e-ISSN:2582-7219

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH IN SCIENCE, ENGINEERING AND TECHNOLOGY

Volume 7, Issue 12, December 2024

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 7.521

© 2024 IJMRSET | Volume 7, Issue 12, December 2024| DOI: 10.15680/IJMRSET.2024.0712169

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

The Impact of Moral Hazard on Healthcare Utilization in Public Hospitals

Aman Srivastav

Bachelor of Business Administration, NIMS School of Business Studies, NIMS University, Jaipur, India

ABSTRACT: Background/Objectives: Moral hazard represents a significant challenge in healthcare systems globally, reflecting the tendency of insured individuals to over-utilize medical services when shielded from the full costs of care. Methods: This paper investigates the dynamics and implications of moral hazard within the Romanian public hospital sector, offering practical recommendations for healthcare policymakers to mitigate the financial risks associated with excessive healthcare utilization and ensure long-term sustainability. To achieve the objectives of this study, a quantitative research approach utilizing vignettes was employed. Vignettes allow for the simulation of real-world decision- making under conditions of insurance coverage, capturing nuanced behaviors that traditional surveys may overlook. Results: The study examined patient behaviors in the context of moral hazard in public hospitals in Romania, employing a quantitative approach based on vignettes. A total of 303 valid responses were collected. The findings indicate a significant tendency among insured patients, both publicly and privately insured, to opt for more expensive treatments compared to uninsured patients, who preferred more affordable options such as medication or physiotherapy. In the case of treatments for severe conditions, insured patients frequently chose combinations of higher-cost therapies, while uninsured individuals either delayed treatment or opted for less expensive alternatives. These results highlight the impact of moral hazard, driven by a reduced sensitivity to costs in the presence of insurance, and underscore the need for cost-sharing policies to mitigate the overutilization of medical resources. Conclusions: This paper uniquely contributes to the understanding of moral hazard by integrating insights from both Romanian public hospitals and international case studies, offering practical policy recommendations for mitigating the financial risks associated with excessive healthcare utilization.

KEYWORDS: Moral hazard; Healthcare; Oregon Medicaid Experiment; Insurance; Healthcare policy

I. INTRODUCTION

Moral hazard in healthcare refers to the tendency of individuals to alter their behavior due to the protection provided by health insurance, potentially leading to inefficient utiliza- tion of medical resources. Insured individuals become less concerned about the costs of care, thereby fostering overuse of services and neglect of preventive measures. This concept, introduced by Kenneth Arrow, highlights the increased demand for healthcare services as a result of insurance coverage. In this context, moral hazard manifests in costly and sometimes unnecessary treatments, exacerbating healthcare system expenditures.

While moral hazard has been extensively studied in developed countries, limited re- search has addressed its manifestation in transitioning economies such as Romania, where public insurance plays a central role. This study analyzes the manifestations of moral hazard within the specific context of Romanian public hospitals and proposes strategies to mitigate its impact on service utilization and system sustainability. In contrast to the well-funded healthcare systems of many Western European countries, the Romanian public healthcare system faces significant challenges due to chronic underfunding and systemic inefficiencies, rendering it particularly vulnerable to moral hazard. Operating under a social health insurance model financed through employer and employee contributions, Romania's healthcare system remains under-resourced compared to other member states of the European Union. Public hospitals contend with inefficiencies that result in elevatedhealthcare costs and disparities in access to essential services. These structural vulnerabilities create conditions conducive to moral hazard, wherein both patients and healthcare providers may engage in practices that exploit insurance coverage, exacerbating service overutilization and further straining the already burdened system. International studies suggest that reducing out-of-pocket costs through insurance results in a significant increase in the consumption of healthcare

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

services, including non-essential ones.

Einav and Finkelstein suggest that the term "moral hazard" is widely used to describe the notion that insurance coverage, by reducing the marginal cost of care for the individual (often referred to as the out-of-pocket cost of care), can lead to increased healthcare utiliza- tion. Health insurance may also incentivize individuals to exert less effort in maintaining their health. This shift in economic incentives not only promotes greater consumption of healthcare services but also discourages personal responsibility in maintaining health. For instance, health insurance may diminish the perceived financial consequences of un- healthy behaviors, such as smoking or a sedentary lifestyle, thereby reducing individual motivation to adopt preventive health measures.

