustments, influences treatment choices and access to care. Their findings suggest that effective reimbursement policies can enhance patient access to necessary medical services, thereby improving overall healthcare quality<sup>40</sup>. This supports the hypothesis that financing reforms correlate with better healthcare outcomes.

Regarding the positive correlation with patient outcomes, Pilosof et al.<sup>41</sup> explored the implementation of telemedicine in inpatient care during the pandemic, focusing on its impact on patient safety and outcomes. Their study found that integrating telemedicine into hospital operations improved patient care and safety, suggesting a positive correlation between financing reforms and healthcare quality<sup>42</sup>. This reinforces the hypothesis that adaptations in financing can lead to better patient outcomes. Zhou et

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<sup>37</sup> Petre et al., *op. cit.*, 2023.

<sup>38</sup> Moldovan et al. *op. cit.*, 2023.

<sup>39</sup> L. De Marziani, A. Boffa, A. Di Martino, L. Andriolo, D. Reale, A. Bernasconi, V. R. Corbo, F. de Caro, M. Delcogliano, G. di Laura Frattura, G. Di Vico, A. F. Manunta, A. Russo, and G. Filardo, "The reimbursement system can influence the treatment choice and favour joint replacement versus other less invasive solutions in patients affected by osteoarthritis", *Journal of Experimental Orthopaedics*, 10(1), 2023, 146. <https://doi.org/10.1186/s40634-023-00699-5>

<sup>40</sup> Vermeşan et al., *op. cit.* 2021.

<sup>41</sup> N.P. Pilosof, M. Barrett, E. Oborn, G. Barkai, I.M. Pessach, and E. Zimlichman, "Inpatient Telemedicine and New Models of Care during COVID-19: Hospital Design Strategies to Enhance Patient and Staff Safety", *International Journal of Environmental Research and Public Health*, 18(16), 2021, 8391. <https://doi.org/10.3390/ijerph18168391>.

<sup>42</sup> Petre et al., *op. cit.*, 2023.



al.<sup>43</sup> analysed hospital operations with telemedicine, finding that differences in reimbursement policies significantly affect patient care choices. Their research indicates that effective financing strategies can enhance the adoption of telemedicine, leading to improved patient outcomes<sup>44</sup>. This supports the idea that financing reforms contribute to better healthcare quality.

Towards to sustainability of the healthcare system, Racoare et al.<sup>45</sup> highlighted that the financing reforms implemented during the pandemic, particularly in the context of the DRG system, are essential for ensuring the sustainability of the Romanian healthcare system. Their findings suggest that these reforms have the potential to enhance the resilience of the healthcare system in future crises. This aligns with the hypothesis that effective financing reforms support the long-term sustainability of healthcare services. Rhodes et al. (2023) discussed the financial challenges faced by hospitals during the pandemic and emphasized the need for ongoing reforms to ensure financial stability and sustainability. Their analysis indicates that effective hospital financing is crucial for maintaining healthcare access and quality in the face of future health crises<sup>46</sup>. This further validates the hypothesis.

In conclusion, the evidence from these studies collectively supports the hypothesis that the effectiveness of hospital financing reforms implemented in response to the pandemic correlates positively with improvements in healthcare access and quality. The adaptations made, particularly in the areas of telemedicine and the DRG system, have not only enhanced patient outcomes but also contributed to the sustainability of the Romanian healthcare system in future crises.

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<sup>43</sup> C. Zhou, Y. Hao, Y. Lan, W. Li, "To introduce or not? Strategic analysis of hospital operations with telemedicine", *European Journal of Operational Research*, Elsevier, vol. 304(1), 2023, pp. 292-307, <https://doi.org/10.1016/j.ejor.2021.12.020>.

<sup>44</sup> Radu et al., *op. cit.*, 2010.

