Faculty of World Economy and International Affairs

Department of World Economy

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Healthcare inequality in China

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Healthcare policies

1990s-2000s

Healthcare Inequality in China

- Recognized increase in healthcare inequality during the 1990s and 2000s
- Highlighted the urgent need for comprehensive healthcare reform

2007

Post-17th Communist Party Congress

- Announcement by the Ministry of Health to initiate policies aimed at reducing healthcare access inequality
- Focus on enhancing the availability of healthcare services

2009

Launch of Major Healthcare Reforms

- Introduction of large-scale reforms aimed at improving healthcare accessibility
- Increased Investment and Coverage Expansion
- Major investments in healthcare infrastructure to support accessibility
- Implementation of various policies over the last 15 years, including the zero markup policy on medicines

2016

Healthy China 2030 Initiative

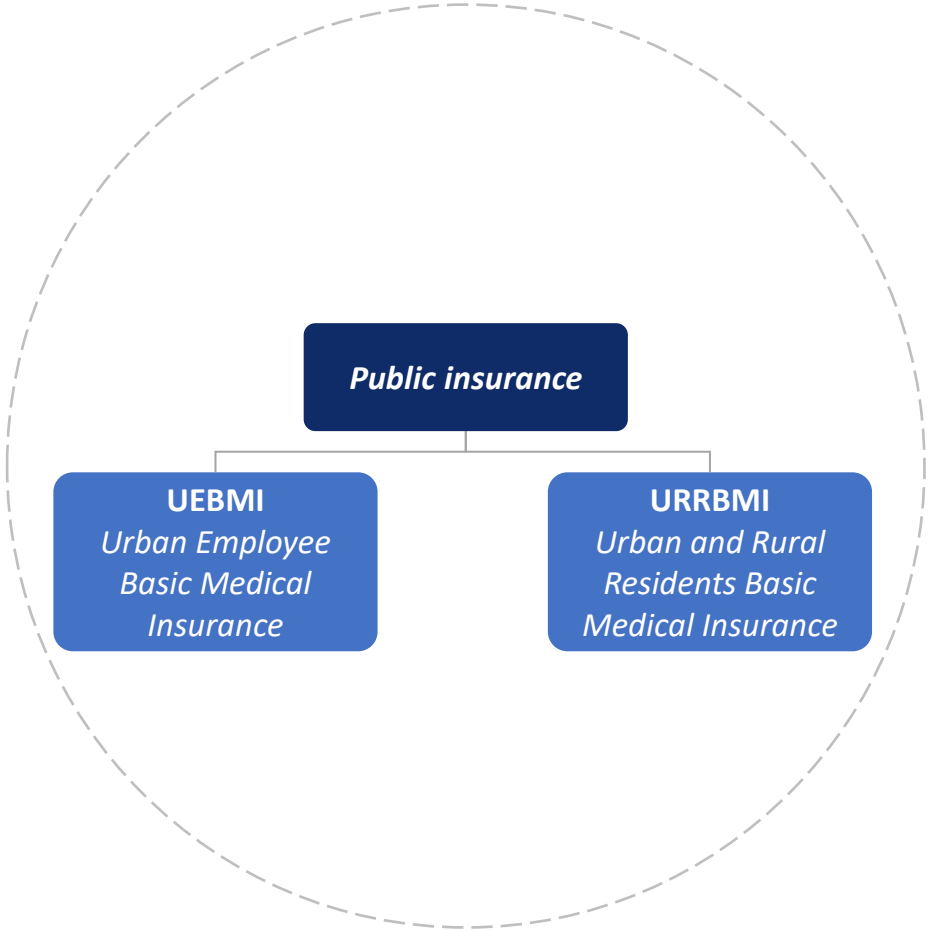
- Adoption of the "Healthy China 2030" program focused on quality healthcare resource expansion
- Aim for balanced distribution of healthcare resources across different regions

Public insurance

Funding Mechanisms
UEBMI: Funded by contributions from both employees and employers.
URRBMI: Funded by the government for those not officially employed.

Reimbursement System
Both insurance plans operate on a reimbursement basis

Differences in Coverage and Reimbursement
UEBMI offers a wider range of services and higher reimbursement amounts.
URRBMI has a more limited scope and lower reimbursement rates.



