

COMMENT

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China's universal medical insurance scheme: progress and perspectives

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Abstract

China has built a universal medical insurance which covers 95% of the total population, up from approximately 10% two decades ago. However, this medical insurance neglects public health, reducing the health system's cost-effectiveness. Additionally, an affordable range of medical insurance payments by local governments and residents needs to be considered.

Keywords Medical insurance, Medical security, Health system reform

Background

In the early 1950s, China developed a three-level medical security system that included civil servants, state-owned company employees, and rural residents. However, after the bankruptcy of the township collective economy and state-owned enterprise reforms across the country in the mid-1980s, most Chinese people were not covered by medical insurance until the early 2000s [1]. Moreover, during the last 20 years, the difficulty and expensiveness of seeing a doctor were critical issues for most Chinese people. To resolve these issues, the central government planned to build a universal medical insurance system. Specifically, from 1998 to 2007, the Chinese government successively issued three regulations to build the Urban Employee Basic Medical Insurance (UEBMI), New Rural Cooperative Medical Scheme (NRCMS), and Urban Resident Basic Medical Insurance (URBBI), which cover urban employees in the public and private sectors, residents in rural areas, and urban residents, respectively. Later, NRCMS and URBBI were merged into Urban and

Rural Resident Basic Medical Insurance (URRBMI) in 2016. The development of China's medical insurance system is illustrated in Fig. 1.

Here, we provided an overview of the implementation of the newly built medical insurance system based on public data and official documents. We discuss the progress and perspectives of China's medical insurance system.

Stage 1 (2003 to 2009): From social experiment to full coverage

The UEBMI, which started in 1998, is a compulsory medical insurance scheme financed by employees and their enterprises. Meanwhile, China's government-funded medical insurance system for residents began in 2003.

Notably, medical insurance coverage among all Chinese increased from 13.4% in 2003 to 94.6% in 2023 [2]. Moreover, considering that medical insurance coverage reached 92.4% in 2009, China took approximately six years to realize universal medical insurance coverage from social experimentation to nearly full implementation.

With the merger of the URBBI and NRCMS, China's universal medical insurance system includes two major insurance schemes. Regarding the UEBMI, the compulsory medical insurance coverage among all urban employees increased from 42.5% in 2003 to 78.9% in 2023 [2]. Furthermore, the URRBBI, a voluntary medical insurance scheme

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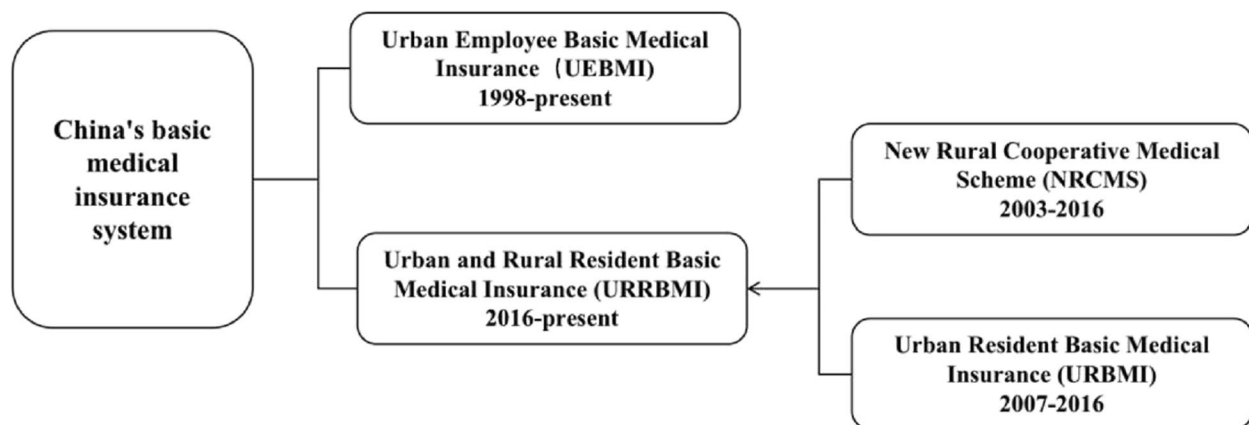


Fig. 1 Flow chart of the development of China's medical insurance system

financed by the government and residents, covers more than two thirds of the country's total population in 2023.