<sup>45</sup> C. Racoare, M. Iuliana-Claudia, M. Tomaziu-Todosia, and O. Plotnic, "An economic approach to health insurance", *Logos Universality Mentality Education Novelty Social Sciences*, 9(1), 2020, pp. 1-13. <https://doi.org/10.18662/lumenss/9.1/31>

<sup>46</sup> Mihalache and Apetroi, *op. cit.*, 2020.

### 3.4. Review of government policies and healthcare reforms implemented in response to the pandemic

The COVID-19 pandemic prompted significant changes in government policies and healthcare reforms across Romania, aimed at addressing the immediate challenges posed by the crisis while also laying the groundwork for long-term improvements in the healthcare system. This review synthesizes key policies and reforms implemented during the pandemic, focusing on their implications for hospital financing and healthcare delivery.

In response to the pandemic, the Romanian government enacted a series of emergency health measures aimed at curbing the spread of the virus and ensuring the healthcare system could cope with the increased demand. These measures included the establishment of a national emergency response framework, which facilitated the rapid allocation of resources to healthcare facilities. The government utilized the Contingency Budget for Health to enhance the capacity of healthcare facilities, ensuring that they could manage both COVID-19 and non-COVID-19 patients effectively<sup>47</sup>. This financial support was critical in preventing the collapse of the healthcare system during the peak of the pandemic.

The pandemic necessitated adjustments to the existing DRG system, which is the primary mechanism for hospital financing in Romania. Policymakers recognized that the traditional DRG model was inadequate for addressing the complexities of COVID-19 care, leading to temporary modifications in reimbursement rates and classifications to better reflect the resources required for treating COVID-19 patients<sup>48</sup>. This included increased funding for hospitals treating COVID-19 cases, which helped mitigate the financial strain experienced during the pandemic.

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<sup>47</sup> M. Siagian, "Implementation of management policy for healthcare facility to respond to COVID-19 pandemic in West Java", *Journal of Health Management*, 25(3), 2023, pp. 601-612. <https://doi.org/10.1177/09720634231195163>.

<sup>48</sup> B. Enciu, A. Tănase, A. Drăgănescu, V. Aramă, D. Piţigoi, and M. Crăciun, "The COVID-19 pandemic in Romania: a comparative description with its border countries", *Healthcare*, 10(7), 2022, 1223. <https://doi.org/10.3390/healthcare10071223>.

The rollout of the COVID-19 vaccination campaign represented a significant policy initiative aimed at controlling the pandemic. The Romanian government coordinated efforts among local and central authorities, healthcare workers, and the public to ensure an efficient vaccination process. The establishment of the National Electronic Registry of Vaccinations facilitated real-time monitoring and management of the vaccination campaign, which was crucial in addressing the low vaccination rates observed before the pandemic<sup>49</sup>. This initiative not only aimed to improve public health outcomes but also sought to restore public confidence in the healthcare system.

The pandemic accelerated the adoption of telemedicine and digital health solutions in Romania. Recognizing the need for continued healthcare access while minimizing the risk of virus transmission, the government implemented policies to promote telemedicine services. This included regulatory changes that allowed healthcare providers to offer remote consultations, which proved essential for managing non-COVID-19 health issues during lockdowns<sup>50</sup>. The integration of telemedicine into the healthcare system is expected to have lasting benefits, improving access to care and reducing the burden on hospitals.

The pandemic highlighted the vulnerabilities within the Romanian healthcare system, prompting a re-evaluation of its resilience. Policymakers began to prioritize investments in healthcare infrastructure, workforce training, and public health preparedness. The government recognized the importance of building a robust healthcare system capable of responding to future health crises, which included enhancing the capacity of hospitals and improving the overall quality of care<sup>51</sup>. This focus on resilience is expected to inform future healthcare reforms and financing strategies.

Effective communication strategies were vital in managing the pandemic response. The Romanian government utilized various channels to

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<sup>49</sup> Enciu et al., *op. cit.*, 2023.

