

Challenge of Internet Public Medical System and Proposal for Fiscal Policy in Post-pandemic Era

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Abstract: The rapid development of information technology and the gradual recovery of government financial situation in the post-pandemic era have brought about a profound transformation in the public medical sector, in order to better combine online and offline medical treatment together for full medical attention. This paper centers on the analysis of advantages and significance of the Internet public medical system, relevant opportunities and challenges, and suggestions and outlook for fiscal policies.

Keywords: Post-pandemic era, Internet public medical system, Fiscal policy.

1. Introduction

The outbreak of COVID-19 exerted a profound and extensive influence on individuals and national economy. For citizens, they suffered employment difficulty and income instability; for national economy, the public financial pressure kept mounting because a big input of resources was essential against the pandemic and people's livelihood and economic stability were also required to be ensured. The pandemic struck many industries, and thus the economic slowdown and even downturn emerged during this period. With the pandemic under control, however, we have entered the post-pandemic era, when we have witnessed the rapid rise of new industries and business models as well as a profound transformation in the medical sector due to booming information technology. The Internet public medical system, as a newly developing medical model, not only provides the public with more convenient and efficient access to medical service, but plays a significant role in the post-pandemic era. With the growing demands for healthcare in society, it is of vital practical importance to deeply study the fiscal policies enjoyed by the Internet public medical system, a supplement to offline medical treatment. This paper is aimed at thoroughly analyzing the current situation and challenges faced by the Internet public medical system in terms of fiscal policy and the role of relevant policy support. More specifically, the article explores the role of fiscal policy in promoting the development of the Internet public medical system based on policy analysis and reveals potential difficulties and obstacles, which could provide a valuable reference for the promotion of healthy system development.

2. Literature Review

The post-pandemic era has triggered the development of the Internet medical system, and online medical treatment has been flourishing with broad prospects around the world (Hantian Sheng, 2024). The business scope of the Internet medical treatment ranges from knowledge popularization to appointment register, online diagnosis and treatment, pharmaceutical e-commerce, medical insurance, etc. Statistics show that there were 363 million users in China's Internet medical system by December 2023, with an increase by 64.66 million compared with that in December 2021.

Different countries and regions have adopted distinctive fiscal policies according to features of medical systems and development needs, to boost the development of Internet medical treatment. For instance, *Affordable Care Act*, which was issued in the United States to reduce medical insurance premiums and provide better medical service for the average citizen, expanded the coverage of medical insurance (Barack Obama, 2016). The Chinese government also actively advanced the construction of the Internet public medical system by adopting a series of fiscal policies and investing more in Internet construction (Guo Yi et al., 2024). The development of the Internet public medical system strongly supplements medical service. For example, the sharing of medical resources (Barkha Kakkar; Prashant Johri, 2024) could help achieve optimal allocation, promote medical equity (Liu Hu; Liu Yuxuan, 2021) and improve medical efficiency. Meanwhile, this system could alleviate the pressure in medical service and enhance its coverage and accessibility. Besides, some policies might have been facing possible issues in the course of implementation such as difficulty in execution and performance evaluation (Ataharul Chowdhury; Gordon Gow, 2024), which needs further in-depth research and discussion.

3. Significance of Internet Public Medical System in Post-pandemic Era

3.1. Improvement in Medical Accessibility

During COVID-19, the Internet public medical system played an important role in offering patients service including online inquiry and medicine delivery, to help them out of time and space constraints and realize better allocation of medical resources. In the post-pandemic era, the system construction will continue to serve people's health. The public medical platform could break through geographical restrictions of local medical service by means of remote diagnosis and treatment technologies, which allow specialists to diagnose diseases and provide treatment suggestions online and patients to enjoy more comprehensive medical service. In addition, public medical technologies enable doctors to keep up with medical advances worldwide so that they could provide the latest diagnosis and treatment plans. The provision of service will greatly help enhance the accessibility

of medical resources, provide patients with more flexible and convenient healthcare, and optimize allocation of medical resources.

3.2. Advancement of Innovation in Medical Model

The development of Internet medical technologies drives the progress in medical technologies and innovates medical models. In the future, the Internet public medical platform could realize collaborative diagnosis among doctors and sharing of medical resources. Besides, by means of the AI-based treatment assistance system, doctors are able to propose more scientific diagnosis and treatment plans while avoiding misdiagnosis and delay treatment due to human factors, to ultimately improve medical quality.

3.3. Promotion of Development of Big Data in Healthcare

Mass medical data was assembled during COVID-19, as an effective tool for epidemic prevention and control as well as improvement in treatment plans and preventative care. Through data collection and analysis, the Internet public medical platform could work on the optimization of diagnosis and treatment, drug research and development, treatment plan, etc., thus helping the further development and popularization of medical science. Medical institutions could also increase their investment in and application of information technology, with the overall medical service more intelligent.

3.4. Cultivation of Public Health Awareness

The public health awareness could be effectively raised through the Internet public medical system. By means of scientific treatment recommendations and health consultations, the public further understand individual health risks and healthcare methods. This proves the system's dual mission of medical treatment and health protection, to promote the popularization of health education and arouse people's enthusiasm for engagement and self-management. In this way, the public could improve health and strengthen confidence in scientific anti-epidemic measures and medical treatment.