In addition to patients, health insurance also influences healthcare providers. Cutler and Zeckhauser argue that providers may choose more expensive treatments or diagnostic tests, knowing that insurance will cover the costs, a phenomenon known as "supplier-induced demand". This behavior increases system costs and negatively im- pacts the sustainability of insurance schemes, particularly for low-income individuals.

The dual influence of moral hazard on both patients and providers highlights its critical role in the sustainability of healthcare systems. By mitigating financial risks, insurance can unintentionally promote riskier behaviors and heightened demand for services. Addressing and managing this issue is essential for designing equitable and sustainable healthcare systems that ensure access without undermining financial viability.

Moral hazard arises when insured individuals can influence either the likelihood of an insured event occurring or the magnitude of the resulting financial loss. It manifests in two distinct forms: ex-ante moral hazard and ex-post moral hazard.

Ex-ante moral hazard refers to the tendency of insured individuals to adopt riskier behaviors, given that insurance reduces the financial burden associated with adverse health outcomes. Behaviors such as unhealthy eating, physical inactivity, or smoking become more prevalent because individuals perceive that potential medical expenses will be covered by insurance. This phenomenon is particularly pronounced in systems offering comprehensive coverage with minimal cost-sharing by patients. Studies indicate that insured individuals exhibit higher hospitalization rates for preventable conditions, reflecting reduced incentives to maintain a healthy lifestyle.

However, the actual impact of ex-ante moral hazard on individual behavior remains a topic of debate. Nyman argues that, while some individuals may take greater health risks, many are deterred by the non-financial costs of illness, such as income loss, physical suffering, and reduced quality of life. For instance, the decision to smoke despite the risk of lung cancer cannot be entirely attributed to the mere existence of insurance, as the health consequences remain a significant deterrent.

II. HEALTHCARE INSURANCE EXPERIMENTS

The Oregon Experiment

Over the years, various experiments have been conducted to investigate the effects of moral hazard within healthcare systems. One of the most renowned is the Oregon Health Insurance Experiment. This experiment, conducted in 2008, provided a unique opportunity to study the impact of health insurance on healthcare utilization, particularly among low-income individuals. Oregon's Medicaid program used a lottery system to randomly select uninsured citizens for Medicaid coverage, ensuring that selection was independent of participants' health status. Out of 74,922 individuals who applied, 29,834 were randomly selected to receive Medicaid benefits, allowing researchers to observe a naturally occurring randomized controlled trial in healthcare coverage.

The Oregon Health Insurance Experiment yielded several notable findings over the two-year observation period. While Medicaid coverage did not result in significant improvements in physical health outcomes—such as control of hypertension, cholesterol, or diabetes—it led to increased healthcare utilization and other key benefits. Participants experienced higher rates of diabetes detection and management, reduced rates of depression, and alleviated financial strain associated with healthcare costs. However, a prominent result was the 40% increase in emergency department

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

visits, even for conditions that could have been treated in outpatient settings or prevented altogether. This increase in emergency department usage is often cited as evidence of moral hazard, illustrating how individuals, once insured, may overutilize certain healthcare services regardless of the necessity for those services. The Oregon Experiment has been instrumental in illustrating the complexity of moral hazard within the healthcare sector. It highlights the trade-offs between providing essential financial protection for vulnerable populations and the unintended consequences of increased healthcare consumption, particularly in emergency settings.

