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# Fundamental Causes and Recommendations for the Insufficient Effectiveness of China's 'Hierarchical Medical System' Policy Implementation

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## ABSTRACT

This paper analyzes sections of China's official government documents regarding the "hierarchical medical system" policy and compares the implementation of China's policy with the hierarchical medical policies of the United Kingdom's National Health Service (NHS). Using the detailed "strengthening the foundation" section in the policy documents as a starting point, the study examines why the issue of "overcrowded major hospitals and underutilized primary healthcare institutions" remains unresolved despite the implementation of the hierarchical medical system policy. One fundamental reason identified is the low competency level of primary care physicians. To address the issue of underqualified primary care physicians, this paper centers on promoting the standardization of primary healthcare and proposes two policy-level recommendations. First, establish a nationwide, objective, and quantitative evaluation standard for the accreditation of primary care physicians, along with a corresponding training system, to standardize the basic diagnostic capabilities of primary healthcare personnel. Second, leverage the medical consortium system to expand career prospects and enhance the professional attractiveness of primary care physicians.

## KEYWORDS

Hierarchical Medical System; Medical Consortium; Primary Care Physicians; Standardization of Medical Services.

## 1. POLICY OVERVIEW

The concept of "hierarchical diagnosis and treatment" first appeared in official documents in 2009. In the "Opinions of the Central Committee of the Communist Party of China and the State Council on Deepening the Reform of the Medical and Health System" (Circular No. 6 [2009] of the Central Committee of the Communist Party of China), the term was introduced as part of policies aimed at "further improving the medical service system" and "strengthening the primary medical and health service system." This was in response to the supply-demand imbalances between China's medical services and the health needs of its people at the time, as well as the uneven development of medical services between urban and rural areas. Even then, "hierarchical diagnosis and treatment" emphasized the division of labor and collaboration between urban hospitals and community health service institutions within the healthcare system. It highlighted how improving primary healthcare-led by key institutions-would contribute to building a hierarchical diagnosis and treatment system and establishing a two-way referral mechanism [1]. However, in the 2009 official documents, the concept was merely supplementary to other policies and did not receive sufficient attention. Although the documents provided structural descriptions of how "hierarchical diagnosis and treatment" would

operate, these explanations remained relatively abstract. After 2009, the supply-demand contradictions in China's medical sector intensified. The construction of a hierarchical diagnosis and treatment system gradually gained government attention as a concrete solution to these challenges.

In 2015, facing the increasingly severe situation of "overcrowded major hospitals and underutilized primary healthcare facilities," the concept evolved into the more concrete objective of "establishing a hierarchical diagnosis and treatment system," becoming a focal point of healthcare reform efforts. That same year, the State Council issued the "Guiding Opinions of the General Office of the State Council on Promoting the Construction of the Hierarchical Diagnosis and Treatment System" (Circular No. 70 [2015] of the General Office of the State Council) (hereinafter referred to as the "Opinions"), formally presenting "hierarchical diagnosis and treatment" as a systematic and specific policy direction. In the "Opinions," the State Council emphasized "strengthening the primary level" as a key focus, with the prerequisite of "clarifying the functional positioning of diagnosis and treatment services at various levels and types of medical institutions." The document positioned urban tertiary hospitals to "primarily provide diagnosis and treatment services for acute, critical, severe, and complex diseases." Urban secondary hospitals were designated to receive recovery-stage and stable patients referred from tertiary hospitals. In contrast, county-level hospitals, rehabilitation hospitals, nursing homes, and other primary medical and health institutions were to focus on diagnosing and treating patients with common and frequently occurring diseases within their regions; providing services for patients with confirmed diagnoses and stable chronic conditions, those in recovery, elderly patients, and individuals with advanced-stage tumors; and offering emergency care for acute and critical patients, as well as upward referral services for complex cases. This division of labor reflects a trend of assigning responsibilities based on disease severity, known as "separating acute and chronic treatments." Major hospitals concentrate on treating complex and critical illnesses, while primary hospitals focus on the treatment and rehabilitation of common, frequent, and chronic conditions, forming a service chain of "treatment - rehabilitation - long-term care" [2]. The vision behind this separation is to enable primary healthcare institutions to handle the diagnosis and care of common and chronic diseases diverted from urban secondary and tertiary hospitals, allowing these larger hospitals to focus on complex cases. Such a division helps alleviate the patient load on major urban hospitals, enhances the efficiency of patient care within the healthcare system, and promotes a more rational allocation of medical resources.

