

# *The Real Cost of Cheap Healthcare in China: Research Based on the Current Situation and Problems of Medical Care in China*

**Pengbo Li**

*Beijing Haidian Foreign Language Tengfei School, Beijing, China  
pl2973@columbia.edu*

**Abstract.** This study explores the actual costs and long-term sustainability of China's low-cost healthcare model, a system that has achieved notable outcome, including a life expectancy of 78.2 years and an 81-point basic health service coverage rate, while maintaining a relatively low per capita healthcare expenditure of \$1,033 international dollars in 2021. By using a secondary data analysis approach, the research draws on comprehensive datasets from multiple authoritative sources: global indicators from the World Health Organization (WHO) and the World Bank, as well as micro-level data such as public hospital revenue-expenditure statistics from Chinese local governments, such as Guangdong Provincial Health Commission and doctor salary surveys from state-owned media like CCTV News. The findings reveal three core challenges undermining the model's sustainability. First, the government controls healthcare costs primarily through limited fiscal subsidies and centralized procurement policies, which leaves public hospitals with significant funding gaps. Second, these gaps force hospitals to shift financial burdens to doctors, resulting in low salaries and reduced talent attraction, and to patients via increased reliance on non-diagnostic service revenues. Third, there exists a severe imbalance in medical resource allocation, with over 70% of resources concentrated in urban areas, widening urban-rural and regional disparities. To address these issues, the study concludes that sustainable reform must involve optimizing government investment in public hospitals, strengthening major-disease insurance to lower patients' out-of-pocket expenses, and integrating medical resources to narrow allocation gaps, ultimately balancing affordability with service quality.

**Keywords:** China's low-cost healthcare, healthcare cost structure, government investment, medical resource allocation.

## **1. Introduction**

Healthcare systems globally grapple with the fundamental trade-off between affordability and quality challenges amplified by aging populations, technological advancements, and economic fluctuations. Developed countries like the U.S. and U.K. often face high healthcare expenditures to maintain quality, while many developing nations struggle to ensure basic coverage within limited

budgets. China stands out with a distinctive low-cost healthcare model: by 2021, it had achieved a life expectancy of 78.2 years and an 81-point basic health service coverage rate, yet its per capita healthcare expenditure remained relatively low at \$1,033 international dollars [1]. However, this model's sustainability has increasingly been questioned in recent years. Problems such as the low proportion of government investment in healthcare, heavy out-of-pocket burdens on patients, and uneven urban-rural allocation of medical resources have emerged, raising concerns about whether the "cheapness" of China's healthcare comes at the cost of long-term quality and equity.

The primary purpose of this study is to systematically analyze the operational logic and potential risks of China's low-cost healthcare model across three core levels: government cost control mechanisms, the pass-through of burdens to doctors and patients, and structural imbalances in resource allocation. The significance of this research is threefold. First, at the national level, it fills a gap in existing studies that often focus solely on either expenditure levels or quality indicators, instead providing a holistic analysis of how cost control measures affect different stakeholders. This can offer evidence-based insights for Chinese policymakers to address current challenges such as doctor talent shortages and inadequate major-disease protection. Second, at the global level, China's experience provides a unique case for other countries, especially developing nations, seeking to balance affordability and quality in healthcare, offering lessons on both the achievements and pitfalls of low-cost models. Third, it enriches the global academic discourse on healthcare system design, challenging the binary view that "high cost equals high quality" or "low cost equals low quality".

This study adopts a secondary data analysis method, leveraging multi-source datasets to ensure comprehensiveness and cross-validation. Data sources include: the WHO Global Health Expenditure Database for cross-country indicators, the World Bank for PPP, and Our World in Data for life expectancy and out-of-pocket expenditure comparisons. Moreover, the researchers get the data from Chinese domestic sources, such as hospital revenue-expenditure data from the Guangdong Provincial Health Commission, doctor salary surveys from CCTV News, and medical resource allocation analyses. The above data can supplement micro-level cases and policy details.

## 2. Research method

This study adopts a secondary data analysis method. First, researchers get data from World Health Organization Global Health Expenditure Database, covering core indicators such as per capita healthcare expenditure, the proportion of government and private expenditure, and basic health service coverage in various countries in 2021. Second, researchers get data from World Bank and Our World in Data, providing cross-country comparative data such as GDP adjusted by purchasing power parity (PPP), the proportion of healthcare expenditure, and life expectancy. Last, researchers get data from Chinese local government and authoritative media reports, such as hospital revenue and expenditure data released by the Guangdong Provincial Health Commission, CCTV News' survey on doctors' salaries, and analyses on the allocation of medical resources by Sina Finance and Sohu News, which are used to supplement domestic micro cases and policy details. Through cross-country data comparison, analysis of domestic urban-rural and regional differences combined with policy text interpretation, the relationship between China's healthcare cost structure and quality performance is sorted out.

