



Research on the Path and Strategy for Integrated Development of Rural Revitalization and Healthcare

Zhidong Zhang^{1, a}, Lingxi Zhang^{2, b}, Xingchen Tang^{1, c}, Xinjie Fang^{1, d},
Qianhan Wang^{2*}

¹Bozhou University, Pharmaceutical Analysis, School of Traditional Chinese Medicine,
Bozhou Anhui, 236800, China

²Hubei University of Chinese Medicine, Health Services and Management, School of Physical
Education and Health, Hubei Wuhan, 430065, China

^a2040434824@qq.com; ^b2194735868@qq.com;

^c2818177343@qq.com; ^d2045527707@qq.com; *1620783901@qq.com

Zhang Zhidong and Zhang Lingxi contributed equally and are co-first authors.

Abstract. With the rapid development of China's socio-economy, the rural revitalization strategy has become an essential component of national development. However, the distribution of health and medical resources in rural areas is significantly insufficient, severely affecting the health level and quality of life of rural residents and becoming a crucial factor restricting rural revitalization. Therefore, exploring effective paths and strategies for the integrated development of rural revitalization and health care is of great significance for promoting comprehensive rural development and improving residents' health levels. This study employed methods such as literature review, field research, and in-depth interviews to analyze the main problems and challenges currently faced by rural health care. By comparing successful cases of integrated development of rural revitalization and health care in China, effective strategies and paths were distilled. Additionally, this research applied the SWOT analysis method to assess the strengths, weaknesses, opportunities, and threats of implementing integrated development strategies of health care in the rural context of China. This study aims to provide scientific and reasonable suggestions for policymakers through researching the paths and strategies of integrated development of rural revitalization and health care. It seeks to promote the effective integration and optimal allocation of rural health care resources, improve the level of medical services and residents' health in rural areas, and offer robust support for the implementation of the rural revitalization strategy. The study shows that achieving integrated development of rural revitalization and health care requires adopting diversified strategies, including but not limited to strengthening infrastructure construction, optimizing medical resource allocation, promoting medical technology and informatization construction, increasing policy support and financial investment, and enhancing rural medical personnel training. Additionally, encouraging social capital participation and promoting the development of public-private partnership (PPP) models are also effective ways to improve the level of rural health care services. Through

the implementation of these strategies, the in-depth development of the rural revitalization strategy can be effectively promoted, realizing the comprehensive improvement of rural socio-economy and health care services.

Keywords: Rural Revitalization; Health Care Integration; Paths and Strategies; Medical Resource Optimization; Information Technology Application

1 Introduction

1.1 Research Background

As the development gap between urban and rural areas becomes increasingly significant, the strategy of rural revitalization has become an important topic for national development. Health care, as an important indicator of people's well-being and social progress, is one of the key elements in achieving rural revitalization. However, compared to urban areas, rural areas still face severe challenges in terms of medical resource allocation, the spread of health education, and more. These challenges include shortages of human resources, insufficient funding, issues with the quality and accessibility of medical services, inadequate health insurance coverage and protection levels, a lack of health knowledge dissemination, and policy and management challenges, among a series of serious issues.[1]The proposal of the rural revitalization strategy aims to promote comprehensive progress in the rural economy, culture, society, and ecology, achieving coordinated development between rural and urban areas. In this historical process, health care, as an important component of rural revitalization, has become increasingly significant. With the deep implementation of the rural revitalization strategy by the state, the economic level of rural areas has been significantly improved, and the quality of life for farmers has also been significantly enhanced. However, the issue of rural healthcare levels lagging behind urban areas has been persistent for a long time, not only affecting the health level and quality of life of farmers but also becoming a significant factor restricting the comprehensive revitalization of rural areas. Against this backdrop, exploring effective paths and strategies for the integrated development of rural revitalization and healthcare is not only of great significance for narrowing the gap between urban and rural development and improving the quality of life of rural residents but also an inevitable requirement for promoting comprehensive social progress.

