The Value of Medical Spending in China, 1991 -2019

HPR215

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INTRODUCTION

Economic development, urbanization, and population aging have driven a significant increase in China's medical expenditures. The public is increasingly concerned about the relationship between medical spending and health benefits, while the value assessment of the medical system remains relatively weak.

OBJECTIVE

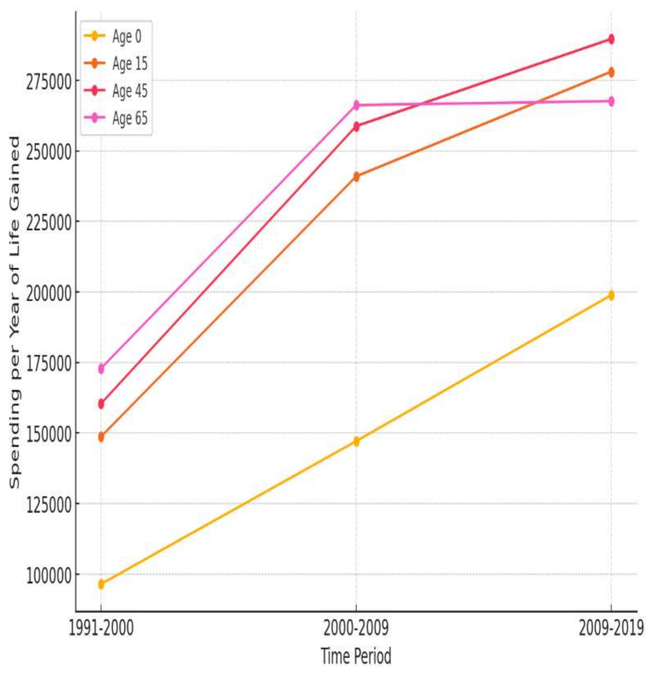
No previous studies have assessed the value of this expenditure growth in China. This study aims to compare gains in life expectancy with increased medical costs in china from 1991 to2019.

METHOD

- Data from CHNS and CFPS were used to estimate average medical expenditures by age and gender for 1991, 2000, 2009, and 2019, with life expectancy and survival probabilities for four age groups from the 2024 Revision of the World Population Prospects.
- Age-specific lifetime medical spending was calculated by combining age-specific survival probabilities with medical expenditures.
- In the base-case analysis, 50% of life expectancy gains were assumed to stem from medical care to control non-medical factors affecting survival.
- Adjusted life expectancy increases were compared with lifetime medical spending over the same periods.

RESULTS

From 1991 to 2019,life expectancy at birth increased by 9.33 years. Life time medical spending, adjusted for inflation, increased by RMB449,911($131,215.7 PPP), and the cost per year of life gained was RMB96,444 ($28,118.6). This cost rose from RMB96,444 ($28,118.6)in 1991 to RMB198,885 ($57,982.8'in 2019. Between 1991 and 2019, the average cost per year of life gained at age 15 was RMB148,668 ($43,342.1), at age 45 was RMB160,389 ($46,792.7), and at age 65 was RMB172,894($50,372.4). For age 65 specifically, this cost was RMB172,859 ($50,372.4) during 1991-2000, RMB266,210 ($77.604.1) during 2000-2009and RMB267,623($77,992.2) during 2009-2019.



Longitudinal Trends in the Costs per Year of Life Gained in Four Age groups.
Spending per year of life gained was defined by the change in spending over the decade divided by the change in expected years of life over the decade.

age	gender	1991-2000	2000-2009	2009-2019
0	Male	98135	141907	148282
	Female	92866	146803	237903
	Both Sexes	96444	147104	198885
15	Male	154298	238811	209180
	Female	140111	234346	327658
	Both Sexes	148669	240953	278081
45	Male	179732	282503	238436
	Female	140237	230852	316162
	Both Sexes	160389	258765	289666
65	Male	193579	289269	192618
	Female	146270	231087	302932
	Both Sexes	172895	266210	267623

The Costs per Year of Life Gained

CONCLUSIONS

Although medical expenditures have increased significantly over the past few decades, our data analysis shows that these expenditures have generally delivered good value—especially among the elderly population. While their incremental costs remain the highest among all age groups, they have shown a stabilizing trend in recent years, reflecting improved efficiency in the utilization of medical resources.

REFERENCES

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