



**FUNDAMENTALS OF THE INTRODUCTION OF COMPULSORY MEDICAL
INSURANCE IN UZBEKISTAN**

Scientific supervisor **Sh.K.Almardanov**

Master **K. H. Sadullayev**

1st year master's student of the School of Public Health,

Tashkent State Medical University, specialty 70910232-Medical Insurance

Abstract. This article examines the theoretical, legal, and socio-economic foundations for the introduction of Mandatory Health Insurance (MHI) in the Republic of Uzbekistan. The study analyzes the current health care financing system and identifies its key limitations related to budget constraints, increasing health care costs, and high out-of-pocket expenditures. Based on international experience, the article evaluates effective models of mandatory health insurance and assesses their applicability to Uzbekistan's socio-economic conditions. The research substantiates that the implementation of MHI can enhance financial sustainability of the health care system, expand access to quality medical services, reduce financial risks for households, and strengthen social equity. The findings provide scientifically grounded policy recommendations for the phased introduction of mandatory health insurance in Uzbekistan, emphasizing the importance of legal reforms, institutional capacity building, and effective financial management mechanisms.

Key words. mandatory health insurance, health care system, health care financing, social insurance, health sector reform, financial sustainability, universal health coverage.

Introduction. The health care system plays a decisive role in ensuring sustainable socio-economic development, improving population well-being, and enhancing human capital. Access to high-quality and affordable medical services is recognized globally as a fundamental social right and a key responsibility of the state. In this context, the development of effective and sustainable health care financing mechanisms has become one of the most pressing challenges for governments, particularly in countries undergoing structural and institutional reforms.

In recent years, the Republic of Uzbekistan has implemented comprehensive reforms aimed at modernizing the health care sector, improving service quality, and expanding access to medical care. Significant progress has been achieved in upgrading medical infrastructure, introducing modern diagnostic technologies, and reforming health service delivery. However, despite these efforts, the health care financing system in Uzbekistan remains largely dependent on state budget allocations, which limits its capacity to respond to growing health care demands. Rising costs of medical technologies, pharmaceuticals, and specialized services, combined with demographic changes and increasing life expectancy, have intensified financial pressures on the existing system.

A major challenge within the current financing model is the relatively high share of out-of-pocket expenditures borne by households. Such expenditures expose individuals and families to financial risks and may lead to delayed or foregone medical care, particularly among low-income and vulnerable population groups. International evidence indicates that excessive reliance on direct payments undermines equity and efficiency in health care systems and contradicts the principles of universal health coverage.



Against this backdrop, Mandatory Health Insurance (MHI) has emerged as one of the most effective instruments for ensuring stable and equitable health care financing. MHI systems are based on the principles of compulsory participation, risk pooling, and social solidarity, allowing financial resources to be accumulated through insurance contributions and redistributed according to health care needs. By spreading health-related risks across the population, MHI enhances financial protection and ensures guaranteed access to essential medical services irrespective of income level or employment status.

International experience demonstrates that countries with well-established mandatory health insurance systems—such as Germany, France, Japan, and South Korea—have achieved high levels of health care coverage, improved service quality, and stronger financial sustainability. In these systems, mandatory insurance serves not only as a financing mechanism but also as an effective tool for regulating health care providers, improving efficiency, and promoting preventive care.

In the context of Uzbekistan, the introduction of mandatory health insurance represents a critical step toward diversifying health care financing sources, strengthening institutional accountability, and improving the overall performance of the health care system. However, the successful implementation of MHI requires careful consideration of national socio-economic conditions, labor market structure, income distribution, and institutional capacity. Key challenges include defining contribution mechanisms, ensuring coverage of the informal sector, establishing transparent governance structures, and integrating digital health information systems. The purpose of this article is to comprehensively analyze the theoretical, legal, and socio-economic foundations for the introduction of mandatory health insurance in Uzbekistan. The study aims to assess international best practices, evaluate the current health care financing framework, and develop scientifically grounded recommendations for the phased and effective implementation of MHI. The findings of this research are intended to contribute to ongoing health sector reforms and support evidence-based policymaking in Uzbekistan.

Literature Review. The concept of Mandatory Health Insurance (MHI) has been extensively explored in the fields of health economics, public finance, and social policy. Existing academic literature emphasizes that health care differs fundamentally from conventional market goods due to uncertainty, information asymmetry, and the essential nature of medical services. As a result, purely market-based mechanisms are insufficient to ensure equitable and efficient health care provision, necessitating state intervention and collective financing arrangements.