To effectively implement this division of labor while ensuring the quality of patient services, the State Council proposed "strengthening the primary level" as both a guarantee for execution and a prerequisite for the continuity of diagnosis and treatment services. The "Opinions" not only emphasized the delineation of service areas, quantities, scales, and standardized construction of primary medical and health institutions but also stressed the downward extension of medical resources from secondary and higher-level hospitals. It highlighted the importance of drug coordination and resource sharing between these hospitals and primary medical institutions. Enhancing the development of specialized departments in county-level hospitals, lifting restrictions on clinical technology applications, and strengthening the basic medical service functions of township health centers were identified as strategies to improve the comprehensive capabilities of primary institutions. Additionally, by encouraging physicians from urban secondary and tertiary hospitals to practice at multiple sites within primary medical institutions and simplifying the approval procedures for individual medical practice, the policy aimed to promote the downward flow of medical talent. To address challenges such as improving medical techniques in primary institutions and achieving resource sharing among different facilities, the "Opinions" proposed advancing healthcare informatization. This includes ensuring smooth channels for remote consultations and training from higher-level hospitals to primary institutions, as well as continuous recording, sharing, and mutual recognition of electronic health records and medical records, thereby enhancing the fluidity and coherence of resources and information [2].

From this, it is evident that "strengthening the primary level" is foundational to the hierarchical diagnosis and treatment system in official policy texts. The specific implementation methods are deeply connected to the coordination and cooperation between higher-level hospitals and primary medical institutions. However, considering the current situation, even with a clear policy direction, the realities of insufficient high-quality medical resources and their uneven distribution remain challenges that cannot be resolved in the short term. Since primary institutions inherently face resource limitations, "strengthening the primary level" cannot be achieved by these institutions in isolation. Confronted with this inherent shortcoming, the "capillaries" of the healthcare system-primary medical institutions-need substantial connections with the "arteries" of resource and information flow. This linkage was formally introduced in the State Council's official policy documents in 2017 under the concept of the "Medical Consortium" (hereinafter referred to as the "Medical Alliance").

During the Third Plenary Session of the 18th Central Committee of the Communist Party of China, two key reform requirements were proposed for the public healthcare sector as part of comprehensive deepening reforms: "making full use of information technology to promote the vertical flow of high-quality medical resources" and "strengthening the integration of regional public health service resources." Aligning with the practical demands of the hierarchical medical system, the State Council later integrated and deepened these reform requirements into the concept of the "Medical Consortium" . In 2017, the State Council issued the "Guiding Opinions of the General Office of the State Council on Promoting the Construction and Development of Medical Consortia" (hereinafter referred to as the "Guiding Opinions on Medical Consortia"), wherein the union of medical institutions is referred to as the "Medical Consortium." The construction of medical consortia is divided into three dimensions:

**(1) Region-Based: Urban Medical Groups and County-Township-Village Medical Communities**

Urban Medical Groups focus on the linkage between large hospitals and primary institutions such as community health service centers, nursing homes, and rehabilitation facilities. County-Township-Village Medical Communities emphasize integrated management led by county-level hospitals serving as urban-rural links and county leaders, with township health centers as hubs and village clinics as the foundation. This dimension not only reflects intra-urban and intra-county collaboration but also involves urban-rural coordinated development with county hospitals acting as bridges between urban and rural areas.

**(2) Department-Based: Cross-Regional Specialized Alliances**

Cross-Regional Specialized Alliances focus on the exchange of specialized expertise between regions, leveraging each other's strengths to promote overall development.

**(3) Economic Development-Based: Remote Medical Collaboration Networks in Marginalized and Impoverished Areas**

Remote Medical Collaboration Networks in marginalized and impoverished regions emphasize utilizing information technology to facilitate the flow of medical resources to remote areas. Public hospitals provide services such as telemedicine, remote teaching, and distance training to medical institutions in impoverished areas via the internet [3].

In terms of cooperation within medical consortia, the "Guiding Opinions on Medical Consortia" mainly emphasize two dimensions:

**(1) Complementing Each Other's Strengths**

The cooperation within medical consortia highlights the pivotal role of leading institutions. Urban Medical Groups stress the leading role of tertiary hospitals or hospitals with strong capabilities. County Medical Communities emphasize the urban-rural bridging and leading role of county-level

hospitals. Specialized Alliances focus on the leadership of institutions with specialized technical strengths. For Remote Medical Collaboration Networks targeting impoverished areas, relying on established long-term and stable counterpart support relationships, the principal role of urban tertiary public hospitals is emphasized.

