

Measures to Narrow the Gap of Basic Medical and Health Services for Urban and Rural Residents

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Abstract: Health is the foundation of economic and social development, and people's health and longevity is an important symbol of national prosperity and national strength. Since the reform and opening up, our country has made remarkable achievements in the reform and development of health field. A sound medical and health service system is the basis for reducing the occurrence of diseases and ensuring residents' equal access to medical and health services. With the implementation of the "Healthy China 2030" Plan and a series of policies, promoting a healthy lifestyle and improving the level of basic medical and health services have become the fundamental direction of current medical and health development. Under the guidance of this development direction, in view of the inherent problems of basic medical and health services in rural areas of Hebei Province, it is necessary to fully investigate and understand the actual needs of residents in rural areas, increase the supply body of basic medical and health service resources, and solve the problem of insufficient total amount and uneven distribution of basic medical and health resources. Make up for the weak basic medical and health service foundation in rural areas of Hebei Province, strive to build a people-oriented basic medical and health service system that is balanced between urban and rural areas, and consciously transfer human, material and financial resources in urban areas to rural areas, so as to lay a solid foundation for protecting the health level of rural residents.

Keywords: Basic Medical and Health Services; Entrustment; Interdepartmental Mechanism.

1. Current Situation of Rural Medical and Health Service Supply

(1) Spending on basic medical and health services in rural areas continued to increase

Medical and health cost is a universal international index, which is an important index reflecting the degree of residents' personal medical economic burden and the quality of basic medical and health services. It includes three parts: government health expenditure, social health expenditure and personal cash health expenditure, which respectively symbolize the role played by the government, society and individuals in the overall medical and health cause. According to the World Health Organization, developed countries spend 6%-8% of their GDP on health, and developing countries spend 2%-6%. The ratio of total health expenditure to GDP of Hebei Province increased year by year and stabilized at about 6%. In 2018, the total health expenditure of Hebei Province was 269.084 billion yuan, 2.97 times that of 90.431 billion yuan in 2010. From the following figure, we can see the proportion of government, society and individuals respectively. The proportion of government health expenditure is stable at about 27%, the proportion of social health expenditure is increasing year by year, and the proportion of personal medical and health expenditure is decreasing year by year, but in general, the proportion of society and individuals is still high, with an average of more than 35%. As a public good, basic medical and health services have strong exclusivity and externality. Relying only on individual and social support will lead to chaos in the medical and health field, the basic medical and health rights and interests cannot be guaranteed, and the overall health level of residents will decline, which is undoubtedly worse for rural areas with low health and health level. Will hinder the economic development of rural areas. In addition, after the introduction of the new medical reform policy, the return of

government responsibility is emphasized, and the government should be the main force in providing basic medical and health services to ensure the development of medical and health undertakings. It can be seen that the government of Hebei Province is still lacking in bearing the medical and health expenses and reducing the burden of residents.

The per capita medical and health expenditure of residents and the proportion of medical and health expenditure of residents in the consumption expenditure can well reflect the level of financial expenditure of the government in the field of medical and health services. If the government bears more, the per capita cost of the corresponding residents will be reduced. However, we must note that there is still a large gap between urban and rural health care spending per capita and resident health care spending as a share of consumer spending. In 2013, the per capita health care expenditure of urban residents was 1047.3 yuan, and that of rural areas was 543.7 yuan, a gap of nearly 50%, and this gap is still widening year by year. Looking at the proportion of residents' medical and health expenditure in consumption expenditure, the two changes are small and stable, but there is still a certain gap between the two, so it is urgent to strengthen the financial expenditure on basic medical and health care in rural areas.

(2) Basic medical and health services in rural areas were improved

Medical and health resources can meet the basic health needs of residents, and are also the material basis to support the smooth operation of basic medical and health services, which are mainly composed of material resources, human resources and financial resources.

First of all, from the number of basic medical and health service providers and the number of beds. The number of health institutions in cities increased from 5,456 in 2013 to 10,740 in 2019, an increase of about two times, although the number of health institutions in rural areas is not as fast as that in cities, the overall base is much larger than that in cities.

