

Evaluation of Health and Poverty Alleviation Programs for Yunnan, China

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Introduction

- China has successfully reduced prevalence of poverty as seen in Figure 1.
- Yet, whether financial catastrophic illness is a problem need assessment.

"3 Batches Action Plan"

A batch of people with serious disease receiving medical assistance and treatment by pulling the resources

A batch of people with chronic disease receiving family doctor contracting services

A batch of people with catastrophic disease receiving guaranteed financial assistance

Source: Public policy documents

Objective

- To analysis self-payment ratio and catastrophic health expenditure before and after reimbursement

Methodology

- Study setting:** Contiguous poverty-stricken areas in Yunnan (Poverty criteria: Annual living standard below 2300 (CNY) per capita for rural residents)
- Public policy documents** related to health and poverty alleviation have been analyzed at both central and provincial levels, with the evaluation incorporating data from **three databases**.
- Sampling:** Due to data access challenges, we used a stratified random sampling method in Yunnan Province's 8 impoverished counties. Economic conditions, population size, and geography guided the selection of 3 counties from 61 less severely impoverished areas and 5 from 27 severely impoverished ones. This resulted in 8 sample counties to assess healthcare's impact on poverty reduction.
- Participants:** In 2019, 441,195 individuals (238,565 males and 202,630 females) from 112,787 impoverished households were registered in the Yunnan Province Health Poverty Alleviation Monitoring System.

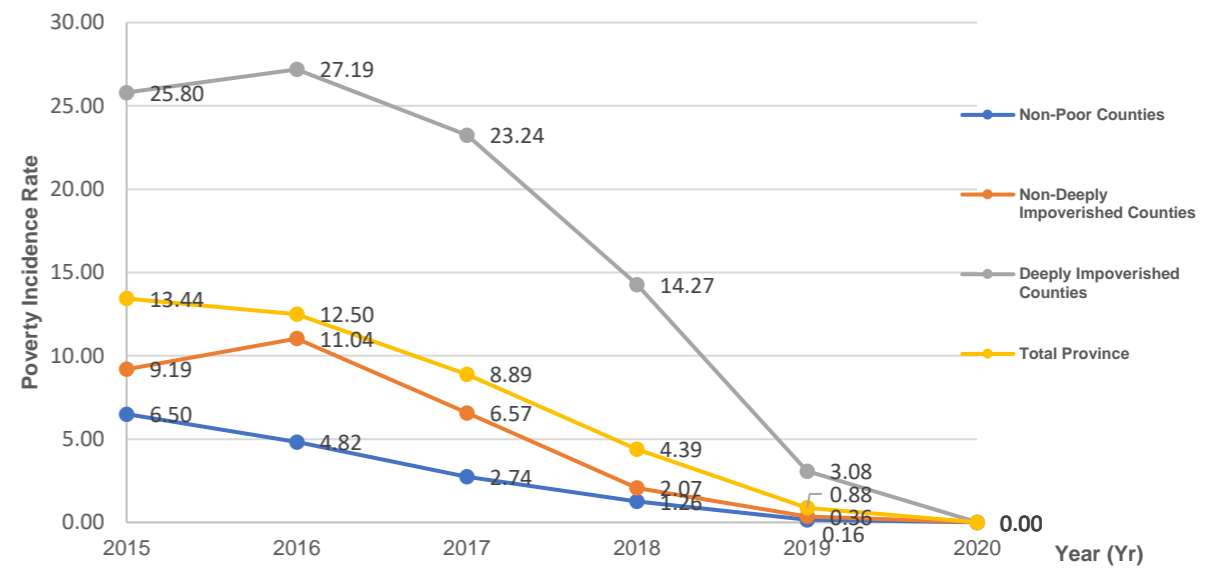


Figure 1 Poverty Prevalence Rate in Yunnan

Source: National Health Service Survey

Content

RULES AND REGULATIONS ISSUED BY THE CHINESE GOVERNMENT

Public policy documents related to health and poverty alleviation at both central and provincial levels

Data Sources

DATASETS ON HEALTH AND POVERTY ALLEVIATION

Monitoring Data from the Yunnan Provincial Health Commission's Health Poverty Alleviation Office

China Health and Nutrition Survey (CHNS)

National Health Service Survey (NHSS)

Results



Table 1 2019 Yunnan Province—Top 10 Hospitalization Reasons, Average Hospitalization Costs, and Self-Payment Ratios for Inpatients among Sampled Poor Households in 8 Selected Counties.

Rank	Disease type (according to top 10 hospitalization reasons)	Average Hospitalization Costs (CNY)	Patient Self-Payment Ratio (%)
2	SMI	17586	8.86
7	CHD	14378	14.86
10	Asthma	14147	9.99
6	COPD	13667	11.66
8	Stroke	13402	10.21
5	CVD	12110	12.41
4	DM	9886.5	14.13
9	CB	7988.6	10.02
1	HTN	6144.6	16.16
3	RA	5589.2	16.19

1. The Self-Payment Ratio for impoverished patients in Yunnan Province ranges from 8.86% to 16.19%, with the lowest ratio observed among patients with severe mental illnesses.