Stage 2 (2010 to present): Towards a multi-level medical insurance system

The UEBMI and URRBMI are referred to as basic medical insurance because of their relatively low reimbursement levels. In 2010, approximately 40% of the medical costs for inpatients in the entire country were covered by the medical insurance system [3]. In 2012, the Chinese government required local governments to create a serious illness medical insurance (SIMI) affiliated with the NRCMS and URBMI as complementary medical insurance to enhance their security capacity [4]. Subsequently, SIMI was complemented by the UEBMI. Through the SIMI, which covers more than 90% of the total population of the whole country in 2023, over 60% of the medical cost can be covered by the medical insurance [2].

Recently, commercial medical insurance for serious illnesses such as various kinds of cancers, supported by the government, has emerged in China. For example, since 2021, "Huhuibao" has been a private budget supplementary medical insurance which covers for Shanghai residents. The commercial medical insurance coverage focuses on patients' hospitalization expenditure, specific high-priced drugs, and proton and heavy-ion treatments. Patients covered by commercial medical insurance can receive additional compensation for the remaining medical expenditures which are covered by the basic medical insurance.

Perspectives on the medical insurance system

Although China's universal medical insurance scheme has made significant progress over the past 20 years, the disadvantages of the medical insurance system must be carefully considered.

A crucial disadvantage of the current medical insurance system is that it is only applicable to hospitals and clinical settings. Ideally, the health system should prioritize public health because paying more attention to public health than medical treatment is much more cost-effective [5]. Furthermore, the medical insurance scheme should focus on the performance monitoring and evaluation of public health work undertaken by hospitals, community health centers, and the Centers for Disease Control and Prevention (China CDC). However, the current medical insurance system mainly covers clinical treatment expenses. Public health work is paid through government subsidies rather than the medical insurance system [6]. Moreover, government finance departments are in charge of public health performance monitoring and evaluation, which have not been fully implemented, rather than the medical insurance system. The division between medical insurance and public health has reduced the country's health system cost-effectiveness. Additionally, pay-for-service payments, which are the major payment method in the current medical insurance system, motivate hospitals and physicians to focus on treatment and neglect prevention. Considering the logic of the more public health, the fewer the patients, the hospitals in China which want more income from more patients are not motivated to pay attention to public health.

Thus, the current medical insurance system is not only less cost-effective but also more harmful to human health. Therefore, the medical insurance system must be transformed such that it adheres with the logic, the better the public health that the hospital ensures, the greater the rewards received by it from the medical insurance system. This cycle becomes beneficial only if the insurance system focuses on public health and motivates the integration of public health and medical treatment [7].

Additionally, the medical insurance system should consider sustainable development. Given the difficulty in controlling the increase in medical expenditure, the burden of increasing medical expenditure on China's local governments and residents must be carefully considered [8]. For example, the URRBMI's annual insurance premium for residents has increased 38 times in the past 20 years. Specifically, the premiums per capita were RMB 10 (approximately USD 1.4) and RMB 380 (approximately USD 53.1) in 2003 and 2024, respectively. This premium increase has reduced residents' willingness to pursue insurance. Meanwhile, annual government subsidies for the URRBMI have increased 64 times over the past 20 years. Specifically, the subsidies per capita were RMB 10 (approximately USD 1.4) and RMB 640 (approximately USD 89.4) in 2003 and 2024, respectively. According to the National Financial Statistical Bulletin, the annual income of residents and annual revenue of local governments increased 8.3 and 12.7 times over the past 20 years, respectively. Clearly, the increase in government subsidies for the URRBMI is much higher than the increase in the annual revenue of local governments. This has created significant expenditure pressure on local governments. As local governments can inevitably face financial difficulties, building a stable financial subsidy mechanism for medical insurance, particularly the URRBMI, is crucial for the sustainable development of China's health insurance system. In particular, an affordable range of medical insurance payments by local governments is a future research area.

Conclusions

Despite its costs, China's medical insurance system has made great progress over the past 20 years. However, the integration of public health, clinical treatment, and sustainability of the system must be considered by the government when developing China's medical insurance system.

Abbreviations

UEBMI	Urban Employee Basic Medical Insurance
NRCMS	New Rural Cooperative Medical Scheme
URBMI	Urban Resident Basic Medical Insurance
URRBMI	Urban and Rural Resident Basic Medical Insurance
SIMI	Serious Illness Medical Insurance
CDC	Center for Disease Control and Prevention

Authors' contributions

JZ and XZ initiated the manuscript draft. DZ revised. All authors approve the final version of the manuscript.

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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