Secondly, the number of beds is the number of patients that medical and health institutions can accept, and it is also an important indicator to measure the ability of basic medical services in a region. From the point of view of the number of bed configurations, the number of beds in rural status has exceeded 253,800 in 2019, far higher than the 176,000 in cities. From the perspective of this number alone, the number of beds provided by basic medical and health institutions in rural areas is still higher than that in urban areas. However, from the perspective of the composition of basic medical and health institutions, there is still a big gap between rural and urban areas. Most of the basic medical and health institutions in rural areas are county hospitals, village clinics and township health centers, of which only 927 were county hospitals in 2019. In addition, the overall medical level of rural medical and health institutions such as county hospitals is far lower than that of urban hospitals. When rural residents have serious diseases and need medical treatment, they often choose to go to big hospitals in cities, and there will be some idle beds.

Secondly, from the perspective of human resources. As the main health institutions providing medical and health services in rural areas, the number of personnel per 1,000 township health centers and per 1,000 village clinics is around 1 and 2, indicating that their capacity to provide services is low. The number of rural health technicians and the number of rural doctors and nurses per thousand can clearly reflect the status of basic medical services in rural areas. The actual effect of basic medical and health services can not be fully reflected only by the increase or decrease in the number of basic medical and health services, and the real situation needs to be reflected by the share of each thousand agricultural population. The number of health technicians and the number of doctors and nurses per 1,000 population is steadily increasing, but the ratio of health technicians and doctors and nurses per 1,000 population is much greater in cities than in rural areas, and this gap is very obvious. Among them, from 2013 to 2019, the number of health technicians per 1,000 people in rural areas was once less than half of the number in urban areas, and the average number of registered nurses in rural areas was only about 1.1, and that in urban areas was about 4.2, reaching four times the number of registered nurses in rural areas. In the Outline of the National Medical and Health Service System Planning, it is pointed out that the proportion of medical care in grass-roots medical and health institutions should reach 1: 1.25. Obviously, the rural areas of Hebei Province have not reached this standard, and the human resources of basic medical and health services in Hebei Province are heavily tilted toward the city, and the urban population has more human resources of medical and health services, resulting in the shortage of rural human resources.

(3)The efficiency of building and utilizing basic medical and health services in rural areas has increased year by year

The utilization efficiency of basic medical and health services can be judged by referring to the number of medical treatment, the average length of hospitalization of patients, the utilization rate of beds, and the average daily number of medical visits borne by doctors on average days of hospitalization. As of 2019, the number of hospital visits in Hebei Province was 164.9628 million, the average length of stay of discharged patients was 9 days, the average length of stay of discharged patients was 37.4707 million in township health centers, and the average length of stay of discharged patients was 7.1 days. It is not difficult to see that urban

hospitals have treated more than 100 million people, while rural areas only 37 million people, the workload and personnel carrying capacity of urban medical institutions are much higher than rural areas. Before 2018, doctors in rural areas need to bear more than 7 patients per day, which is enough to see the shortage of medical manpower, poor service quality, and the overburden of doctors and nurses. In terms of the utilization efficiency of hospital beds, the utilization rate of hospital beds in urban hospitals has been about 85%, while the number of beds in rural areas is higher than that in urban areas, but the utilization rate is low, only about 55%. There may be two reasons for this. One is that there is unfair allocation of medical resources, and the low number and proportion of medical staff will have an impact on the utilization rate of hospital beds. The other is that rural residents have a great demand for medical and health care, but rural residents do not trust township medical and health institutions enough, believing that the medical service level of township health centers is far lower than that of urban areas. The resulting choice of urban hospitals for treatment will increase the burden on rural residents, forming a vicious circle.