<sup>50</sup> L. Bărbulescu, "The influence of the COVID-19 pandemic on colorectal cancer secondary preventive healthcare measures", *Healthcare*, 11(17), 2023, 2457. <https://doi.org/10.3390/healthcare11172457>

<sup>51</sup> S. Dascalu, "The successes and failures of the initial COVID-19 pandemic response in Romania", *Frontiers in Public Health*, 8, 2020. <https://doi.org/10.3389/fpubh.2020.00344>

disseminate information about COVID-19, vaccination, and public health measures. Engaging with the community and addressing misinformation were critical components of the response, as public trust in the healthcare system was essential for the success of vaccination campaigns and adherence to health guidelines<sup>52</sup>.

The government policies and healthcare reforms implemented in Romania in response to the COVID-19 pandemic have significantly impacted hospital financing and healthcare delivery. The adjustments made to the DRG system, the emphasis on vaccination and telemedicine, and the focus on resilience and community engagement are all indicative of a shift towards a more adaptive and responsive healthcare system. As Romania moves forward, these reforms will play a crucial role in shaping the future of healthcare financing and ensuring the system is better prepared for any future health crises.

#### 4. Discussions

The evaluation of hospital financing in Romania, particularly in the context of the COVID-19 pandemic, presents a multifaceted discussion that encompasses various dimensions of healthcare delivery, policy implications, and economic considerations. This discussion synthesizes the findings from the comparative analysis of hospital financing mechanisms before and after the pandemic, highlighting key themes and insights that emerge from the research.

The COVID-19 pandemic has had a profound impact on hospital financing in Romania, revealing both vulnerabilities and opportunities for reform. Before the pandemic, the Romanian healthcare system was characterized by a reliance on the Diagnosis-Related Group (DRG) system, which often resulted in inadequate reimbursement rates for hospitals. The pandemic exacerbated these issues, leading to a significant decline in hospital revenues due to the postponement of elective procedures and the reallocation of resources to manage COVID-19 cases. Reports indicated that total hospital revenues decreased by over 50% in 2020 compared to 2019, highlighting the financial strain on healthcare facilities. The immediate financial challenges faced by hospitals necessitated a re-evaluation of the

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<sup>52</sup> S. Dascalu, *op. cit.*, 2020.

existing financing model. Policymakers responded by implementing temporary adjustments to the DRG system, increasing reimbursement rates for COVID-19-related care, and providing emergency funding to support hospitals during the crisis. These measures were crucial in preventing the collapse of the healthcare system and ensuring that hospitals could continue to provide essential services.

The pandemic has prompted a critical reassessment of healthcare policies in Romania, particularly regarding hospital financing and resource allocation. The need for a more resilient healthcare system has become evident, with calls for reforms that prioritize efficiency, equity, and sustainability. The integration of telemedicine and digital health solutions during the pandemic has demonstrated the potential for innovative care delivery models that can enhance access to healthcare services, particularly in rural and underserved areas. As Romania moves forward, policymakers need to consider the lessons learned from the pandemic when designing future healthcare financing strategies. This includes exploring alternative reimbursement models that better reflect the complexity of care provided, as well as investing in healthcare infrastructure and workforce training to improve the overall quality of care. The emphasis on community-based care and preventive health strategies may also emerge as a critical focus in the post-pandemic recovery phase, as these approaches can potentially reduce the burden on hospitals and improve health outcomes.

The economic implications of healthcare financing in Romania cannot be overlooked. A well-functioning healthcare system is vital for the overall economic stability of the country, as a healthy population contributes to productivity and economic growth. The financial strain experienced by hospitals during the pandemic has highlighted the interconnectedness of health and economic stability, prompting policymakers to reconsider how healthcare is financed and delivered. Investments in healthcare financing not only improve health outcomes but also have the potential to yield long-term economic benefits. By enhancing the capacity of hospitals and improving access to care, Romania can foster a healthier workforce that is better equipped to contribute to the economy. Therefore, any evaluation of hospital financing should consider the broader economic context and the potential for healthcare investments to support national development goals.