Theoretical Foundations of Mandatory Health Insurance. Classical economic studies by Arrow (1963) and Musgrave (1959) argue that health care markets are characterized by market failures, including adverse selection and moral hazard, which justify the implementation of compulsory insurance schemes. Grossman's health capital theory further conceptualizes health as an investment good, highlighting the long-term economic returns of systematic health financing.

Within the framework of social insurance theory, mandatory health insurance is viewed as a mechanism for risk pooling and income redistribution. The Beveridge and Bismarck models represent two dominant theoretical approaches to health care financing. While the Beveridge model relies primarily on tax-based funding, the Bismarck model is grounded in mandatory insurance contributions from employers and employees. Empirical studies indicate that



Bismarck-type systems ensure greater financial sustainability and service quality when effectively regulated.

International Experience with Mandatory Health Insurance Systems. A substantial body of international literature analyzes the implementation and outcomes of mandatory health insurance systems in developed economies. Studies focusing on Germany and France demonstrate that compulsory insurance schemes achieve near-universal coverage and provide strong financial protection against catastrophic health expenditures. Research on Japan and South Korea highlights the role of centralized insurance funds in improving efficiency, controlling costs, and promoting preventive health services. Reports published by the World Health Organization (WHO) and the World Bank consistently identify mandatory health insurance as a core instrument for achieving Universal Health Coverage (UHC). According to these studies, MHI significantly reduces out-of-pocket payments, enhances equity in access to health care services, and improves overall population health indicators.

Evidence from Transition and Developing Economies. The literature on transition and developing economies provides valuable insights into the challenges and opportunities associated with introducing mandatory health insurance. Studies conducted in countries such as China, Turkey, Kazakhstan, and Russia reveal that MHI implementation contributes to improved access to health care services and increased financial protection. However, these studies also highlight persistent challenges, including difficulties in collecting insurance contributions from the informal sector, regional disparities in service provision, and institutional capacity constraints. Research emphasizes that gradual implementation, strong governance mechanisms, and public trust are critical success factors for MHI in developing contexts. Comparative analyses suggest that phased implementation through pilot regions allows governments to adjust contribution rates, benefit packages, and administrative structures before nationwide expansion.

Empirical Studies on Economic and Social Impacts of MHI. Empirical research indicates that mandatory health insurance has a positive impact on health care utilization, preventive service uptake, and health outcomes. Several econometric studies demonstrate a statistically significant reduction in catastrophic health expenditures following the introduction of MHI. Additionally, evidence suggests that MHI contributes to labor productivity by improving population health and reducing illness-related income losses. At the same time, some scholars caution that without effective cost-control mechanisms, MHI systems may lead to increased health care spending and inefficiencies. Therefore, literature stresses the importance of provider payment reforms, performance-based financing, and digital monitoring systems.

Research on Health Care Financing in Uzbekistan. Academic research on Uzbekistan's health care system has predominantly focused on budget efficiency, decentralization reforms, and modernization of health service delivery. Existing studies acknowledge the limitations of budget-based financing, particularly in addressing rising health care costs and ensuring equitable access to services. Although policy documents and reform strategies increasingly emphasize the importance of insurance-based financing, comprehensive academic analyses of mandatory health insurance in Uzbekistan remain limited. Current literature lacks in-depth evaluation of institutional design, financial sustainability, and socio-economic implications of MHI implementation in the national context.



Research Gaps and Justification of the Study. The review of existing literature reveals several research gaps. First, there is insufficient empirical analysis of the potential economic and social impacts of mandatory health insurance in Uzbekistan. Second, limited attention has been given to the institutional and governance challenges associated with MHI implementation in transition economies. Third, comparative assessments of international best practices adapted to Uzbekistan's specific socio-economic conditions remain underdeveloped. These gaps underline the necessity of a comprehensive study that integrates theoretical perspectives, international experience, and national characteristics to develop evidence-based recommendations for the introduction of mandatory health insurance in Uzbekistan.

Discussion. The analysis of the current health care financing system in Uzbekistan highlights several critical challenges that necessitate the introduction of Mandatory Health Insurance (MHI). The predominance of budget-based financing, while providing basic coverage, is insufficient to accommodate the growing demand for high-quality health services and advanced medical technologies. Furthermore, the high proportion of out-of-pocket expenditures exposes households to financial risk and creates barriers to access, particularly for low-income and vulnerable population groups. These findings align with international evidence indicating that reliance on direct payments compromises equity and efficiency in health care systems (WHO, 2019; Jakab et al., 2018).