**(2) Resource Mobility**

**A. Flow of Medical Resources**

This includes technical support within urban medical consortia, technical training between leading institutions and grassroots units, and the circulation of pharmaceuticals between these entities.

**B. Flow of Medical Information**

The "Guiding Opinions on Medical Consortia" emphasize, on one hand, the use of information technology as a crucial tool to promote the flow of medical resources, such as telemedicine and remote training. On the other hand, they stress the continuity and sharing of information between different levels of institutions. Unified information platforms and the establishment of continuous and shareable electronic health records and medical records play a vital role in promoting mutual recognition of examination results, prescription circulation, and drug sharing within the medical consortium.

**C. Flow of Medical Talent**

The "Guiding Opinions on Medical Consortia" elaborate from two perspectives:

**a. Circulation of Talent Between Institutions**

The guidelines encourage tertiary public hospitals to dispatch management and expert teams to county-level hospitals, enhancing the medical service capabilities of county-level hospitals through support and collaboration. Regarding circulation channels, the guidelines explicitly state: "Within the medical consortium (including cross-regional medical consortia), medical personnel practicing in medical institutions that have signed assistance or trusteeship agreements are not required to undergo procedures for changing practice locations or registering practicing institutions."

**b. Skill Enhancement Among Grassroots Personnel**

This perspective emphasizes the unique role of general practitioners and family doctors in ensuring the operation of the medical consortium system, especially concerning key populations such as patients with chronic diseases, the elderly, pregnant women, children, people with disabilities, and impoverished individuals. General practitioners with sufficient medical skills, serving as family doctors contracted with key populations, can help guide and ensure the quality of primary first-contact care. They also facilitate the provision of long-term prescription services for patients with chronic conditions [3].

From the State Council's proposal of the hierarchical medical framework in 2015 to the detailed policy regulations on the medical consortium framework formalized in documents in 2017 under this overarching framework, we observe a progressive trend. It is evident from government policy texts that the State Council has fully recognized that the success of China's hierarchical medical reform hinges not only on the rational allocation of medical resources but also on the medical proficiency of other medical institutions and professionals beyond the leading medical units. Standardizing the construction of medical consortia significantly benefits the promotion of hierarchical medical treatment and even broader healthcare reforms.

## 2. EFFECTS AND SHORTCOMINGS OF POLICY IMPLEMENTATION

Using Sichuan Province as an example: As a western province, Sichuan exhibits significant disparities in economic and social development across different regions. The three prefectures of

Liangshan, Ganzi, and Aba account for 61.3% of the province's area but contain only 4.8% of its tertiary hospitals. Therefore, the structure of the hierarchical medical system and medical consortia is particularly beneficial for the rational and efficient allocation of Sichuan's medical resources. By June 2024, Sichuan had established 36 tightly integrated urban medical groups in 14 national and provincial pilot cities and initiated the construction of tightly integrated county-level medical communities in all agriculture-related counties. Leveraging these medical consortia, over 5 million patients have been diagnosed and treated through mobile medical services and on-site support. Simultaneously, medical personnel from township health centers and community health service centers have been fully deployed to cover all village clinics, benefiting more than 100 million people. Emphasizing the leading role of key institutions, Sichuan has also achieved full coverage of the "5G+" telemedicine network and grassroots health information network across all primary medical units in all cities, counties, and townships, providing robust technical support for remote consultations and other telemedicine assistance [4].

In Sichuan, county-level regions have reaped the policy dividends of the hierarchical medical system and medical consortia in promoting the rational and efficient allocation of medical resources. According to an article in *People's Daily* in April 2023, the within-county medical consultation rate in pilot counties for medical consortium construction in Sichuan reached 92.67%. In these pilot counties, residents are increasingly seeking medical care within their own counties [5]. To illustrate at the local level, consider Tiantaishan Town in Qionglai City, Sichuan Province: Building on an existing traditional fixed-point support relationship, the Tiantaishan Town Central Health Center formed a medical consortium with the Fifth People's Hospital of Chengdu in 2014, with three doctors specializing in internal medicine, surgery, and pediatrics stationed at the health center long-term. Furthermore, the health center annually dispatches doctors to the Fifth People's Hospital of Chengdu for advanced training lasting from six months to one year. This supportive tie of "mentoring and assistance," along with continuously upgraded medical consortium policies over time, has led to improvements in the hardware facilities of the Tiantaishan Town Central Health Center and enhancements in the medical skills of its practitioners. The overall improvement of the health center has resulted in increased recognition from the local population: the facility handles over 50,000 outpatient visits and nearly 5,000 inpatient admissions annually, enabling residents of Tiantaishan Town to complete routine examinations and treatments without leaving the town [5].