The RAND Health Insurance Experiment

Preceding the Oregon experiment, the RAND Health Insurance Experiment (HIE) re- mains one of the most comprehensive studies to date on the relationship between insurance structure and healthcare utilization. Conducted from 1974 to 1982, the RAND experiment was designed to rigorously assess how different cost-sharing structures in health insurance affect the demand for healthcare services. Unlike the Oregon Experiment, which focused on the expansion of Medicaid, the RAND study evaluated a range of cost-sharing plans, providing a broader view of consumer behavior under varying financial incentives. In the RAND experiment, over 5800 participants from six U.S. regions were randomly assigned to insurance plans with differing levels of cost-sharing, ranging from full coverage (with no out-of-pocket costs) to plans requiring substantial co-payments. The study demonstrated a clear inverse relationship between the level of cost-sharing and the utilization of healthcare services: participants with full insurance coverage (zero cost- sharing) utilized significantly more healthcare services than those in high cost-sharing plans. The elasticity of healthcare demand in response to out-of-pocket costs was evident, as individuals with higher cost-sharing obligations reduced their use of both necessary and unnecessary medical services. However, the RAND experiment also emphasized that factors beyond direct medical costs, such as transportation and time spent accessing care, play a crucial role in determining healthcare utilization. These additional costs—often overlooked in discussions of moral hazard—affect healthcare decisions as much as, if not more than, financial cost-sharing.

The RAND Health Insurance Experiment conclusively demonstrated the existence of moral hazard in healthcare: as consumer cost-sharing decreases, healthcare utilization and overall spending increase. This moral hazard effect becomes particularly pronounced in the context of comprehensive insurance plans, where patients are more likely to consume healthcare services that they might otherwise forgo if they had to bear the full costs themselves. Notably, the experiment also showed that while cost-sharing reduced the use of medical services, it did not lead to significant negative health outcomes for most participants, challenging assumptions that higher utilization necessarily correlates with better health outcomes.

In summary, both the Oregon and RAND experiments provide critical insights into the complex relationship between insurance coverage, healthcare utilization, and moral hazard. While increased coverage improves access to care and alleviates financial stress, it also promotes the overuse of services, underscoring the need for carefully balanced policy interventions that account for both the benefits and risks associated with comprehensive health insurance.

Romanian Healthcare System

The Romanian healthcare system operates on a social health insurance model, primarily funded through mandatory contributions made by both employers and employees. In 1997, Romania adopted the Bismarck model, a system rooted in compulsory health insurance and the principle of solidarity, ensuring access to healthcare services through a decentralized structure. This model is prevalent across several European Union countries, including Belgium, Germany, France, the Czech Republic, Estonia, Lithuania, Luxembourg, Poland, the Netherlands, Slovakia, Hungary, and Slovenia. The adoption of this model marked a significant shift in Romania's healthcare financing, aiming to enhance the efficiency and equity of healthcare delivery.

The primary challenge for the Romanian healthcare system, as for many other health- care systems, is cost management. Healthcare costs in Romania are influenced by numerous factors; however, the present study focuses exclusively on the impact of health insurance within public hospitals in Romania. The rising costs in Romania's healthcare system are driven by a multitude of factors, including demographic changes, increasing demand for services, and inefficiencies in resource allocation. This study, however, narrows its focus to explore the role of health

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

insurance in shaping healthcare utilization within Romanian public hospitals, where moral hazard plays a critical role. Theoretically, insurance reduces the monetary cost individuals pay for healthcare ser- vices. However, this reduction may also contribute to "moral hazard," whereby individuals engage in riskier behaviors due to the shared or absorbed nature of the financial risk. The phenomenon of moral hazard is particularly relevant in public healthcare systems like Romania's, where both patients and providers may alter their behaviors due to the presence of insurance coverage.

Insurance beneficiaries may be tempted to utilize healthcare services more frequently or request costly procedures and treatments excessively, often without medical justification. Similarly, healthcare providers or physicians may prescribe unnecessary or excessive tests, procedures, or treatments, knowing that the costs will be covered by insurance, thereby generating higher profits.

Such behavior can lead to increased healthcare system costs, as excessive use of medical services may become financially unsustainable and could limit access to essential services for other individuals.
The objective of this study is to assess whether the effect of health insurance on health- related behaviors in Romania aligns with findings reported in the existing literature. In other words, the study aims to explore a relatively under-researched area: moral hazard and the behaviors exhibited by individuals in Romanian public hospitals regarding the consumption of healthcare services.

