

Evaluating China's Health System Performance Towards Universal Health Coverage

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ABSTRACT

Achieving universal health coverage (UHC) is one of the core goals of the Sustainable Development Goals (SDGs), which aim to ensure that all individuals have access to quality health care without facing financial hardship. As the largest developing country, China has made remarkable progress in achieving UHC through healthcare financing and government leadership. However, urban and rural areas in China still face challenges in terms of access to health care, quality, and resource allocation. This structured literature review of articles published between 2010 and 2025 was conducted through PubMed and Google Scholar, and a total of 31 studies related to UHC and health systems in China were included as evidence for analysis. Through this literature review, we found that China has achieved more than 95% population coverage in terms of UHC, significantly improving access to basic health services. However, China's financial protection indicators, such as Catastrophic Health Expenditure (CHE), are still higher than those of comparable countries. There are significant differences in the distribution of health human resources, the quality of medical services, and the quality of facilities between urban and rural medical institutions in China.

KEYWORDS

Universal Health Coverage; Access to basic health services; Equal distribution of health resources

1. INTRODUCTION

Universal health means that everyone can access quality health services at any location when needed, without facing financial difficulties [1]. National health coverage protects individuals' health rights and interests, ensuring that people with lower economic levels can access the high-quality medical services they need [2]. Universal health coverage encompasses the essential healthcare services required throughout the life cycle, from health promotion and prevention to treatment, rehabilitation, and hospice care [1]. Universal health coverage is not only the target of the United Nations Sustainable Development Goals (SDGs) but is also crucial to achieving other health-related SDGs [1]. Therefore, universal health coverage not only protects people's health rights but also minimizes the economic burden of paying for medical services [3]. Universal health coverage also plays a key role in promoting sustainable development, fostering social equity, and improving the overall public health level [3].

Hospitals in China are organized according to a three-tier system, and the Chinese government classifies hospitals into primary, secondary, or tertiary institutions based on their ability to provide medical services, medical education, and conduct medical research [4]. Additionally, community health service centers are available in urban areas, while township health centers are located in rural areas [4]. This type of health service can provide basic health services to both community and rural residents [4]. China's hospital system ensures that rural residents also have access to medical care, providing access to healthcare and essential medicines. China's universal health insurance system

consists of two major insurance schemes, namely the Basic Medical Insurance for Urban Employees (UEBMI), which covers urban workers in the public and private sectors, and the Basic Medical Insurance for Urban and Rural Residents (URRBMI), which covers both urban and rural residents [5]. About 1.3 billion people in China will participate in basic medical insurance, accounting for about 95% of the total population [6].

As the largest developing country in the world, China's healthcare system has achieved internationally recognized successes in managing medical services and addressing public health challenges [4]. As a result, China's healthcare system and its efforts to achieve universal health coverage offer important lessons for other countries. Based on insights from the Health Systems Framework towards UHC, which is grounded in the underlying evidence literature, China has demonstrated excellent capabilities in leadership, health financing, and access to essential medicines. However, while China has made significant progress toward universal health coverage, it still faces challenges in terms of Service Delivery, Health Workforce, and Health Information Systems.

This literature review will assess the performance of China's health system from multiple perspectives and illustrate the progress of China's health system toward universal health coverage through evidence-based insights. This paper critically analyzes China's successes and challenges in achieving universal health coverage and proposes effective strategies and recommendations for China's health system to achieve universal health coverage.

2. METHOD

2.1. Search Strategy

To fully identify the relevant literature on the performance of China's health system in advancing universal health coverage (UHC), a structured literature search was conducted on June 2, 2025, via PubMed and Google Scholar. The search examined publications from the last 15 years (2010-2025) to ensure that the literature was up-to-date and relevant.

In searching the literature on China's health system and universal health coverage in China, the following keywords were used:

“Importance” AND “Universal Health Coverage” OR “UHC” AND “China”

AND (“Health services coverage” OR “service delivery” OR “health system financing”

OR “human resource”

OR “health products” OR “health information” OR “leadership” AND “governance”) AND (“impact” AND “health system performance” AND “factors”)

AND (“shortage” OR “success”)

The terms "AND" and "OR" were used in the search process to ensure the relevance and comprehensiveness of the search results. Only English articles were screened for inclusion and duplicates and irrelevant results were manually screened and removed.

2.2. Inclusion and Exclusion Criteria

The following criteria were considered when selecting literature related to the research topic. Firstly, the selected articles were published between 2010 and 2025, ensuring the timeliness of the content to the greatest extent. Secondly, the selected literature must be based on Universal Health Coverage and China's health system. It is also important to select literature resources that will aid in studying China's universal health coverage. At the same time, this literature review prioritizes peer-reviewed articles published by authoritative institutions in the selection of literature, ensuring that the selected literature meets academic standards, has credibility, and corresponding reference value. The literature search

excluded articles that did not fit the research theme of China's health system and universal health coverage.