Although economically underdeveloped areas represented by county-level regions in Sichuan Province have benefited from the policy dividends of the hierarchical medical system and medical consortia, from a broader national perspective, the performance of these policies in solving the practical problem of "overcrowded major hospitals and underutilized primary hospitals" is not encouraging. According to survey data from the National Health Commission, before the outbreak of the COVID-19 pandemic-that is, from 2015 to the end of 2021-the total number of medical consultations increased by 45.13%. The number of consultations in tertiary hospitals rose from 1.497646 billion in 2015 to 2.231444 billion by the end of 2021, an increase of 49%. Comparing the figures from January to November 2022 with the same period in 2023, consultations in tertiary hospitals rose from 2.077393 billion to 2.328937 billion, a growth of 12.1%. Looking at other medical institutions, although primary medical and health institutions saw a 17.68% increase in consultations during 2015–2021, health centers increased by 30.29%, secondary hospitals by 7.01%, and primary hospitals by 5.26% [6,7,8]. However, in the face of the total number of consultations rising at the high rate of 45.13%, and the increasingly heavy patient load on tertiary hospitals over time, the growth rates of other medical institutions-far lower than the overall increase-are evidently insufficient to effectively divert patients from tertiary hospitals. Despite the significant benefits that current hierarchical medical system and medical consortia policies have brought to grassroots regions, the issue of "overcrowded major hospitals and underutilized primary hospitals" remains unresolved, with major hospitals facing escalating pressure from patient visits.

## 3. CAUSES OF THE SHORTCOMINGS

One of the core reasons why the hierarchical diagnosis and treatment system and its accompanying medical consortium policies have not effectively alleviated the problem of "overcrowded major hospitals and underutilized primary healthcare facilities" is the low competency level of primary care physicians in China. According to research data from 2023, among 8,469 primary care physicians nationwide, 1.7% still lack practicing qualifications. Even in eastern regions, where primary care physicians predominantly hold a bachelor's degree or higher, in central regions, most have a secondary vocational education or lower, and in western regions, the majority hold associate degrees. Overall, the primary care physician workforce exhibits a shortage of young doctors and highly educated talent [9]. Moreover, the proficiency rates for diagnosing common and frequently occurring diseases among primary care physicians in the eastern, western, and central regions are all below 90%, with an overall rate of 82.1%. The proficiency rates for emergency handling of critical and severe conditions are all below 60%, with an overall rate of 50.6% [9]. These data reflect the weak overall quality of China's primary care physicians. The scarcity of high-quality talent within this workforce makes it difficult for the public to trust them, hindering effective patient diversion. From the perspective of risk perception, patients' distrust of the professional level of primary care physicians and the medications and equipment of township health centers and community health service centers leads them to believe that primary healthcare institutions cannot meet their needs. Additionally, even if primary healthcare institutions can provide upward referral services for patients with severe conditions, the time wasted on referrals and the financial costs of repeated examinations at higher-level hospitals make patients feel that "the illness is delayed, and money is wasted." Consequently, patients choose to go directly to tertiary hospitals to avoid these risks [10].