III. MATERIALS AND METHODS

To achieve the objectives of this study, a quantitative research approach utilizing vignettes was employed. Vignettes allow for the simulation of real-world decision-making under conditions of insurance coverage, capturing nuanced behaviors that traditional surveys may overlook. As Finch (1987) defines them, vignettes are short, descriptive stories that outline hypothetical situations under specific conditions to which participants are invited to respond. This approach proves particularly useful in exploring sensitive topics that participants might otherwise find difficult to discuss openly.

Vignette methodologies have been increasingly adopted in healthcare research to assess decision-making under various scenarios, offering a robust way to capture nuanced patient behaviors that might not be evident through traditional survey methods. Vignettes are also recognized as an effective method for assessing clinical decision-making, particularly in healthcare contexts, where they provide insight into complex professionaljudgments.

To capitalize on the strengths of both experimental and traditional research methods while minimizing their limitations, they were integrated into a questionnaire-based survey (see Supplementary Materials). This hybrid approach allowed for the collection of nuanced data on healthcare decisions while ensuring broad accessibility and ease of response.

The questionnaire comprised three distinct sections. In the first section, participants who were employees of the public healthcare system were provided with an informed consent form detailing the study's procedures, the time commitment required, the risks and benefits of participation, the nature of the information requested, and their right to withdraw from the study at any time. These participants were selected because of their familiarity with the medical terminology presented in the vignettes. Participants were also assured that their responses would be confidential, their anonymity preserved, and that all personal data would be handled in compliance with European data protection regulations (GDPR). Those who responded to the survey verbally consented to participate, acknowledging their understanding of the study's terms and conditions. Following a review of the responses provided, no respondents were identified as failing to complete the vignettes; thus, no exclusions from the sample were necessary.

The second section focused on collecting socio-demographic information. Participants were required to respond to six closed-ended questions with predefined response optionsto ensure the consistency and comparability of data.

In the third section, respondents were presented with three distinct vignettes, each depicting a medical situation in narrative form. The vignettes were developed by the authors, drawing upon both the studies available in the

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

specialized literature and their personal experience, with three of the four authors actively working in the Romanian public healthcare system. These scenarios were carefully designed to simulate real-world health- care decision-making processes and were constructed based on both relevant literature and clinical expertise, particularly with respect to issues such as autonomy, responsibility, and clinical outcomes. The validity of vignette-based surveys depends heavily on the quality of the vignette design, including clarity, structure, and the methods used to present the vignette questions.

IV. RESULTS

Following the administration of the questionnaires, 303 valid responses were obtained for analysis.

Scenario 1 explored treatment options for a herniated disc, providing participants with a choice between less expensive treatments (such as physiotherapy or medication) and a more costly surgical intervention. The results reveal significant variations based on the participants' insurance status. Most respondents who opted for the more expensive surgical treatment were those covered by public health insurance, followed closely by those with private insurance. Figure 1 highlights the difference in treatment choices between insured and uninsured patients, illustrating the potential presence of moral hazard among insured individuals. Insured participants were more likely to select surgical intervention as an immediate solution, knowing they would not bear the financial burden. Conversely, uninsured participants were least likely to choose surgery, opting instead for more affordable alternatives such as medication and physiotherapy. This behavior suggests the presence of moral hazard to some extent, as insured individuals, aware that their health insurance would cover the costs, tended to choose the safer, faster, but more expensive treatment option.

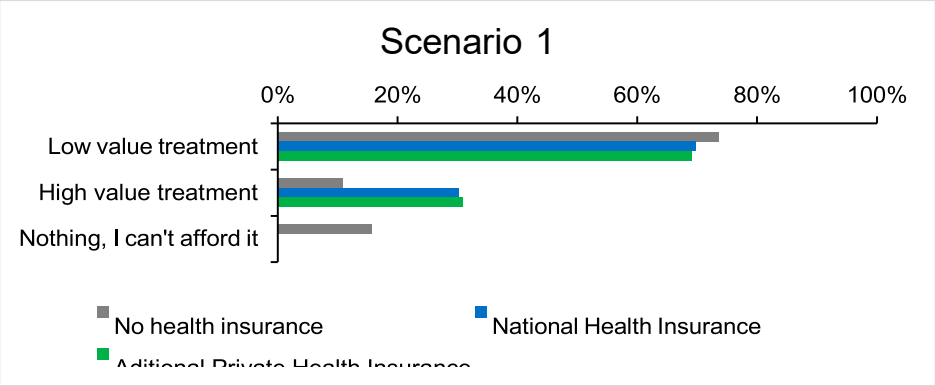

Figure 1. Selection of affordable vs. expensive treatment based on insurance type in Scenario 1.