2.3. Grey Literature

In addition to peer-reviewed articles, this review also includes some grey literature to capture perspectives and information that have not yet been published in scholarly journals. Literature from the National Health Commission of the People's Republic of China and the World Bank was included in the literature review. The sources of this grey literature are credible, they are from authoritative institutions, and they are relevant to the subject matter of the study. The inclusion of these grey literature sources in the literature review is helpful for a multifaceted analysis of the implementation and progress of universal health coverage in China. Therefore, this grey literature was included in this literature review, providing a comprehensive explanation for universal health coverage.

3. FINDINGS

3.1. Universal Health Coverage

3.1.1. Health services coverage

In China, basic medical insurance plans funded by public funds typically cover inpatient care, primary and specialty care, mental health care, physical therapy and urgent care [2]. Approximately 95% of the total population is covered by the universal health insurance system established in China [1]. The Basic Medical Insurance for Urban Employees (UEBMI) covers urban workers in both the public and private sectors [7]. The Basic Medical Insurance for Urban and Rural Residents (URRBMI) is a voluntary medical insurance scheme funded by both the government and residents that covers both rural and urban residents in China [7]. These two types of insurance ensure access to basic health services in towns and villages across the country.

Over the past 20 years, China has made significant progress in health service coverage, particularly in the areas of reproductive health, maternal, newborn, and child health, infectious diseases, service capacity, and accessibility [1]. Inequities in health care coverage in China have been reduced, and coverage in these areas can reach the level of high-income countries [1]. However, coverage of services for chronic diseases such as hypertension, diabetes, and chronic kidney disease in China is still inadequate, significantly lower than in other high-income countries [1]. This shows that the Chinese government's public health authorities still need to strengthen infrastructure and investment in chronic disease management.

3.1.2. Financial risk protection

Protecting against financial risks is a fundamental goal of health systems, and it is a key dimension of universal health coverage [8]. Catastrophic Health Expenditure (CHE) and Health Poverty Index (HPI) are indicators commonly used internationally to assess financial risk protection [8]. The goal of financial protection in universal health coverage is to avoid catastrophic payments due to illness and to ensure that all individuals do not suffer an excessive financial burden when accessing essential health care [9]. In 2018, the overall incidence of catastrophic healthcare expenditure in China at the 25% and 10% thresholds was 4.7% and 21.7%, respectively [1]. It means 4.7% of Chinese residents allocate more than 25% of their total household expenditure to medical services, and 21.7% allocate more than 10% of their total household expenditure [1]. The overall incidence of healthcare-induced poverty in 2018 was 1.9% [1]. Despite the positive developments in financial risk protection in China in recent years, the incidence of CHE and MI remains high compared to other countries [8].

Although China is reducing out-of-pocket health expenses as a share of total health expenditure, the health costs faced by China's poor remain high. China's social health insurance scheme still lacks adequate financial protection for Chinese households, especially low-income rural families and those with chronic diseases [10]. 10.53% of households with chronic diseases in China are trapped in poverty due to medical expenditures, more than twice as many as those without chronic diseases [10]. The deterioration of China's health situation in the field of chronic diseases also proves the urgency of continuously improving the medical service capacity and financial security for underdeveloped provinces and regions [10].

3.2. Service Delivery

3.2.1. Access

Access to health services has improved significantly in China, with a gradual increase in the number and quality of primary care personnel [1]. In 2018, 81.7% of households in China were able to reach the nearest medical facility within 10 minutes [1]. The shortening of distances to healthcare has also greatly improved access to health services. Despite improvements in access to basic medical facilities and services, a significant gap remains in the distribution of medical resources between urban and rural areas. Due to uneven infrastructure development, the construction of medical and health facilities in rural and underdeveloped areas lags significantly behind [11]. Public trust in the quality of care provided by local primary care providers is low, and many patients do not trust primary care providers for even simple conditions, often seeking medical treatment in high-level hospitals [1]. This will lead to overcrowding of large public hospitals and underutilization of primary care resources. The transportation and geographical barriers that often exist in rural areas can further limit rural residents' access to health care on time.

3.2.2. Quality

China has a high-quality, efficient, and integrated healthcare system. Factors such as limited funding, shortages of healthcare personnel, and inadequate infrastructure in rural areas have led to a widening gap in the quality of healthcare services between urban and rural areas in China [12]. The quality of medical services is unevenly distributed between hospitals and primary healthcare facilities. This has led to a low level of public trust in the quality of care provided by local primary care providers, leading the public to choose to seek medical care in urban hospitals [1].

3.2.3. Equity

Health resources are unevenly distributed in China, with significant differences between urban and rural areas [12]. Urban areas tend to have greater access to health resources than rural areas, which hinders equitable access to health services in rural and remote areas. Highly qualified medical staff tend to gravitate toward large hospitals in major cities for professional development [13]. This suggests that future policies should prioritize the equitable distribution of health resources in urban and rural areas and that investment in medical resources in rural and remote areas needs to be strengthened.

3.3. Health System Financing

3.3.1. Populations covered

China's basic medical insurance system currently covers approximately 95% of the population [6]. The Chinese Government has established basic medical insurance for urban workers, covering all urban workers. The basic medical insurance for urban residents covers urban residents in China [14]. Public finance accounts for more than three-quarters of the UEBMI pooled fund [15]. Individual contributions are a significant source of funding for the Basic Medical Insurance for Urban and Rural Residents, which is also partially subsidized by public funds [15]. However, China's health security

system still has deficiencies in population coverage. Those living in extreme poverty and on the move face difficulties in affording the cost of health insurance, which also harms progress toward universal health coverage [7].