### 3. Results and discussion

#### 3.1. Government investment and cost control mechanisms

First, the Chinese government controls healthcare expenditure through "limited subsidies + strong administrative control". In 2022, government health expenditure accounted for 8.8% of total fiscal expenditure, far lower than that of the United States (24.7%) and the United Kingdom (20.7%) [1]. Taking Guangdong as an example, only 18.8% of public hospitals' revenue comes from government subsidies, and 72.2% relies on operational income generation, forcing hospitals to make up for funding gaps through non-diagnostic services such as examinations [2]. Additionally, when government subsidies account for less than 20% of hospital revenue, hospitals tend to increase non-diagnostic service income to make up for gaps, which negatively correlates with operational efficiency [3]. For every 1% increase in government health expenditure, per capita medical consumption expenditure of residents will decrease by approximately 0.3%. However, the proportion of government health expenditure allocated to primary medical care and public health is only 35%, while the proportion spent on hospital construction and other aspects is as high as 65%, indicating a significant structural imbalance.

Second, centralized procurement policy is a core means of cost control. The National Healthcare Security Administration has reduced drug prices by more than 50% through bulk purchasing, but 60-80% of drugs used in public hospitals are domestic generics, and the coverage of imported original drugs has decreased, raising concerns about efficacy [4]. In addition, the cost of medical education in China is extremely low, much lower than that in the United States. Although this reduces labor costs, it also leads to low expected income for doctors, exacerbating difficulties in talent recruitment [5].

#### 3.2. The pass-through effect of cost burdens on doctors and patients

First, hospitals' funding gaps are passed on to doctors and patients through "revenue generation pressure". Income from examinations and treatments has become the main source, and examination-related income continued to grow from 2021 to 2022 [6]. Doctors' salaries are controlled by the government, equivalent to those of low-professional public positions, and the income gap between hospitals of different levels is small, leading to a decline in the college entrance examination scores for medical schools and pressure on talent quality [7].

Second, patients face significant out-of-pocket pressure. In 2018, 6.94% of China's population spent more than 25% of their household income on medical care, far higher than in Japan (1.7%) and the United Kingdom (0.37%); in 2020, out-of-pocket expenses accounted for 35% of total healthcare expenditure, nearly three times that of Germany (12%) [8], and medical insurance focuses more on daily diagnosis and treatment, with insufficient protection for major diseases. In 2023, the out-of-pocket expenditure ratio for residents with major diseases was 42%, far higher than the national average of 35%. It also points out that the current medical insurance system's "catastrophic insurance" has low reimbursement ceilings, leading to 15% of major-disease patients facing catastrophic medical expenditure [9].

#### 3.3. Structural imbalance in resource allocation

First, urban-rural and regional gaps are prominent. Cities occupy more than 70% of medical resources, while rural areas account for only 30%. The proportion of minimally invasive surgeries

and the number of institutions in urban hospitals are far higher than those in rural areas [10]. The number of medical facilities in eastern regions is 2.8 times that in western regions, and high-quality resources are concentrated in large cities, leading patients to flock to tertiary hospitals and low trust in primary-level institutions [11]. The gap in high-quality resource, such as tertiary hospital beds and specialist doctors, is 2.3 times larger than the gap in basic resources. The main cause is the urban bias in government resource allocation and the low mobility of rural medical talents [12].

Second, although the government promotes telemedicine and the construction of regional medical centers, the national per capita number of doctors and beds is still lower than that in developed countries. The technical capacity of township health centers is weak, and only 37% of hospitals have realized cross-hospital sharing of electronic medical records, resulting in repeated examinations and increased costs [13].

#### 4. Conclusion

China's healthcare system has achieved a balance between low cost and basic quality through limited government investment, centralized procurement, and low labor costs. However, its "cheapness" comes at the cost of increased burdens on doctors and patients, unbalanced resource allocation, and potential risks to quality. Future breakthroughs require reforms in three aspects: first, optimizing the structure of government investment to increase subsidies for public hospitals and incentives for doctors; second, improving medical insurance coverage for major diseases and reducing patients' out-of-pocket ratio; third, accelerating resource sinking and data integration to narrow urban-rural and regional gaps. Only in this way can the sustainable coordination of "low cost" and "high quality" be achieved, and a more equitable and efficient healthcare system be built.

This study has three main limitations. First, in terms of data, it relies primarily on secondary data from 2021 to 2025, with limited access to micro-level, longitudinal data. For example, long-term tracking of individual patients' medical burden changes or doctor career satisfaction. This may restrict the analysis of dynamic trends, such as how centralized procurement policies have affected drug efficacy over time. Second, in terms of analytical perspective, it emphasizes quantitative data such as expenditure ratios and resource counts but pays less attention to qualitative insights from stakeholders such as patient interviews, which could provide richer context for understanding the subjective impacts of cost burdens. Third, in terms of research scope, it focuses on national and regional-level analyses but lacks in-depth case studies of specific regions, such as underdeveloped western rural areas, or specific medical institutions such as primary-level township health centers. This limits the ability to capture localized challenges that may not be reflected in aggregate data.

Future research can address these limitations in three ways. First, expand data sources to include longitudinal primary data, such as tracking surveys of patients with chronic diseases or major illnesses to analyze changes in their out-of-pocket burdens over 5 to 10 years, or panel data on doctor salaries and career choices to assess the long-term impact of low medical education costs on talent retention. Second, conduct in-depth case studies of underrepresented regions, exploring how local policies adapt to national cost control measures and identifying region-specific solutions for resource sinking. Third, integrate qualitative methods, such as semi-structured interviews with policymakers, doctors, and patients, to capture subjective experiences that quantitative data cannot fully reflect. Additionally, future studies could compare China's model with other low-cost healthcare systems, such as India and Thailand, to identify cross-national best practices for balancing cost, quality, and equity.

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