On the other hand, a significant proportion of respondents—irrespective of insurance status (uninsured, publicly insured, or privately insured)—chose the combination of medication and physiotherapy. This decision does not necessarily imply the absence of moral hazard; rather, it may be influenced by personal factors such as fear of surgery, mistrust in the effectiveness of invasive treatments, or financial constraints, especially for uninsured individuals as shown in Figure 2. Furthermore, it may reflect a general preference for less invasive treatment options, even among insured individuals, who might choose to exhaust non-surgical avenues first. In this scenario, respondents' choices may have been influenced not only by cost but also by a range of other factors, which can vary between individuals depending on the status of their condition. It is important to emphasize that any choice not medically justified contributes to the manifestation of moral hazard.

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

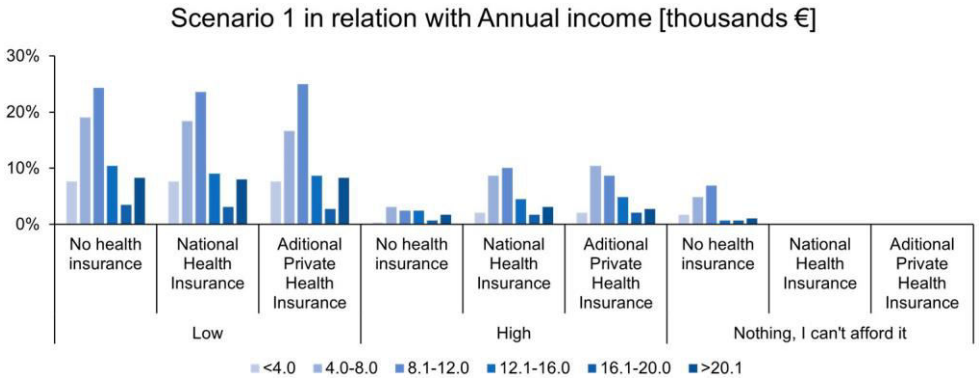

Figure 2. Results by annual income [thousands €].

Interestingly, 6% of respondents indicated that they would take steps to obtain public health insurance to avoid paying out-of-pocket for healthcare services. This indicates that uninsured individuals recognize the financial barriers to treatment and may view insurance as essential for accessing adequate care.

The proportion of respondents who expressed interest in seeking a second medical opinion was notably low, at only 2%. However, none of these individuals were uninsured,suggesting that patients with insurance are more likely to pursue additional consultations as they know that their insurance will cover the cost. The low rate of uninsured patients seeking second opinions suggests limited accessibility and perceived futility in additional consultations, reflecting deeper healthcare equity challenges. In contrast, uninsured patients were less inclined to consider this option, likely due to the increased financial burden ofout-of-pocket payments for a second opinion.

These findings imply that uninsured individuals may not fully explore all available medical options, potentially leading to suboptimal health outcomes. Addressing financialbarriers could improve equity in healthcare utilization and ensure that all patients can make informed decisions about their care.

Scenario 2 presented a hypothetical case involving the treatment of renal tumors following an MRI diagnosis. Respondents had to choose between standard chemotherapy (a less expensive option) and a more expensive treatment that involved combining chemotherapy with a new medication costing 15,000 RON per month. Figure 3 illustrates how uninsured patients predominantly opted for the less expensive chemotherapy, while insured patients preferred the more expensive combination therapy, highlighting the in- fluence of insurance on decision-making and moral hazard. Some uninsured respondents explicitly stated that they chose standard chemotherapy due to financial constraints, while insured individuals selected the full treatment, confident that they would not need to bear the costs themselves.