Methodology and data

1. Data Source

- The study uses data from the China Household Income Project (CHIP) 2018 collected through a series of surveys conducted in both urban and rural areas
- Respondents include households and their individual members.
- Surveys encompass economic status, employment, education levels, income sources, and household expenditures.

2. Sample Size and Representation

- The final sample consists of data from 21,381 households (after excluding incomplete responses).
- Breakdown: 9,284 rural households (43%) and 12,097 urban households (57%).

3. Measurement of Inequality

- The Gini coefficient, adapted for healthcare, was used to measure inequality within the dataset.
- Key indicators: household incomes and healthcare expenditures were selected for analysis.
- The study investigates the distribution of household healthcare spending in relation to income levels.

$$G = 1 - 2\sum_{i=1}^{n} x_i cumy_i + \sum_{i=1}^{n} x_i y_i$$

x_i – the share of the i-th group in the volume of income of the population

y_i – the share of the i-th group in the volume of healthcare expenses

$cumy_i$ – the accumulated share of the I-th group in the volume of healthcare expenses

Households expenditure on healthcare

Income Quantile	Type	Total observations	Average household income	Average household expenses	Average health care expenses	The share of health care expenses from total expenses
1-20%	Urban	11 914	214 859	122 772	8 297	6,80%
1-20%	Rural	1 638	189 592	81 780	7 607	9,30%
1-20%	***Urban and Rural***	***13 552***	***211 805***	***117 817***	***8 213***	***7,00%***
21-40%	Urban	10 316	105 924	74 952	5 493	7,30%
21-40%	Rural	3 237	103 288	62 761	6 530	10,40%
21-40%	***Urban and Rural***	***13 553***	***105 294***	***72 041***	***5 740***	***8,00%***
41-60%	Urban	7 562	71 398	58 412	4 461	7,60%
41-60%	Rural	5 991	68 941	51 201	5 787	11,30%
41-60%	***Urban and Rural***	***13 553***	***70 312***	***55 224***	***5 048***	***9,10%***
61-80%	Urban	4 362	46 844	45 552	4 044	8,90%
61-80%	Rural	9 191	44 698	39 557	4 166	10,50%
61-80%	***Urban and Rural***	***13 553***	***45 389***	***41 486***	***4 127***	***9,90%***
81-100%	Urban	1 749	18 686	38 053	3 805	10,00%
81-100%	Rural	11 804	19 490	31 808	3 286	10,30%
81-100%	***Urban and Rural***	***13 553***	***19 386***	***32 614***	***3 353***	***10,30%***
Total		**67 764**	**90 435**	**63 836**	**5 296**	**8,30%**

The quantile analysis includes both rural and urban households, allowing for direct comparison within the same income group

Rural residents allocate a significantly higher proportion of their expenditures to healthcare compared to urban residents across nearly all income quantiles

Urban residents with similar incomes to rural residents spend, on average, 3.7 percentage points less on healthcare than their rural counterparts

Households expenditure on healthcare

Higher-income households tend to spend more in absolute terms on healthcare, reflecting their ability to access more costly medical services and facilities

As income levels decrease, urban households in China allocate a larger proportion of their total expenses to healthcare

In contrast, rural households do not demonstrate the same pattern regarding the percentage of expenditures on healthcare. The share of healthcare spending among rural households remains relatively stable, fluctuating between 10.3% and 10.9%, regardless of income level

This stability suggests that, compared to urban households, rural residents face a consistent financial burden regarding healthcare, independent of their income status

On average, rural residents spend a higher proportion of their total expenses on healthcare compared to urban residents across all income quantiles

Urban households

Income Quantile	Average household income	Average household expenses	Average health care expenses	The share of health care expenses from total expenses
1-20%	258 891	141 248	9 134	6,50%
21-40%	139 825	90 987	6 615	7,30%
41-60%	101 664	72 785	5 429	7,50%
61-80%	74 617	60 305	4 652	7,70%
81-100%	41 834	44 495	3 909	8,80%

Rural households

Income Quantile	Average household income	Average household expenses	Average health care expenses	The share of health care expenses from total expenses
1-20%	120 340	65 775	6 759	10,30%
21-40%	62 400	48 766	5 324	10,90%
41-60%	43 639	38 812	4 060	10,50%
61-80%	29 752	33 896	3 512	10,40%
81-100%	11 892	30 282	3 210	10,60%