We can compare the training and quality of China's primary care physicians with the selection mechanism for general practitioners in the United Kingdom's National Health Service (NHS). The NHS is renowned for its well-structured hierarchical medical system. It defines primary care as the first step in the diagnosis and treatment process, including general practitioners, community pharmacies, dental, and eye care services. Registering with a general practitioner is a responsibility and obligation stipulated in the NHS Constitution for UK citizens participating in the NHS, and general practitioners are defined as "the main entry point for accessing the NHS medical system." More importantly, the NHS regards the primary care sector, centered on general practitioners, as its foundation. In 2014, the NHS allocated 75% of its funding to primary care, corresponding with a 90% cure rate for patients at this stage [11]. In fact, becoming a general practitioner is a career path that can be chosen directly after two years of university pre-medical education. According to the NHS website, to become a general practitioner within the NHS, applicants must, after acquiring basic medical knowledge, participate in a GP Specialty Training (GPST) program led by the NHS, which lasts at least 18 months [12]. The GPST training framework not only specifies in detail the subjects that general practitioners need to study but also introduces a unified teaching quality monitoring mechanism: clinical supervisors are responsible for daily teaching supervision in clinical environments, provide regular feedback on trainees' performance, and help improve the teaching methods of general practice trainers. Additionally, educational supervisors monitor the learning progress of trainees annually [13]. Simultaneously with the GPST, trainees must apply to take the unified Membership of the Royal College of General Practitioners (MRCGP) examination, which consists of a 200-question Applied Knowledge Test and a Clinical Skills Assessment involving simulated consultations. Applicants have four opportunities to take the exam. Only after passing the MRCGP examination can applicants receive the GPST completion certificate and be qualified to practice as general practitioners within the NHS system [14]. The NHS oversees the entire UK's health system, and the unified training and examination system for general practitioners within the NHS helps promote the standardization of services in the NHS medical system, reducing disparities in the qualifications of general practitioners across different regions.

In contrast, China's training for general practitioners mainly focuses on job-transfer training for existing primary care physicians in township health centers and community health service centers. Taking Hebei Province as an example, in a survey of 801 trainees participating in general practitioner job-transfer training in Hebei Province in 2020, 70.35% of the trainees worked in township health centers, and 16.64% worked in community health service centers [15]. However, in China, the policies for general practitioner training mainly consist of "guiding opinions" and "construction plans," with few "training standards" [16]. Even though the National Health Commission's General Office issued the "General Practitioner Job-Transfer Training Outline" in 2019, which stipulated a total training duration of at least 12 months and detailed the content to be learned and mastered, while also requiring provincial health administrative departments to organize unified assessments, the outline did not provide more detailed and unified requirements for the assessment methods. Additionally, the outline lacks stratification and grading of training content, as well as standards and supervision for faculty and educational quality [17]. Therefore, the lack of comprehensive policies for general practitioner training hinders the standardized development of such training, becoming one of the reasons for the uneven levels of primary care physicians in China. Moreover, among the 801 trainees participating in the general practitioner job-transfer training in Hebei Province, 58.39% held associate degrees or secondary vocational education, and 53.06% were over 41 years old. Factors such as the fixed thinking patterns of older trainees, life responsibilities, and work affairs restrict their learning ability and efficiency, and the aging of primary care physicians is a common trend in China [15]. Additionally, influenced by significant disparities in socioeconomic development levels and healthcare development across different regions in China, the complex practical situations pose great challenges to formulating a unified standardized training structure for general practitioners nationwide.

An important reason for the aging of primary care physicians and the lack of fresh talent is the low professional attractiveness. One of the most critical reasons for the low professional attractiveness is the economic pressure caused by low salaries. In a 2018 survey of 3,244 general practitioners working in community health service institutions, 76.17% reported that the greatest pressure in their work was the economic stress caused by low wages [18]. Additionally, according to survey data from 2024, general practitioners in eastern regions have lower turnover intentions, but in central and western regions, due to insufficient income levels and significant wage gaps between township health centers and county-level hospitals, there is a high attrition rate of general practitioners. For example, in Hubei Province, 78.35% of general practitioners have intentions to leave their jobs; in the Tibet Autonomous Region, 77.7% of designated doctors, in Yunnan Province, 64.54% of designated medical students, and in the Guangxi Autonomous Region, 57.4% of designated medical students are unwilling to practice long-term at the grassroots level [19]. In contrast, general practitioners in the UK's NHS had an average salary of £87,884 in 2024. Depending on the region, the starting salary for general practitioners is £68,974 in England, £69,993 in Scotland, and £71,738 in Wales, which is quite substantial [20].

In summary, there are two main reasons for the low competency level of China's primary care physicians: first, the lack of a standardized training structure; second, the insufficient professional attractiveness of being a primary care physician. The low competency level of primary care physicians and the insufficient professional attractiveness are, to some extent, a cyclical relationship. The public's lack of trust in the competency of primary care physicians leads to underutilized primary healthcare systems, resulting in primary care physicians being unable to create value and experiencing decreased income. Low wage levels lead to insufficient professional attractiveness, with low attraction and retention of fresh talent, exacerbating the aging of the primary care physician workforce, further affecting their competency level and creating a vicious cycle.