© 2024 IJMRSET | Volume 7, Issue 12, December 2024| DOI: 10.15680/IJMRSET.2024.0712169

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

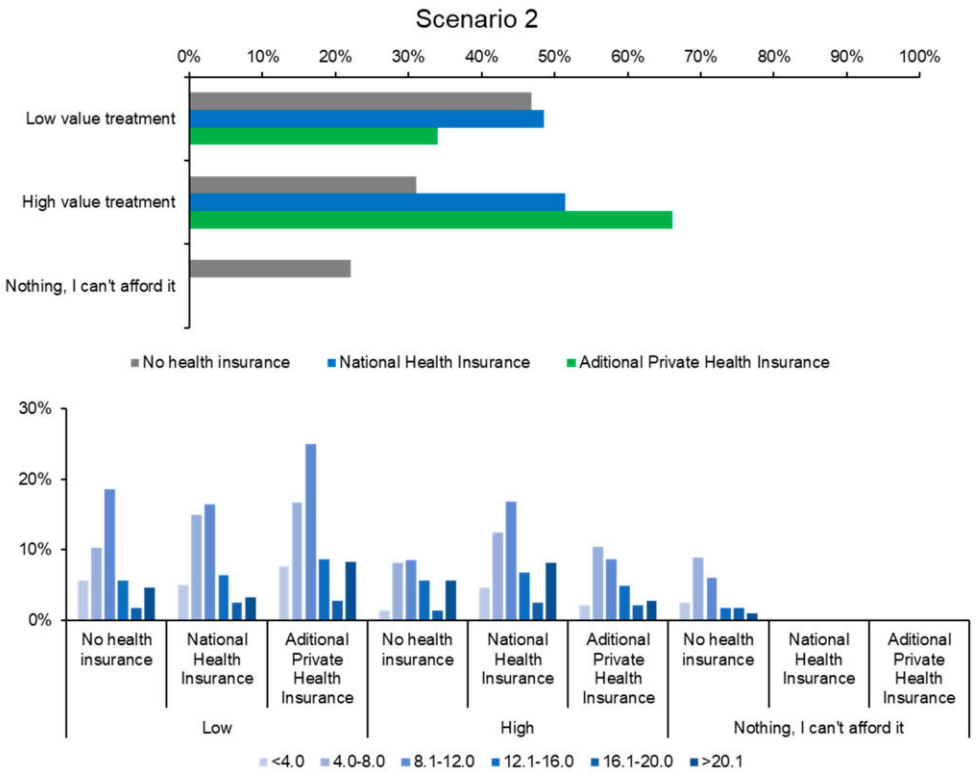

Figure 3. Selection of affordable vs. expensive treatment based on insurance type in Scenario 2.

Given the severity of the diagnosis, a small percentage of respondents chose to delaytreatment. Only 1% of privately insured and 2% of publicly insured participants indicated that they would postpone treatment, primarily to seek additional medical opinions. In contrast, 7% of uninsured respondents delayed treatment, citing financial limitations as the main reason for postponement.

V. CONCLUSIONS

To address these challenges, policymakers in Romania should consider several key actions. First, introducing targeted cost-sharing measures, such as co-payments or deductibles for elective treatments, could help reduce the overutilization of healthcare services among insured patients. This approach would discourage the unnecessary use of high-cost treatments, balancing service demand with cost containment. Additionally, implementing preventive care incentives could be instrumental in reducing ex-ante moral hazard. By encouraging patients to adopt healthier behaviors through reward programs or reduced insurance premiums, the need for reactive healthcare services would likely diminish.

Strengthening regulations on provider behavior is equally important in addressing health- care inefficiencies. By establishing clear guidelines for healthcare providers and conducting regular audits, the overprescription of unnecessary procedures and treatments—driven by provider-induced demand—can be mitigated, ultimately curbing rising healthcare costs.