1.2 Literature Review

Numerous studies have indicated that the Chinese rural healthcare system is facing a series of challenges, including underdeveloped basic medical facilities, a shortage of medical professionals, and poor accessibility to medical services.[2] These challenges not only affect the health levels of rural residents but also become a bottleneck in the implementation of the rural revitalization strategy. With the advancement of the rural revitalization strategy, an increasing number of studies have started to focus on the deep

integration of health care services with rural development. Research shows that improving the level of rural medical services is of great significance for enhancing the quality of life of rural residents and promoting socio-economic development. Effective strategies, such as optimizing the allocation of medical resources and advancing the innovation of medical service models, can significantly improve the coverage and efficiency of rural medical services. There is also a growing body of research on policies and strategies for rural healthcare reform. Some studies focus on analyzing the effects and shortcomings of existing policies, while others propose specific reform suggestions, such as strengthening the construction of rural basic medical infrastructure and improving the rural medical insurance system. These studies are of great value in guiding practice and provide theoretical support for the formulation of more effective policies.

1.3 Research Methods and Objectives

This study aims to deeply analyze the current status of rural healthcare, identify existing problems and challenges, and on this basis, explore how to achieve effective integration of rural revitalization and healthcare services through multi-dimensional measures such as policy support, technological innovation, and model exploration. By conducting comprehensive analysis and field research, this paper intends to propose a series of specific, feasible strategies and suggestions, in order to provide theoretical guidance and practical references for government departments, social organizations, and related stakeholders in advancing the rural revitalization strategy, especially in strengthening rural health and medical services. This will not only promote the comprehensive development of rural economy and society but also contribute to the construction of a global health community.

2 Analysis of the Current Status of Integrated Development of Rural Revitalization and Healthcare

2.1 The Intrinsic Connection between Rural Revitalization and Integrated Development of Healthcare

The intrinsic connection between rural revitalization and the integrated development of healthcare is reflected in the fact that health is both the foundation and prerequisite for rural revitalization. Rural revitalization is a long-term process, during which it is crucial to guard against the serious issues of falling into poverty due to illness or returning to poverty because of illness.[3] Rural healthcare services are not only a crucial component of rural revitalization but also ensure that farmers are physically healthy, enabling them to better participate in social and economic activities. This drives the development of the rural economy and societal progress, thereby providing solid human resource support for rural revitalization. In the process of rural revitalization, deepening the integration of rural development with healthcare and improving primary healthcare ser-

vices can meet the growing health needs of farmers, promote the comprehensive development of rural residents' physical and mental health, and further advance the rural revitalization process. Moreover, the integrated development of health and healthcare also promotes equitable resource distribution, improves the quality of life and happiness of rural residents, and further propels the implementation of the rural revitalization strategy.

2.2 The Current Status and Challenges of Integrated Health and Medical Development in Rural Areas

In recent years, the state has introduced a series of policies to promote the development of rural revitalization and healthcare. For example, by implementing the construction of closely-integrated medical communities within counties, a model has been established where minor and chronic diseases are addressed at the primary level, and emergencies or serious illnesses are referred to hospitals.[4]With the improvement of primary healthcare service capabilities, the medical service conditions for rural residents have been enhanced to some extent, and some primary healthcare institutions have achieved certain results in healthcare services.[5]Additionally, with the widespread dissemination of health knowledge and the increased health awareness among rural residents, farmers' demand for healthcare services is also growing. They are gradually beginning to focus on health management, leading to a rising demand for primary healthcare services.

However, although policies have promoted development in some rural areas, the distribution of high-quality medical resources remains uneven, and disparities and inequalities in the provision of health insurance and healthcare services still exist in some provinces.[6] The lack of necessary equipment and talent can also lead to substandard levels of medical service. These factors limit farmers' opportunities to access high-quality medical services. In some rural areas, medical services may suffer from issues such as inaccurate diagnoses and unscientific treatment methods, affecting farmers' trust in and satisfaction with primary healthcare services. Additionally, due to reasons like excessive workload or unreasonable professional division, some primary healthcare workers may not be able to provide efficient medical services.

The level of medical informatization in rural areas is relatively low, lacking modern information systems and telemedicine technology. This not only affects the efficiency and quality of medical services but also limits the sharing and penetration of high-quality medical resources. In some impoverished areas, economic pressures may prevent governments from allocating sufficient funds to support the development of rural healthcare. This can lead to underfunded medical services in rural areas, restricting their further development and improvement.