2. Countermeasures for Matching Supply and Demand of Rural Medical and Health Services

(1) Expand channels for investment and increase farmers' incomes

Strengthen the main responsibility of government expenditure

As an exclusive and non-competitive quasi-public good, basic medical and health services should be led by the government, especially in terms of financial support. In the macro-evaluation of basic medical and health services in Hebei Province, it is not difficult to see that the proportion of government health expenditure in medical and health expenses is stable at about 27%, and the proportion of social and personal health expenses is above 35% on average. By 2019, the per capita medical and health expenditure of urban residents is 1,883.7 yuan, while that of rural areas is 543.7 yuan. It is enough to see that with the passage of time, there is still a large gap between rural areas and urban areas in terms of resource input in per capita health care expenditure.

To this end, we must do the first thing, optimize the structure of financial support, and increase medical and health spending. Governments at all levels in Hebei Province must clearly define their own rights and responsibilities and the leading position in medical and health expenditure, gradually increase the proportion of government in health expenditure support, reduce the proportion of personal health expenses, and ensure the smooth development of medical and health care in rural areas by providing financial help, increasing financial expenditure, setting up special funds for medical and poverty alleviation. Secondly, according to local conditions, according to the economic development level of various regions in Hebei Province, the quantity and quality of service supply should be dynamically and flexibly adjusted in time according to the current needs of residents, so as to improve the basic medical and health service standards in rural areas of Hebei Province as a whole. Second, to reduce residents' per capita medical and health costs, we must promote the reform of medical and health payment methods, so that "serious diseases do not leave the county." We should actively promote DIP and DRG payments based on big data, increase the

difference in the reimbursement ratio of patients in and outside county-level hospitals, narrow the reimbursement gap with urban areas, scientifically plan the starting payment standard of medical insurance reimbursement, and increase the proportion of medical and health expenses reimbursement for rural residents. We will build village clinics and township hospitals with convenient transportation and high medical and health care quality, and solve the problem of difficult and expensive medical treatment for residents in rural areas.

Guide the public to run medical services

Medical and health costs are mainly composed of three aspects, but with the improvement of rural residents' living standards, the financial support required for medical and health services is far from enough if only the government can independently bear it, and it needs the support of civil society. We will support the private sector in running medical services and ensure the diversification of providers of medical and health services. First, the government should introduce preferential policies to encourage social capital and residents' idle funds to invest, and apply it to the infrastructure construction of basic medical and health services in rural areas, medical equipment and other hardware facilities, such as cooperation with medical equipment manufacturers, increase the medical equipment of village clinics and township health centers, in order to provide higher quality and quality services. Second, the appropriate introduction of third-party agencies to ensure the safety and stability of the medical insurance fund, maintain and increase the value of the premise, give full play to the role of the market, improve the utilization rate of medical and health funds.

Promote rural revitalization and increase farmers' incomes

According to the above research, it is found that when the residents' income satisfaction increases by 1%, the corresponding overall satisfaction of basic medical and health services will increase by 3.6%, and the dissatisfaction will decrease by 1.7%. This shows that the income level of rural residents affects their satisfaction with basic medical and health services to a certain extent. In addition, due to the relatively backward medical and health resources of rural residents, the overall health level is not as good as the urban level, and the low income level will aggravate social inequity. Therefore, only by increasing farmers' income and realizing rural revitalization can residents' satisfaction with basic medical and health services be improved.

In order to improve the income level of farmers, the specific measures to achieve rural revitalization are as follows: first, accelerate the transformation and upgrading of rural industrial structure, backward production and life style is the root cause of restricting the development of rural economy and the increase of farmers' income, so it is necessary to change the extensive and intensive small-scale peasant economic production mode in the past and increase the cohesion of rural residents. Through the introduction of high-tech equipment and the use of artificial intelligence technology for machine replacement, agricultural modernization can be promoted, agricultural production efficiency can be improved and agricultural production risks can be reduced. Second, promote the development of rural industries to achieve industrial prosperity. Government departments will introduce corresponding subsidy and preferential tax policies in a timely manner. We should promote the development of rural township enterprises by means of discount loans, establish a modern enterprise system, and develop characteristic industries according to local

conditions. We should use Internet technology to develop derivative products to increase industrial added value and broaden the income channels of rural residents. Third, break the barriers of urban and rural household registration. Efforts should be made to achieve equal access to public services in urban and rural areas, and to achieve flexible mobility of urban and rural employees. At the same time, the income distribution system should be implemented to narrow the income gap between urban and rural residents, raise the overall wage level in rural areas, and give rural residents the confidence to pursue better basic medical and health services.