Abbreviations
Hypertension: HTN; Severe Mental Illness: SMI; Rheumatoid Arthritis: RA; Diabetes: DM; Cerebrovascular Disease: CVD; Chronic Obstructive Pulmonary Disease: COPD; Coronary Heart Disease: CHD; Chronic Bronchitis: CB
Source: Monitoring Data from the Yunnan Provincial Health Commission's Health Poverty Alleviation Office

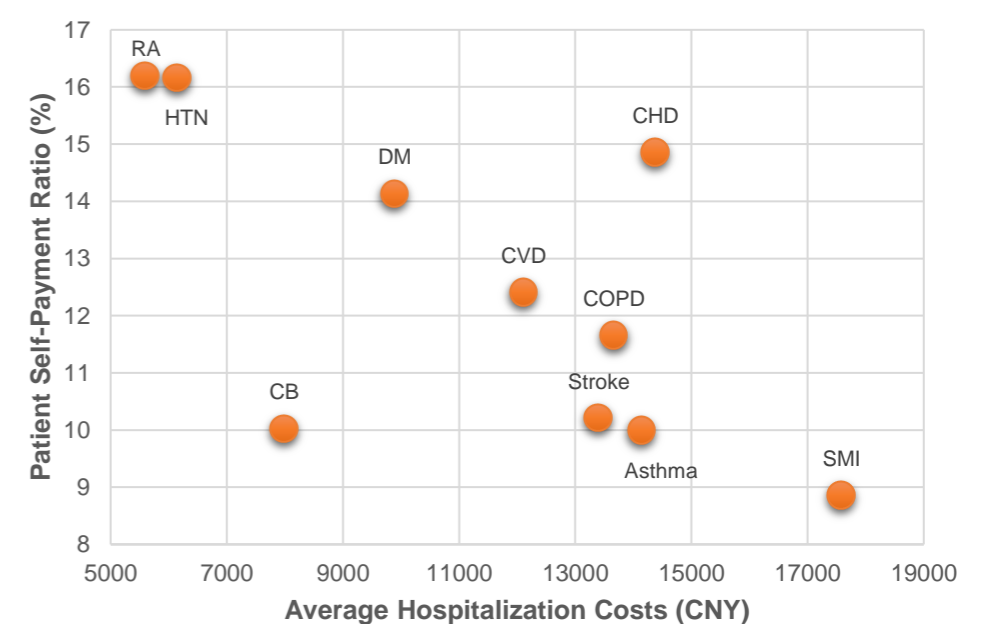


Figure 2 The relationship between average hospitalization costs and self-payment ratio in Yunnan province 2019

Note: In 2019, China per capital GDP = 70892 (CNY), per capita disposable income of rural residents in impoverished areas = 11567 (CNY)

- In 2019, impoverished patients in Yunnan had an average hospitalization expense reimbursement rate of 89.71%, with an average out-of-pocket expense of 556 yuan.
- Following insurance implementation, the incidence of catastrophic medical expenditures significantly decreased from 33.25% to 2.88%, with a reduction of incidence (%) consistently exceeding 90% across various metrics.

Disease type (according to the insurance systems)	Number of Households	Catastrophic Health Expenditure - Before Reimbursement		Catastrophic Health Expenditure - After Reimbursement		Reduction of incidence (%)
		Number of Households	Incidence Rate (%)	Number of Households	Incidence Rate (%)	
Common and Prevalent Diseases	15,621	3,158	20.22	116	0.74	96.3
Centralized Treatment of Major Diseases	3,020	1,004	33.25	87	2.88	91.3
Chronic Disease Contracted Services	7,327	1,671	22.82	82	1.12	95.1
Critical Illness Coverage	277	109	39.35	10	3.61	90.8
Total	26,245	5,942	22.64	295	1.12	95.1

Table 2 2019 Yunnan Province—Catastrophic Health Expenditure Incidence for 4 Treatment Categories of Registered Impoverished Households Before and After Medical Insurance Reimbursement

Source: Monitoring Data from the Yunnan Provincial Health Commission's Health Poverty Alleviation Office

Lessons Learned

- Since the implementation of the Health and Poverty Alleviation Policy in 2015, China has witnessed a reduction in payment of catastrophic illness in Yunnan.
- The transformation from "postponing minor illnesses, enduring major illnesses, and seeking medical attention only for severe conditions" among the impoverished population to "affordable, accessible, and nearby healthcare, eliminating the link between illness and poverty."



Policy Recommendation

- Alleviate non-merit health inequalities**
 - Strengthening primary healthcare services, supporting non-traditional healthcare providers, providing economic assistance, promoting health education, and establishing monitoring and evaluation mechanisms are recommended policies to alleviate non-merit health inequalities.
- The top-down forces created a context that gave legitimacy to promoting a bottom-up approach**

Contact Information

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✦ Recommended Reading:
Liang W, Tang K, Zhu J, et al. Tsinghua-Lancet Commission on health and poverty alleviation in China. *The Lancet* 2023; 0. DOI:10.1016/S0140-6736(23)01856-1.