Based on the rural revitalization and healthcare policies mentioned above, list Table 1, including their issuance years, main bodies, document names, and main contents:

Table 1. Policy Analysis Table

Field	Policy Name	Year of Issuance	Issuer	Document Name	Main Content
Rural Re- vitaliza- tion	Rural Revi- talization Strategic Plan (2018- 2022)	2018	Central Com- mittee of the Communist Party of China and the State Council	“Rural Revitali- zation Strategic Plan (2018- 2022)”	The strategy and main objectives for rural revitaliza- tion have been es- tablished, encom- passing aspects such as flourishing industries, livable ecology, civilized rural culture, ef- fective govern- ance, and prosper- ous living stand- ards.
Rural Re- vitaliza- tion	Opinions on Implement- ing the Ru- ral Revitali- zation Strat- egy	2017	Central Com- mittee of the Communist Party of China and the State Council	"Opinions on the Im- plemen- tation of the Rural Re- vitaliza- tion Strat- egy"	It proposes the general require- ments and key tasks for promot- ing the compre- hensive revitaliza- tion of rural areas, which are the foundation of the rural revitalization policy.
Medical Care	Healthy China Initia- tive (2019- 2030)	2019	Central Com- mittee of the Communist Party of China and the State Council	"Healthy China Ac- tion (2019- 2030)"	Aimed at compre- hensively improv- ing the national health level, with special emphasis on improving rural medical and health services.
Medical Care	Opinions on Deepening the Reform of the Medi- cal and Health Sys- tem	2016	Central Com- mittee of the Communist Party of China and the State Council	"Opinions on Deep- ening the Reform of the Medi- cal and Healthcare System"	Advance the coord- inated reform of medical services, medical insurance, and pharmaceuticals, with special emphasis on im- proving medical

					services in rural areas and extending medical insurance policy coverage.
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This table concisely summarizes the key information of relevant policies, helping to understand the background, main bodies, and core issues each policy aims to address. From the perspective of issuance years, these policies were introduced successively from 2016 to 2019, showing the Chinese government's continuous policy focus and support in the fields of rural revitalization and healthcare. Without exception, these policy documents were jointly issued by the Central Committee of the Communist Party of China and the State Council, reflecting the national level's emphasis on these issues. The policy documents have different focuses in content; rural revitalization policies pay more attention to comprehensive issues such as economic development, social governance, and cultural construction, while healthcare policies are more focused on improving public health levels, reforming the healthcare system, and ensuring medical services. Although their focus differs, their common goal is to improve the quality of life and health levels of residents in rural areas. The implementation of these policies has played a significant role in promoting rural economic development, improving the living conditions of farmers, and enhancing the level of medical services. Through continuous deepening of reforms, China has seen significant improvements in rural revitalization and healthcare service levels.

3 The Necessity of Integrated Development of Rural Revitalization and Healthcare

Primary medical and health institutions in our country account for more than two-thirds of the national diagnostic and treatment volume, taking on a large number of tasks for the prevention and treatment of common and frequently occurring diseases. However, primary medical institutions generally face issues such as the lag in talent team development and insufficient service capacity. By implementing policies such as the rural doctor special post program to attract doctors from large hospitals to sit in or offer remote diagnostic services in rural areas, and by enhancing the professional level and diagnostic abilities of rural doctors, the basic medical service needs of farmers can be better met. At the same time, as the degree of population aging deepens, the loss of rural medical and health resources becomes more severe, necessitating the strengthening of talent training and introduction to improve the level of rural medical and health services.

The number and service capacity of medical institutions in rural areas are also relatively low. Data show that at the end of 2023, there were a total of 1.071 million medical and health institutions nationwide, including 34,000 township health centers and 583,000 village health posts.[7] This causes farmers to face issues such as long distances and low quality when seeking medical services. Therefore, strengthening the construction of rural medical resources and enhancing the capacity of primary medical

services have become urgent needs for the integrated development of rural revitalization and health care.

4 Exploring the Path for Integrated Development of Rural Revitalization and Healthcare

4.1 Strengthening the Construction of Rural Medical Infrastructure

According to data from the National Bureau of Statistics, by the end of 2023, there were 10.2 million beds in medical and health institutions, of which 8 million were in hospitals and 1.51 million in township health centers. These figures indicate that China has improved the service level of county and township medical and health institutions, providing higher quality medical services to the vast rural population. There are 12.47 million health professionals, including 4.78 million practicing physicians and assistant practicing physicians, and 5.63 million registered nurses. The number of health personnel in rural areas has increased, gradually improving the professional level of rural medical services.[8] Strengthening the construction of rural medical infrastructure is a key approach to comprehensively improving medical and health services in rural areas. Here are some specific suggestions and measures:

1. Central and local government financial support: The government should increase fiscal investment in the construction of rural medical infrastructure, including direct investment and providing financial support through medical insurance funds and other means.