# 4. SOLUTIONS

To break the aforementioned vicious cycle, the key lies in standardization-achieving uniform levels of medical care such that, within a given region, patients receive comparable healthcare services regardless of which medical institution they visit. This standardization can effectively enhance the clinical competence of primary care physicians, build public trust in them, and subsequently improve their income and career development prospects, attracting new talent. Achieving such standardization requires further support from the medical consortium system.

To attain the ultimate goal of standardization, two aspects need to be addressed simultaneously at the policy level of the healthcare system:

**(1) Standardizing the Competence of Medical Personnel**

In China, the advancement of medical standardization primarily relies on the leadership role of regional flagship hospitals within certain areas, and their methods of leadership vary by region. This paper uses the medical consortia of Wuhan Fifth Hospital and West China Hospital of Sichuan University as examples. In the medical consortium led by Wuhan Fifth Hospital, the hospital acts as the flagship institution and directly manages subordinate units such as community health centers. The hospital deeply involves itself in personnel appointments, financial management, and medical operations of six affiliated institutions: it not only uniformly recruits new staff but also assigns technical experts to concurrently serve as department heads in affiliated institutions and regularly schedules its doctors to participate in community outpatient services [21]. In the "government-hospital cooperative hosting medical consortium" of West China Hospital of Sichuan University, the hospital collaborated with the People's Government of Longquanyi District to establish the "Longquan Hospital of West China Hospital of Sichuan University." The hospital manages its subsidiary, Longquan Hospital, mainly by deploying high-quality expert resources to the grassroots level. Through department pairing, director pairing, mentor-apprentice relationships, guided ward rounds, participation in complex case discussions, surgical demonstrations, and expert outpatient consultations, West China Hospital provides comprehensive guidance in medical management to Longquan Hospital, significantly enhancing its medical service capabilities [22].

While flagship hospitals in different regions are improving the clinical abilities of primary care physicians by having experts guide grassroots institutions, merely providing expert guidance to existing primary care physicians is insufficient. It is also crucial to regulate the admission standards and training effectiveness of primary care physicians.

In most cases, the recruitment thresholds for primary care physicians in grassroots medical institutions are inconsistent and lack standardized criteria, leading to uneven clinical competence among current primary care physicians. Although, in the Wuhan Fifth Hospital medical consortium, the flagship hospital ensures the basic clinical abilities of new recruits in affiliated institutions by deeply involving itself in personnel appointments [21], such cases are rare. Moreover, because the direct management of its affiliated institutions by Wuhan Fifth Hospital involves coordination with local governments, replicating such direct management across other medical consortia nationwide is challenging due to varying local circumstances. At the macro policy level, China lacks a relatively stable quantitative evaluation standard specifically for the admission of primary care physicians. The national medical practitioner qualification exam broadly determines qualifications through licensure but does not provide a more precise assessment method tailored to primary care physicians. In contrast, the UK's GPST and MRCGP examinations offer a stable quantitative evaluation standard and admission threshold specifically for general practitioners, recognized by all hospitals within the NHS system. Additionally, China lacks an objective evaluation tool to assess the effectiveness of primary care physician training, whereas the UK's MRCGP examination serves as the graduation exam for the GPST program.

In summary, to promote the standardization of the entire primary care physician workforce at the policy level, the urgent task is to establish a nationwide, objective, and quantitative evaluation standard for admitting primary care physicians-for example, creating a standardized assessment tool for primary care physician admission. Such an assessment tool must be accompanied by a comprehensive training system tailored to it. Even if specific recruitment requirements vary among different grassroots medical institutions, a universally recognized objective admission standard for primary care physicians helps ensure the basic clinical competence across institutions. It aids flagship hospitals in recognizing and trusting the diagnostic assessments from grassroots medical institutions, reducing redundant examinations and diagnoses for referred patients and saving time. Furthermore, for the expert training of existing primary care physicians, post-training assessments are essential to ensure training quality.