4. Challenge of Internet Public Medical System in Post-pandemic Era

4.1. Lack of Unified Technical Standards

Compatibility issues might exist due to non-uniform technical standards and specifications adopted in different Internet medical platforms and systems, resulting in difficulties in data exchange and sharing as well as circulation and integration of medical information. Ultimately, there is a chance patient information across different platforms is incoherent and that cooperation costs and difficulties among medical and research institutions increase, to the detriment of the quality and efficiency of service.

4.2. High Risk of Data Security

Internet healthcare involves a large number of patients' private information. Mass sensitive medical information is put at risk of hacking and leakage when being transmitted and stored on the Internet, which might violate patient privacy. So how to safeguard data security is an important challenge. If data security cannot be handled effectively, the public would perform quite differently in acceptance with a sense of

misgiving about the effect and safety of Internet healthcare, whose widespread application would thus be hindered.

4.3. Difficulty in Regulatory Control

Virtual and transregional Internet medical treatment makes it difficult to fully apply traditional regulatory methods, causing blind spots and loopholes. It might be tricky to detect and stop some nonstandard medical behaviors in time, and the medical quality and patient rights would thus be affected. Therefore, with the rapid development of Internet medical treatment, regulatory authorities are required to continuously strengthen supervision and establish resultful supervision systems for the quality and safety of medical service, so that the increased difficulty in regulatory control can be solved.

4.4. Instability in Investment

The government mainly invested more funds in the Internet public medical system during COVID-19. In the post-pandemic era, however, there is a large fluctuation in investment because all industries are in recovery, making it a challenge to decide the input of investment. This situation also influences the continuous growth and improvement in the Internet public medical system, as its establishment requires significant investment in aspects including IT infrastructure, healthcare software and hardware, and personnel training. Unstable investment might lead to problems such as a slowdown in technology development and a lack of infrastructure construction, further restricting the enhancement of service ability. So, cost reduction with efficiency improved will become one of the keys to the sustainable development of the medical service system.

5. Proposal for Fiscal Policy on Internet Public Medical System in Post-pandemic Era

5.1. Provision of Special Subsidy & Funds

Subsidies for research and operation should be provided aimed at Internet medical enterprises and institutions as an incentive to enhance technical innovation and business development. Besides, special funds for regulation should be set up to help build professional regulatory teams and purchase advanced regulatory equipment and technology, with the aim of enhancing regulatory capacity.

5.2. Provision of Incentive Policy including Tax Incentive

For enterprises which actively engage in the construction of the Internet public medical system, tax credit should be granted for a period of time to help reduce their operating costs; for those with outstanding performance in data security, privacy protection or system innovation, financial incentives should be granted to set the industry benchmark. On the contrary, severe financial penalties, including fines, should be imposed on those who violate relevant regulations with the risk of data security thus triggered.

5.3. Stability in Investment

Firstly, it is necessary to establish a long-term budgetary mechanism, with the investment in the Internet public medical system incorporated into the government's annual budget and ensured to increase steadily. Secondly, special bonds can be issued for the construction of the system to raise

long-term stable funds. Thirdly, social capital is encouraged to be invested in the Internet public medical sector by means of financial discount and risk compensation, to broaden sources of capital. Moreover, the government could lead the establishment of Internet public medical industry fund to attract various kinds of funds for industry development.

5.4. Policy Formulation Consistent with National Conditions and Reality for Countries at Different Development Stages

For countries with a high degree of Internet medical development, regulations and policies can be further improved on an ongoing basis, and Internet healthcare's service standard and responsibility definition can be clarified to protect patient rights. For sharing and mutual-recognition of medical data, there is a need to increase investment in the research and development of Internet medical technologies, drive the development of advanced technologies such as AI-aided diagnosis and remote surgery, and establish a unified online medical information platform.

For countries who are getting started in Internet healthcare, the priority is to attract Internet medical enterprises to the platform by granting tax incentives so that corporate tax burden can be eased. Meanwhile, the government should encourage an increase in research investment and innovation in enterprises and develop a mechanism for cultivating talents in Internet medical treatment with more investment input, so that such interdisciplinary talents could master both medical knowledge and information technology capability, which is beneficial to future development. In addition, it is essential to carry out popularization of Internet medical treatment for enhancing people's cognition and acceptance of online healthcare. The focus of education is on encouragement to choose online inquiry by highlighting the coverage and payment support of medical insurance for online treatment. In this way, online and offline medical treatment could be effectively combined to perfect the medical system in the post-pandemic era.

6. Conclusion

This study analyzes fiscal policies on the Internet public medical system in the context of post-pandemic era, with relevant proposals presented for national construction at different stages, and significance and challenges of the development of the Internet public medical system. In the future, it is necessary to further strengthen policy research and practices and continuously optimize fiscal policies to advance the healthy development of the Internet public medical system.

Meanwhile, limitations of this study include research scope and data collection. So, there is a need to further explore research perspectives and methods, so as to put forward more scientific and comprehensive policy suggestions and theories for the system development. It is hoped that this study could provide a useful reference for the development of Internet public medical system and contribute to the improvement in the quality of medical service and protection of public health.

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