2. Participation of social capital: Encourage and attract social capital to participate in the construction of rural medical infrastructure, introducing private investment into the rural healthcare system through Public-Private Partnership (PPP) models.

3. Training medical personnel: Enhance the training of rural medical personnel, offer professional skills training and continuing education to improve the professional capabilities and service levels of medical staff.

4. Establishing a telemedicine system: Utilize internet technology to develop telemedicine services, extending high-quality medical resources to rural areas through remote diagnosis and consultations.

5. Improve the primary healthcare service network: Optimize the allocation of medical resources, establish a comprehensive primary healthcare service network, and ensure rural residents can access basic medical services nearby.

4.2 Enhancing the Level of Rural Medical Services

The primary task in enhancing rural medical service levels is to strengthen the construction of medical infrastructure. This includes establishing and maintaining hospitals, clinics, and other medical institutions, ensuring they are equipped with the necessary medical equipment and drug supplies. The shortage of medical professionals is a common issue in rural areas. To address this problem, measures must be taken to cultivate local medical talent and attract doctors and nurses from outside to work in rural

areas. This can be achieved by offering professional training, improving salaries and benefits, and enhancing working conditions. Utilizing modern information technology, remote medical services can effectively improve the medical service levels in rural areas. Through telemedicine, rural residents can obtain professional diagnoses and treatment recommendations from city hospital doctors via video conferencing and online consultations, thus reducing the geographical barriers to accessing medical services.[9]

Promoting health education and preventive measures is an effective way to improve the level of rural medical services. By regularly holding health lectures, publishing health guides, and organizing preventive vaccination campaigns, the health awareness of rural residents can be significantly enhanced, reducing the incidence of diseases. Training rural medical personnel and volunteers to become disseminators of health education can effectively convey health information within the community and enhance the effectiveness of preventive measures. This not only helps to build a healthy rural environment but also alleviates pressure on the medical system, providing a solid foundation for the successful implementation of rural revitalization strategies.

5 Strategic Recommendations for the Integrated Development of Rural Revitalization and Healthcare

First, in the process of enhancing rural medical service levels, the guidance and support of government policies play a crucial role. By introducing a series of preferential policies and subsidy measures, the government can motivate social capital investment in the rural healthcare sector, thus forming a diversified investment and financing mechanism. For instance, the government can attract private sector investment in building rural medical facilities through public-private partnership (PPP) models or raise funds for rural medical projects by issuing special bonds. This multi-channel financing approach can effectively alleviate the issue of insufficient funding for rural medical construction and operation.

Second, cross-regional cooperation and resource sharing also play a key role in improving rural medical service levels. By establishing urban-rural medical service cooperation mechanisms, city hospitals can form long-term cooperative relationships with rural medical institutions, sharing medical resources and expertise. For example, through the "medical consortium" model, the vertical flow and integration of medical resources can be achieved, allowing rural residents to enjoy more professional and efficient medical services.

Third, technological innovation and the application of information technology are important means to promote the modernization of rural medical services. The government should encourage and support the research and development and application of medical information technology, such as telemedicine, electronic health records, and intelligent medical devices. By establishing a comprehensive medical information system, the optimization and efficient use of medical resources can be realized, while also improving the accessibility and quality of rural medical services. For example, telemedicine services can not only address the shortage of medical professionals in rural

areas but also provide timely and convenient medical services to rural residents through remote diagnosis and treatment.

Fourth, the guidance and support of government policies, the establishment of a diversified investment and financing mechanism, promotion of cross-regional cooperation and resource sharing, and the advancement of technological innovation and information technology application are key strategies to enhance the level of rural medical services. This requires not only active participation and promotion by the government but also the joint efforts and collaboration of all sectors of society.