By implementing these reforms, Romania's healthcare system could achieve a better balance between accessibility and sustainability, ensuring essential services remain availablewithout encouraging the excessive use of medical resources. Given the significant impact of moral hazard on the system's sustainability, it is imperative for policymakers to

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

prioritize the introduction of co-payment systems and to strengthen provider accountability to ensure efficient use of public resources.

REFERENCES

1. Einav, L.; Finkelstein, A. Moral Hazard in Health Insurance: What We Know and How We Know It. J. Eur. Econ. Assoc. **2018**, 16,957–982.
2. Arrow, K.J. Uncertainty and the Welfare Economics of Medical Care. Am. Econ. Rev. **1963**, 53, 941–973.
3. Nyman, J.A. The Theory of Demand for Health Insurance; Stanford University Press: Redwood City, CA, USA, 2003.
4. Anderson, G.F.; Frogner, B.K. Health spending in OECD countries: Obtaining value per dollar. Health Aff. **2008**, 27, 1718–1727.
5. Cohen, A. Asymmetric information and learning: Evidence from the automobile insurance market. Rev. Econ. Stat. **2005**, 87, 197–207.
6. Cutler, D.M.; Zeckhauser, R.J. The anatomy of health insurance. In Handbook of Health Economics; Elsevier: Amsterdam, The Netherlands, 2000; Volume 1, pp. 563–643.
7. Hooley, B.; Afriyie, D.O.; Fink, G.; Tediosi, F. Health insurance coverage in low-income and middle-income countries: Progress made to date and related changes in private and public health expenditure. BMJ Glob. Health **2022**, 7, e008722.
8. Torre-Enciso, M.I.; Barros, R.H. Operational risk management for insurers. Int. Bus. Res. **2013**, 6, 1.
9. Pauly, M.V. Overinsurance and public provision of insurance: The roles of moral hazard and adverse selection. In Uncertainty in Economics; Academic Press: Cambridge, MA, USA, 1978; pp. 307–331.
10. Hasan, M.Z.; Ahmed, M.W.; Mehdi, G.G.; Khan, J.A.M.; Islam, Z.; Chowdhury, M.E.; Ahmed, S. Factors affecting the health- care utilization from Shasthyo Suroksha Karmasuchi scheme among the below-poverty-line population in one subdistrict in Bangladesh: A cross sectional study. BMC Health Serv. Res. **2022**, 22, 885.
11. Dave, D.; Kaestner, R. Health insurance and ex ante moral hazard: Evidence from Medicare. Int. J. Health Care Financ. Econ.
12. **2009**,9, 367–390.
13. Finkelstein, A.; McKnight, R. What Did Medicare Do (and Was It Worth It)? Annu. Rev. Econ. **2005**, 1, 237–260.
14. Koohi Rostamkalaee, Z.; Jafari, M.; Gorji, H.A. A systematic review of strategies used for controlling consumer moral hazard inhealth systems. BMC Health Serv. Res. **2022**, 22, 1260.
15. Finkelstein, A.; Taubman, S.; Wright, B.; Bernstein, M.; Gruber, J.; Newhouse, J.P.; Allen, H.; Baicker, K.; Oregon Health Study Group. The Oregon Health Insurance Experiment: Evidence from the First Year. Q. J. Econ. **2012**, 127, 1057–1106.
16. Baicker, K.; Taubman, S.L.; Allen, H.L.; Bernstein, M.; Gruber, J.H.; Newhouse, J.P.; Schneider, E.C.; Wright, B.J.; Zaslavsky, A.M.; Finkelstein, A.N. The Oregon experiment—Effects of Medicaid on clinical outcomes. N. Engl. J. Med. **2013**, 368, 1713–1722.
17. Druică, E. Despre Hazardul (Moral) al Asigurărilor de Sănătate. Ce S¸ tim Despre România? Alianta Paccientilor. 2016. Available online: https://aliantapacientilor.ro/wp-content/uploads/2016/07/IS-Druica-30-iunie-2016.docx (accessed on 15 June 2022).
18. Aron-Dine, A.; Einav, L.; Finkelstein, A. The RAND Health Insurance Experiment, three decades later. J. Econ. Perspect. **2013**, 27,197–222.
19. Morris, S.; Devlin, N.; Parkin, D.; Spencer, A. Economic Analysis in Healthcare; John Wiley & Sons: Hoboken, NJ, USA, 2012.
20. Vlădescu, C. Sănătate Publică şi Management Sanitar; Cartea Universitară: Bucureşti, Romania, 2004; pp. 221–222.
21. Gaeta, M.; Campanella, F.; Capasso, L.; Schifino, G.M.; Gentile, L.; Banfi, G.; Pelissero, G.; Ricci, C. An overview of different health indicators used in the European Health Systems. J. Prev. Med. Hyg. **2017**, 58, E114–E120.
22. Onofrei, M.; Cigu, E.; Gavriluta Vatamanu, A.F.; Bostan, I.; Oprea, F. Effects of the COVID-19 Pandemic on the Budgetary Mechanism Established to Cover Public Health Expenditure. A Case Study of Romania. Int. J.