Regional inequality

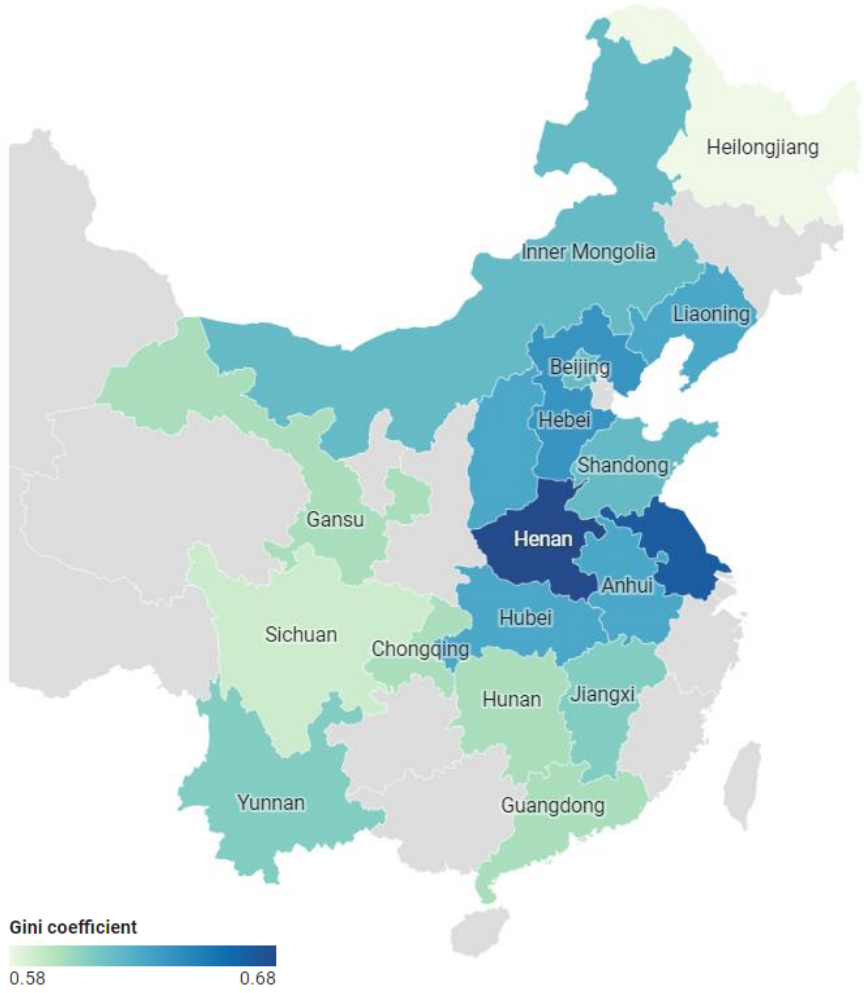
The findings indicate a higher level of inequality in healthcare access than in income distribution (0,62 vs 0,47)
The Gini coefficient for healthcare access among rural households is greater than that for urban households

Regional Variations in Healthcare Inequality
The coefficients range from 0.68 in Henan Province to 0.58 in Heilongjiang Province, indicating persistent high inequality in healthcare expenditures.

Factors Influencing High Gini Coefficients
Elevated Gini coefficients may reflect that some surveyed individuals do not utilize healthcare services at all.
Analysis shows no direct relationship between per capita GRP and the Gini coefficient for healthcare. There is no observed correlation between regional inequalities and geographic location.

Inter-Regional Gini Coefficient
A Gini coefficient of 0.17 indicates low inter-regional inequality in healthcare.

Gini	Gini for urban households	Gini for rural households	Inter-regional Gini
0,62	0,63	0,66	0,17



Conclusion

High Inequality in Access:
Significant disparities in health service access across different income levels in China

Causes of Inequality:
Unique features of China's healthcare system, including:

- Lack of comprehensive insurance coverage
- Varied insurance structures for urban workers versus non-working urban and rural residents

Healthcare Spending Patterns:
Rural populations spend a higher share of their income on healthcare compared to urban populations
Spending proportions are similar among the poorest segments, highlighting ongoing income inequality

Implications for Health Insurance System:
Current spending trends reflect systemic shortcomings in the health insurance framework

Need for Integrated Policy Solutions:
Emphasis on the necessity of a comprehensive approach to tackle healthcare inequality

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