3.3.2. Services covered

In China's universal health coverage, health services include inpatient and outpatient care, preventive services and essential medicines, and maternal, newborn and child health services [1]. However, there is a large gap in the coverage of chronic disease services in China [1]. More than 90% of the services provided by rural health clinics in China are covered by basic health insurance [16]. Expanding access to health services is important to improve population health outcomes.

3.3.3. Costs covered

Although the Chinese government has gradually increased its funding for health care, there are still shortcomings in terms of cost coverage. The actual reimbursement rate of immediate reimbursement by medical insurance reached 60.6% [17]. However, there are still high out-of-pocket costs, with 39.5% of the out-of-pocket costs for basic medical insurance for urban residents [18]. This prevents high-income groups from benefiting more from a single treatment and also affects access to health services for low-income groups [18].

3.4. Human Resources for Health

Health human resources are the most critical part of health resources and are essential to achieving better health. China has made significant progress in terms of the total amount of health human resources. China had 14.41 million health workers, the number of active physicians and registered nurses per 1,000 people stood at 3.15 and 3.71 [19]. The overall distribution of health human resources is uneven across provinces [20]. There are significant differences in the distribution of doctors and medical equipment, especially in remote rural areas of southwest China [21].

3.5. Health Products

China's commitment to reducing healthcare costs is critical to ensuring widespread access to health products. In 2019, China amended its Drug Administration Law, which can strengthen the regulation of health products and ensure the safety of health products [22]. The price of essential medicines in China is close to and slightly higher than the international level, but the essential medicines are somewhat affordable [23]. However, access to health products such as cancer drugs remains a challenge for the Chinese population, and the overall availability of most innovative anti-cancer drugs remains at a low level [24].

3.6. Health Information

Health Information Systems can dramatically improve the efficiency and accessibility of health care. The use of electronic health records (EHRs) to record patient information in health systems is considered one of the essential components of an efficient health system [25]. Mobile health can also provide health services and manage patient information to people in remote areas in a timely manner [26]. Not only does it help healthcare workers in rural areas stay up-to-date with the latest health information, but it also helps them manage patients with chronic diseases more effectively. However, many underdeveloped regions lack the infrastructure and technical training to fully adopt mHealth tools. Strengthening health information systems is critical not only to improve individual care, but also to improve health system performance and disease surveillance.

3.7. Leadership and Governance

The Chinese government has shown active leadership in funding the health system and universal health coverage. In 2019, the Chinese government invested 800 billion Chinese Yuan in health care [27]. In 2020, the government's subsidy for residents' medical security reached 550 Chinese Yuan per person [27]. The Chinese government has also dramatically reduced the price of medicines through a series of measures to improve the diagnosis rate and access to treatment for chronic diseases [27]. The Chinese government also has a strict monitoring system for medical institutions, which effectively maintains the safety of medical insurance funds [27]. But there are some problems with China's health system leadership in promoting equity and efficiency. There are many institutions, organizations and departments in China's health system, and it is necessary to clarify the work content of each department to maximize the efficiency of China's health system and promote universal health coverage.

4. DISCUSSION

China has made significant progress towards universal health coverage, but challenges remain in achieving access and equity in health services [4]. There are similarities and differences between China and Thailand's strategies for achieving universal health coverage. Since 2001, the Thai government has continued to provide policy support and funding for health system reform to expand the coverage of basic health services [28]. Both countries have made primary care a central step in advancing UHC [28]. Thailand promoted the transfer of medical services from hospitals to communities, and improved the accessibility and quality of primary health care [28]. Thailand continued to expand its health workforce before and after the implementation of UHC, upgrading health services in remote and rural areas by increasing the number of rural doctors [28].

To address these issues, the following are some strategies to improve the performance of universal health coverage in China. First, the Chinese government's health authorities should standardize the training of primary health service personnel and upgrade the basic medical facilities of primary health institutions, so as to enhance the public's credibility in primary health care institutions [29]. Second, incentives should be set up for those who work in rural or remote areas [30]. Finally, investment should be made in mobile health apps that can better monitor and manage people with chronic diseases in remote areas, promoting health equity and universal health coverage [31].

5. CONCLUSION

This literature review assesses the performance of China's health system, illustrating the notable achievements and ongoing challenges of China's health system in achieving universal health coverage through evidence-based insights and the Health System Framework. Through this literature review, we can see that China has made great progress towards universal health coverage, but the distribution of health services and health workforce has led to unequal distribution of health resources. In the future, there could be serious health inequalities for both urban and rural dwellers. To strengthen progress towards universal health coverage, China needs to continue to make efforts in the areas of service delivery, health workforce, and financing. In order to helping China achieve more equitable health system performance by upgrading rural healthcare infrastructure, training primary health care workers, and upgrading digital health systems to achieve the vision of universal health coverage.

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