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 7.521| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Environ. Res. Public Health **2021**, 18, 1134.

23. Horodnic, A.V.; Williams, C.C.; Drugă, R.I.; Incaltarau, C. Informal Payments by Patients in Central and Eastern Europe during the COVID-19 Pandemic: An Institutional Perspective. Int. J. Environ. Res. Public Health **2021**, 18, 10914.
24. Jerant, A.; Fiscella, K.; Tancredi, D.J.; Franks, P. Health insurance is associated with preventive care but not personal health behaviors. J. Am. Board. Fam. Med. **2013**, 26, 759–767.
25. Hood, V.L.; Weinberger, S.E. High value, cost-conscious care: An international imperative. Eur. J. Intern. Med. **2012**, 23, 495–498.
26. Choonara, S.; Eyles, J. Out of control: Profit-seeking behaviour, unnecessary medical procedures and rising costs of private medical care in South Africa. BMJ Glob. Health **2016**, 1, e000013.
27. Renold, E. Using vignettes in qualitative research. Build. Res. Capacit. **2002**, 3, 3–5.
28. Finch, J. The vignette technique in survey research. Sociology **1987**, 21, 105–114.
29. Evans, S.C.; Roberts, M.C.; Keeley, J.W.; Blossom, J.B.; Amaro, C.M.; Garcia, A.M.; Stough, C.O.; Canter, K.S.; Robles, R.; Reed, G.M. Vignette methodologies for studying clinicians' decision-making: Validity, utility, and application in ICD-11 field studies.Int. J. Clin. Health Psychol. **2015**, 15, 160–170.
30. Sheringham, J.; Kuhn, I.; Burt, J. The use of experimental vignette studies to identify drivers of variations in the delivery of healthcare: A scoping review. BMC Med. Res. Methodol. **2021**, 21, 81.
31. Peabody, J.W.; Luck, J.; Glassman, P.; Jain, S.; Hansen, J.; Spell, M.; Lee, M. Measuring the quality of physician practice by using clinical vignettes: A prospective validation study. Ann. Intern. Med. **2004**, 141, 771–780.
32. Payton, K.S.E.; Gould, J.B. Vignette Research Methodology: An Essential Tool for Quality Improvement Collaboratives. Healthcare **2022**, 11, 7.
33. Veloski, J.; Tai, S.; Evans, A.S.; Nash, D.B. Clinical vignette-based surveys: A tool for assessing physician practice variation. Am. J.Med. Qual. **2005**, 20, 151–157.
34. Krosnick, J.A. Improving question design to maximize reliability and validity. In The Palgrave Handbook of Survey Research; Springer: Berlin/Heidelberg, Germany, 2018; pp. 95–101.
35. Lefever, S.; Dal, M.; Matthíasdóttir, Á. Online data collection in academic research: Advantages and limitations. Br. J. Educ. Technol. **2007**, 38, 574–582.

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH

IN SCIENCE, ENGINEERING AND TECHNOLOGY

| Mobile No: +91-6381907438 | Whatsapp: +91-6381907438 | ijmrset@gmail.com |

www.ijmrset.com