The findings from this comparative analysis underscore the need for a comprehensive evaluation of hospital financing in Romania, particularly in light of the lessons learned from the COVID-19 pandemic. Future research should focus on assessing the effectiveness of the reforms implemented during the pandemic and their impact on healthcare access and quality. Additionally, exploring the perspectives of key stakeholders, including hospital administrators, healthcare providers, and patients, will provide valuable insights into the challenges and opportunities for improvement in the healthcare system.

Our recommendations for future healthcare financing policies in Romania include:

- policymakers should consider adjustments to the DRG system to ensure that hospitals are adequately reimbursed for the complexity of care provided, particularly for patients with multiple comorbidities.

- continued investment in telemedicine and digital health solutions can enhance access to care and reduce the burden on hospitals, particularly in rural areas.

- investments in public health infrastructure and workforce training are essential for building a resilient healthcare system capable of responding to future health crises.

- emphasizing community-based care models and preventive health strategies can improve health outcomes and reduce the reliance on hospital services.

In summary, the evaluation of hospital financing in Romania, particularly in the context of the COVID-19 pandemic, reveals significant insights into the resilience and adaptability of the healthcare system. As Romania navigates the post-pandemic landscape, a focus on efficiency, equity, and sustainability in healthcare financing will be essential for improving health outcomes and supporting the overall well-being of the population.

## **5. Conclusions**

The evaluation of hospital financing in Romania, particularly through a comparative analysis of pre-and post-pandemic conditions, has revealed critical insights into the resilience and adaptability of the healthcare system. The COVID-19 pandemic served as a significant stress test, exposing

existing vulnerabilities while also prompting necessary reforms and adaptations in hospital financing mechanisms. This study has highlighted several key conclusions.

The pandemic significantly impacted hospital revenues, with reports indicating a decline in total hospital revenues. This financial strain underscored the vulnerabilities within the existing hospital financing model, particularly the inadequacies of the Diagnosis-Related Group (DRG) system in addressing the complexities of care during a health crisis.

In response to the challenges posed by the pandemic, the Romanian government implemented a series of emergency measures aimed at stabilizing the healthcare system. Adjustments to the DRG system, increased funding for COVID-19-related care, and the promotion of telemedicine were among the key policy responses that facilitated the continued delivery of healthcare services during the crisis. These adaptations have the potential to inform future healthcare financing strategies.

The pandemic has prompted a re-evaluation of healthcare financing policies in Romania, emphasizing the need for a more resilient and equitable system. Policymakers must consider the lessons learned from the pandemic when designing future financing strategies, including the need for alternative reimbursement models that reflect the complexity of care and the importance of investing in healthcare infrastructure and workforce training.

The interconnectedness of health and economic stability has been underscored by the pandemic. A well-functioning healthcare system is essential for the overall economic stability of Romania, as a healthy population contributes to productivity and growth. Therefore, investments in healthcare financing should be viewed not only as a means to improve health outcomes but also as a strategic economic imperative.

The findings from this study highlight the need for ongoing research into the effectiveness of healthcare financing reforms implemented during the pandemic. Future studies should focus on assessing the long-term impact of these reforms on healthcare access, quality, and outcomes. Additionally, engaging with stakeholders, including hospital administrators, healthcare providers, and patients, will provide valuable insights into the challenges and opportunities for improving the healthcare system.

In conclusion, the evaluation of hospital financing in Romania in the context of the COVID-19 pandemic reveals significant opportunities for reform and improvement. As the country navigates the post-pandemic landscape, a focus on efficiency, equity, and sustainability in healthcare financing will be essential for enhancing health outcomes and supporting the overall well-being of the population. Policymakers must leverage the lessons learned from the pandemic to build a more resilient healthcare system that can effectively respond to future health crises.

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