3. Improving Medical and Health Care to Achieve Common Prosperity

(1) Carry out medical cooperation between urban and rural areas

The use of beds in rural basic medical and health institutions is inefficient, and rural residents choose to go to urban hospitals for medical treatment, which reflects the relatively backward level of medical and health services in village clinics, township hospitals and county hospitals. According to the regression results in Chapter 4, we can also see that the medical level of medical institutions has an impact

Rural residents' satisfaction with basic medical and health services. The higher the medical level of medical institutions, the more satisfied residents will be. Since the level of medical institutions between urban and rural areas cannot be synchronized, it is imperative to integrate medical and health service resources and carry out urban-rural cooperation.

First, expand the scope of basic medical and health services, service content closer to the city, improve service standards, pay attention to the environmental health of rural medical and health service institutions, if the environment is dirty and bad, the public will inevitably have a sense of dissatisfaction. Government departments can conduct regular surveys and visits to understand the changes in residents' demand for basic medical and health services, and communicate with institutions in a timely manner to increase and innovate the content and form of services. Second, improve the carrying capacity of rural medical and health institutions. This carrying capacity is not only reflected in the increase of the number of patients, but also in the improvement of the service technology level of rural clinics, township health centers and county hospitals. Effectively integrate medical and health resources to solve the shortcomings of rural basic medical and health institutions. The implementation of the urban and rural hospital mutual aid project, the selection of comprehensive strength of urban hospitals to regularly help rural medical and health institutions, especially for the diagnosis and treatment of frequently-occurring and common diseases training, secondly, the medical level of medical and health institutions not only refers to the medical level should also add more humane factors. Realize the common sharing of medical and health equipment, and realize the coordination between urban and rural hospitals in the aspects of doctor interaction, drug collection and material use. We will encourage urban hospital experts to provide clinical training and regular consultations, promote high-quality medical and health resources at the grassroots level, expand new models of cooperation, and ensure that rural residents can seek medical treatment quickly and easily. Third, actively promote telemedicine. Combining the "Internet" to achieve intelligent services, so that rural residents can see a doctor at home without leaving the house,

effectively reduce the cost of medical treatment, through the "Internet" big data to achieve information integration, online appointment, two-way referral and pre-examination graded diagnosis and treatment, broaden the new way for rural residents to see a doctor, reduce rural residents to seek medical consultation in different places, improve residents' sense of gain and happiness.

(2) Improve hardware strength and shorten the distance of medical treatment

According to the above research findings, the choice of medical location of rural residents also has an impact on their satisfaction. At present, in the process of providing basic medical services in China, in order to protect the interests of vulnerable groups, we choose to separate urban and rural residents, but it leads to the subsidies enjoyed by urban residents, and rural residents have been in a state of low security. This state of "differentiation" has intensified social inequity and played a role in reverse regulation. In the third chapter, we have found that there is a certain gap between the medical and health resources and levels between rural areas and urban areas. In the fourth chapter, the level of medical and health institutions and the choice of medical and health sites provide an optimal path. Therefore, it is necessary to provide more accurate services from the perspective of the needs of rural residents, improve the supply institutions of basic medical and health services, and solve the contradiction between supply and demand of rural residents.

First, establish a diversified basic medical and health service system. First of all, according to age classification, older patients are provided with priority treatment according to the degree of disease, and 24-hour monitoring services and daily care are provided, so as to solve the worries of the elderly and their children by combining medical care; For middle-aged and young patients, focus on sub-health problems and psychological problems, and provide health guidance and psychological assessment in time to help them relieve pressure. Secondly, to carry out the door-to-door signing activities of doctors, timely information in the process of door-to-door, the establishment of rural residents' health files, and unified upload to the data registration system, to grasp the health status of residents in the region. Regular on-site inspection services are provided to provide differentiated and precise services for different needs of residents. Second, promote the integration of urban and rural transport. On the premise of fully measuring the accessibility of walking, electric vehicles and automobile medical services, medical and health institutions should be set up in areas with high population density and convenient transportation, and then actively build roads to improve road conditions and traffic in rural areas, strengthen the connection with the city, and enhance the matching degree with the supply and demand of rural medical and health services.