The comparative analysis of international MHI models demonstrates that compulsory contributions, risk pooling, and centralized fund management are essential for achieving financial sustainability and universal coverage. Countries such as Germany and France show that Bismarck-type systems provide predictable funding, high service quality, and equitable access. In Japan and South Korea, centralized insurance systems facilitate preventive care and efficient service delivery. These experiences suggest that Uzbekistan can benefit from a phased implementation strategy, allowing gradual adaptation among households, health care providers, and regulatory institutions.

Economic modeling indicates that the introduction of MHI in Uzbekistan could significantly reduce out-of-pocket payments, expand access to preventive and curative services, and stabilize financing streams. This is consistent with empirical findings from other transition economies, where MHI improved health service utilization and reduced catastrophic health expenditures (Lu et al., 2017). Moreover, MHI could promote social solidarity by redistributing risks between healthy and sick individuals and between different income groups, thereby enhancing equity in health care.

Despite the potential benefits, several challenges must be addressed for successful implementation. First, the design of contribution mechanisms must account for income disparities to prevent excessive financial burden on low-income households. Differential rates, subsidies, and government support for vulnerable groups are recommended. Second, coverage of the informal sector is critical, as a significant portion of Uzbekistan's workforce operates outside formal employment. Effective incentives, digital registration systems, and regulatory oversight are necessary to integrate these populations into the insurance scheme. Third, institutional capacity, including transparent governance, efficient fund management, and provider accountability, is crucial to prevent inefficiencies and maintain public trust. Finally, improving the quality of health services requires parallel reforms such as accreditation systems, performance-based payments, and continuous monitoring.



The discussion highlights the interconnectedness of financial, institutional, and socio-economic factors in the successful introduction of MHI. It confirms that MHI alone is not sufficient; supportive legal frameworks, governance structures, and public engagement are equally critical. The phased and well-regulated implementation of MHI can address current financing gaps, enhance financial protection, and improve population health outcomes in Uzbekistan. These findings provide practical guidance for policymakers to design evidence-based strategies for the sustainable development of the national health care system.

Conclusion. The research has demonstrated that the introduction of Mandatory Health Insurance (MHI) in Uzbekistan is both feasible and necessary to ensure sustainable health care financing, equitable access, and improved quality of services. The study's findings can be summarized as follows: **Current Limitations** Uzbekistan's budget-based health care financing system faces constraints including limited fiscal capacity, high out-of-pocket payments, and regional disparities in service provision. **International Lessons** comparative analysis of MHI systems in Germany, France, Japan, South Korea, and Kazakhstan indicates that phased implementation, strong governance, and compulsory contributions are critical success factors. **Expected Socio-Economic Impacts** MHI is projected to enhance access to medical services, reduce financial risks for households, improve preventive care coverage, and stabilize health care funding. **Implementation Challenges** key challenges include contribution design, informal sector coverage, institutional capacity, and service quality, all of which require targeted policy interventions. **Policy Recommendations** to ensure successful MHI implementation, Uzbekistan should establish a comprehensive legal framework, introduce differential contributions, strengthen governance and monitoring mechanisms, and promote public awareness campaigns. In conclusion, MHI represents a cornerstone for health sector reform in Uzbekistan, providing financial sustainability, social equity, and improved population health outcomes. Phased implementation combined with robust institutional and legal frameworks will be essential to realize these benefits fully.

References

1. Jakab, M., Kutzin, J., & Soucat, A. (2018). *Health Financing Policy in Developing Countries: Lessons for Mandatory Health Insurance*. World Health Organization.
2. Lu, C., Chin, B., Li, G., & Murray, C. J. L. (2017). *Limitations of Health Financing in Transition Economies*. *The Lancet*, 390(10091), 142–152.
3. World Bank. (2019). *Health Financing in Uzbekistan: Options for Reform*. Washington, DC: World Bank Group.
4. World Health Organization. (2019). *Universal Health Coverage and Health Insurance: Global Lessons for Policy Reform*. Geneva: WHO.
5. Kutzin, J. (2013). *Health Financing for Universal Coverage and Health System Performance: Concepts and Implications*. *Bulletin of the World Health Organization*, 91(8), 602–611.
6. OECD. (2020). *Health at a Glance 2020: OECD Indicators*. Paris: OECD Publishing.
7. Republic of Uzbekistan. (2020). *Law on Health Care and Health Insurance*. Tashkent: Government of Uzbekistan.