**(2) Enhancing the Professional Attractiveness of Primary Care Physicians through the Medical Consortium System**

To advance the process of standardization, it is necessary not only to ensure the basic clinical competence of primary care physicians but also to enhance the attractiveness of the profession. Taking the hosting medical consortium of Longquan Hospital as an example, a developmental bottleneck is that, due to the hospital's limited grade and scale, its compensation and career development opportunities are not on par with top-tier hospitals, making it prone to losing high-level talent [22].

In fact, two critical factors affecting professional attractiveness are career development opportunities and compensation. Career development significantly influences medical students' enthusiasm for entering the primary care field, while compensation mainly affects the retention of talent within grassroots medical institutions. In addressing the talent issues of primary care physicians at the policy-making level, the primary consideration should be "attracting" talent, followed by "retaining" it. Only by increasing the total number of qualified primary care physicians can the number of experienced core physicians grow, thereby enhancing the clinical capabilities of grassroots medical institutions. To attract medical students to become primary care physicians, it is necessary to broaden their career development opportunities. In the medical consortium of Wuhan Fifth Hospital, for example, medical staff working in the other six community health service centers have the opportunity, after serving in grassroots institutions for a certain period, to be selectively promoted to work at the Fifth Hospital [21]. The collaborative nature of the medical consortium can connect grassroots institutions with limited development prospects to large-scale flagship hospitals. By streamlining unique talent mobility channels between different institutions within the consortium, career development opportunities for primary care physicians can be expanded.

At the policy-making level, the government can leverage existing medical consortium structures to encourage flagship hospitals to provide more positions within the consortium for primary care physicians who meet certain conditions (such as having worked in grassroots institutions for three years-a time requirement that helps maintain staff stability). Using their performance in grassroots institutions as a primary assessment criterion, these physicians can be preferentially promoted to work in flagship hospitals. This approach not only helps attract more medical students to become primary care physicians but also motivates them to proactively improve their professional abilities, viewing their role as a stepping stone to positions in leading hospitals, thereby raising the overall diagnostic and treatment standards among primary care physicians.

After considering how to attract talent, the next step is to focus on retention. Adequate compensation and the ability to access more opportunities while remaining in their positions are key to retaining talent. To increase the compensation of primary care physicians, it is essential not only for them to improve their medical skills and create more value but also to implement performance distribution systems that favor excellent doctors and critical positions [23]. At the policy level, the existing medical consortium can continue to play its role by providing outstanding primary care physicians

with more opportunities to utilize their talents—for instance, encouraging flagship hospitals to leverage the interdisciplinary knowledge of primary care physicians, allowing more capable individuals to participate in consultations for complex cases, and offering greater professional recognition and incentives.

## 5. CONCLUSION

This paper addresses solutions to the issue of "the low competency level of primary care physicians in China during the implementation of the hierarchical medical system policy," focusing on three key aspects. First, establishing a nationwide, objective, and quantitative evaluation standard for the admission of primary care physicians, along with a corresponding training system, helps ensure that these physicians-who form the main component of the first tier in China's hierarchical medical system-possess fundamental diagnostic capabilities. This allows patients to confidently step onto the first tier to begin their diagnostic process and enables leading hospitals to trust the judgments made at this level, thereby improving medical efficiency. Second, leveraging the medical consortium system, leading hospitals are encouraged to provide more job opportunities within their institutions to outstanding primary care physicians who have met certain working time requirements within the consortium. This approach aligns with the "tiered" nature of the hierarchical medical system and taps into the ambition of primary care physicians. It not only broadens their career prospects but also stimulates appropriate competition in medical proficiency among them, promoting an overall improvement in their competency levels. Third, beyond increasing salaries, encouraging leading hospitals to involve more capable primary care physicians in consultations for complex cases helps fully utilize and strengthen their skills. As key members of the foundational first tier in the hierarchical medical system, they possess interdisciplinary knowledge. Providing more opportunities for these physicians to engage with challenging cases at leading hospitals and to tackle problems using their unique expertise enhances their professional identity and offers greater psychological incentives.

Admittedly, advancing the implementation of China's hierarchical medical system policy requires not only talent but also the multifaceted cooperation of technology, collaborative capabilities, and infrastructure development. However, improving the competency level of primary care physicians is paramount. Solid clinical skills among these physicians form the foundation of trust between doctors and patients, trust among medical professionals, and collaborative cooperation among medical institutions. They also serve as the basis for learning advanced technologies in the future. Therefore, ensuring the clinical competence of primary care physicians is fundamental to the deep and far-reaching implementation of the hierarchical medical system policy.

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