(3) Strengthen the health care functions of basic medical and health institutions

In Chapter 4, it is mentioned that there is a positive correlation between residents' health level and rural residents' satisfaction with basic medical and health services. People's needs have changed from disease-centered to health-centered. However, due to the concept of emphasizing treatment over prevention when providing basic medical and health services in rural areas of Hebei Province, residents in rural areas of Hebei Province have suffered more injuries during the novel coronavirus epidemic, which has exposed the shortcomings of medical and health services in rural areas to the public's

attention again.

To improve the basic medical and health level in rural areas, we should first change the concept in time, pay attention to the work of prevention and health care, and strengthen the trust of residents in rural doctors. First, transform institutional functions. Under the premise of rural social transformation, changes in residential expectations and future needs, efforts should be made to improve diagnosis and treatment services such as disease prevention and rehabilitation, and timely adjustments and changes should be made. Priority has been given to disease prevention, maternal and child health care, health education, prevention and treatment of infectious diseases and planned immunization, and free health check-ups and publicity activities have been actively carried out on a daily basis to raise residents' awareness of health and epidemic prevention and improve their health. Second, accelerate the linkage of rural three-level health service networks. Promote the unified management of village, township and county level, straighten out the relationship between the three-level medical and health care network, government departments take the lead to ensure the basic role of village clinics and the hub role of township health centers, realize the effective combination of the three-level health service network with the hierarchical diagnosis and treatment system and the referral system, and effectively combine the theme of providing medical and health services at the three levels with that at the grass-roots level. Ensure the communication and contact of the three-level institutions and the reasonable allocation and flow of medical and health resources, while giving full play to their preventive and health care functions.

4. Establish a Multi-Level and Cross-Departmental Participation Mechanism

As there are many subjects involved in basic medical and health services and there are unclear responsibilities, in order to better ensure that residents in rural areas of Hebei Province can better enjoy fair medical and health services, it is proposed to establish a multi-level and cross-departmental participation mechanism.

At the first level, the government departments regularly survey the satisfaction of rural areas with the current basic medical and health services, and then the basic medical and health services in rural areas can be delegated to local governments through democracy and administrative delegation. The key to the stable operation of the principal-agent mechanism is that rural residents have enough consciousness of participation and smooth feedback channels. To this end, the first step is to strengthen health education. Mobilize medical service volunteers to go into the homes of rural residents to carry out medical and health knowledge advocacy activities, encourage all villagers to take the initiative to participate in the study of basic medical and health service system, and guide rural residents to establish correct health awareness. Second, we should attach importance to the role of grassroots organizations. As rural residents are in a weak position in social life, their demands are easily ignored. Therefore, attention should be paid to the role of grass-roots organizations in daily activities, and grass-roots organizations should build a platform for dialogue between the government and rural residents, and grass-roots autonomous organizations should regularly collect opinions

from the masses and centrally convey them to relevant government departments.

At the second level, for the problems of multi-head management and chaotic management, we build an information sharing platform and set up a special joint team of departments to solve any problems. The joint team is mainly composed of the financial department, the Medical Security Bureau, private hospitals, education departments and the public. The team can grasp the development and changes of medical and health services in rural areas at the current stage according to the satisfaction and demand changes of medical and health services regularly investigated by local governments, and focus on solving the pain points of rural residents on this basis. Secondly, the supervision and prosecution role of the public should not be underestimated, and the feedback to the government through the village committee and online petition channels is provided, and the local government supervises the work of the group and strengthens the control mechanism.

The third layer of basic medical and health services itself, the introduction of the "Internet" system, the construction of information service platform, the establishment of rural residents health information card and family doctor services, timely understanding of residents' health conditions, effective prevention and control of endemic diseases and chronic diseases.

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