6 Case Study

In the Healthy City Construction Evaluation of Zhejiang Province, Tongxiang City, with its outstanding performance, represented the county-level healthy cities and shared its experience in constructing a healthy city at the 2020 Healthy China Forum. To comprehensively advance the construction of Healthy Tongxiang, the city established a leadership team covering all towns (streets and major departments), forming a strong joint force to promote the development process of Healthy Tongxiang. Tongxiang City actively strengthened the promotion of health concepts, hosting numerous related lectures to deepen the core concepts and profound significance among the public. In the construction process, Tongxiang focused on health as the core, starting from improving the health environment, building a healthy society, optimizing health services, creating a healthy culture, and cultivating healthy populations to comprehensively advance the construction of healthy cities. Meanwhile, Tongxiang City also actively utilized the "Internet+" form, empowering medical services through technological means. Medical institutions above the basic level in the city have all opened remote diagnostic systems, achieving comprehensive construction of four major centers for pathological diagnosis, imaging diagnosis, clinical testing, and electrocardiogram diagnosis. Additionally, Tongxiang City developed the province's first smart vaccination management system, providing the public with more convenient and efficient vaccination services through information technology.

The experience of Tongxiang City in the field of healthcare has important implications for establishing a comprehensive medical health system in rural areas. Here are some suggestions for establishing a comprehensive medical health system in rural areas:

Strengthen policy support and funding: The government should issue relevant policies, define the goals and tasks of constructing a rural medical health system, and increase financial input to ensure rural areas can access sufficient medical resources. Stable financial support for the construction of a rural medical health system can be provided through establishing special funds and optimizing fiscal subsidies.

Optimize medical resource allocation: To address the issue of insufficient medical resources in rural areas, medical resources should be planned and allocated rationally. By strengthening the construction of primary medical institutions and enhancing the business capabilities and service levels of rural doctors, villagers can enjoy basic and convenient medical services. Meanwhile, establish a mechanism for sharing medical

resources between urban and rural areas to promote the flow of high-quality medical resources to rural areas.

Improve the medical service network: Construct a rural medical service network with county hospitals as the leading body, township health centers as the backbone, and village health posts as the foundation. Through strengthening cooperation and linkage between medical institutions at all levels, the optimization and sharing of medical resources can be achieved. Meanwhile, promote new medical service models such as telemedicine and mobile medicine to improve the accessibility and convenience of medical services in rural areas.

Strengthen health management and preventive healthcare: Establish a comprehensive health management and preventive healthcare system in rural areas, regularly carry out health checks and health education activities, and improve villagers' health literacy and self-care ability. Implement key population health management plans, such as special care measures for the elderly, children, and pregnant women, to further improve the health level in rural areas.

Enhance talent training and introduction: Strengthen the training and introduction of rural medical talent through targeted training and recruitment to attract more outstanding medical professionals to work in rural areas. Meanwhile, enhance the on-the-job training and continuing education of rural doctors to improve their professional level and service capability.

Introduce information technology to improve service levels: Drawing from the experience of Tongxiang City, use information technology to enhance the efficiency and quality of rural medical services. For example, establish an electronic health record system for sharing and managing villagers' health information; promote the use of mobile medical devices to facilitate diagnosis and follow-up by rural doctors; and utilize the internet to conduct remote medical consultations and consultations.

7 Conclusion and Outlook

The integrated development of rural revitalization and healthcare is a key factor in promoting comprehensive social progress. By strengthening medical infrastructure construction, training medical personnel, promoting telemedicine services, and enhancing public health and health promotion measures, the level of rural medical services can be effectively improved, laying a solid health foundation for rural revitalization. The urgency of implementing paths and strategies is emphasized because, with the increasing prominence of issues such as population aging [10] and the growing burden of chronic diseases, failing to accelerate the development of rural medical and health undertakings will directly affect the effectiveness of the rural revitalization strategy. Therefore, urgent measures must be taken, through policy guidance, financial support, technological innovation, and other efforts, to accelerate the overall improvement of rural medical and health undertakings.

Looking forward, the integrated development of rural revitalization and healthcare will evolve towards more intelligent, personalized, and efficient directions. With the application of information technology, future rural medical services will become more

convenient and precise, better meeting the health needs of rural residents. Meanwhile, the in-depth promotion of public-private partnership models will bring more innovative resources and management experiences to rural medical services, helping to build a more efficient and sustainable rural medical and health service system. Additionally, as health education and preventive measures become widespread, the health awareness and self-management abilities of rural residents will significantly improve, helping to form healthy lifestyles and promote the comprehensive development of rural society. The integrated development of rural revitalization and healthcare is a systematic project that requires the joint participation and effort of the government, enterprises, social organizations, and rural residents. Through continuous exploration and practice, we have reason to believe that the continuous improvement of the rural medical and health business will provide a strong impetus for achieving comprehensive rural revitalization.

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