

Failing the Same Group in Different Ways: Comparing China's and the U.S.'s Health Insurance Protections for Chronically Ill Older Adults

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Abstract. Among the challenges of aging populations faced by both China and the United States, older adults with chronic health issues stand out for their demand for medical treatment and long-term care, constituting a "double risk". This paper draws on extant theoretical concepts, such as catastrophic health expenditure, out-of-pocket caps, risk pooling, and means-testing, as well as empirical research on health insurance for older adults. It first compares institutional designs of the two countries: China's Long-Term Care Insurance reform on top of its integrated government-led basic insurance system and Critical Illness Insurance, along with fragmented systems of Medicare, Medicaid, and private coverage in the United States, to analyze how each country's institutional designs protect this vulnerable group from the double risk. It then conducts case studies within each country, including China's city-level LTCI models (Qingdao and Nantong), China's insurance-eligibility disparities (UEBMI versus URRBMI), and the United States' state-level variation in Medicaid expansion outcomes and PACE program implementation. Comparisons show that their national policies also play out unevenly at the local level. The paper finds that neither system has successfully resolved the double risk, and points out directions for their future medical insurance reforms: China establishes a wide but uneven floor of coverage, while the United States is capable of a standard of protection which remains not always accessible.

Keywords: long-term care insurance, catastrophic health expenditure, chronically ill older adults, China-U.S. health policy comparison

1. Introduction

The financial implications of an aging society in both China and the United States are significant. The "double risk" faced by older people with chronic diseases, who need frequent medical care and eventually long-term care, is a pressing issue. With this financial burden posing a great challenge to individuals and their families, China and the United States have adopted two different approaches to cope with it. China has built on its government-led medical insurance system and attempted to link it with expanded long-term care insurance. In contrast, the United States has developed new integrated insurance plans such as the Program of All-Inclusive Care for the Elderly (PACE) on top of divided

responsibilities among Medicare, Medicaid, private insurance, state-level programs, etc. These differences result in varying levels of financial protection for older people with chronic diseases depending on the country, city, state, or insurance policy they belong to.

Understanding these differences is essential for further medical system reform, and it requires a set of common standards for comparing actual financial protection rather than just describing how each country's insurance programs work. This paper first draws on theoretical concepts, including exposure to catastrophic health expenditure, out-of-pocket cap, means-testing and asset spend-down, to compare China and the United States. Next, it compares the institutional design of medical insurance for the older population in China and the United States, and conducts case studies in both countries to reveal the different consequences of national policies at the local level. Finally, it reflects on the major findings of the within- and cross-country comparison and discusses future directions of medical reform for both countries.

2. Theoretical concepts and motivations

As populations grow older, paying for medical care and long-term support has become a more and more important issue in both China and the United States. For older adults with chronic conditions, the pressure often comes from two directions, creating a kind of "double risk." For one, the older population faces repeated medical needs, such as prescription drugs, hospital stays, rehabilitation, and specialist visits. For another, losing physical strength or cognitive ability makes them depend on everyday help, such as bathing, dressing, eating, or simply moving around. While these two risks often arrive at the same time, current insurance systems do not always address them simultaneously. As a result, the older population can be in a situation where they have health insurance yet still struggle to find an affordable way to pay for long-term care. This study focuses on this mismatch for older adults with a chronic condition, to compare and investigate the institutions that better suit their needs and minimize the double risk they bear.

The goal of health insurance is to pool risk by spreading unpredictable healthcare costs across a large enough group in the society, so that no single household has to carry the entire financial burden of becoming sick. Government insurance programs usually create larger pools through taxes or required enrollment, while private insurance relies more on premiums, employers, subsidies, and regulation. In theory, a large enough pool can absorb almost any medical shock. Yet in reality, whether this promise can be materialized depends on how the insurance is designed and grants access to the vulnerable population, which determines the actual risks they bear. At the same time, supporting a large public insurance system can be expensive, which raises concerns over whether the system can remain financially sustainable as the population continues to age.

One important concept to understand whether a system supports vulnerable individuals is the out-of-pocket (OOP) cap. This is the maximum amount an insured person has to pay for covered medical services within a certain year, above which insurance will cover the remaining eligible costs. A healthcare system without a cap, or if the cap is very high, will allow a serious illness to still take away a large part of an older person's savings. Therefore, OOP cap provides a useful ankle to compare how much financial protection different insurance systems actually provide.

A relative way of understanding the question is to evaluate how often insured households still suffer from catastrophic health expenditure (CHE). Medical spending becomes "catastrophic" when a household's out-of-pocket costs become high enough to threaten its normal standard of living. CHE is often measured using certain thresholds, such as medical payments above 10 percent of total household spending or 40 percent of spending after food costs are excluded. Simply having insurance does not necessarily guarantee someone to be financially protected from CHE, what

matters is whether that insurance actually stands between an illness from becoming a serious financial problem and economic ruin.

Long-term care exposes this gap more starkly than acute medical care because of the aforementioned double risks. Medical insurance is generally built around treating a discrete illness which covers a specific period from a beginning to an end, yet long-term care is often more open-ended, and a system built for the first kind of risk does not automatically extend to the second. Where a government draws the line between "medical care we insure" and "long-term care someone else pays for" determines the eligibility to medical care programs, as well as who falls into the space between the two. It is common that a household's own savings, rather than insurance, have to fill this gap.

This is where means-testing and asset spend-down become relevant. Many long-term care programs decide on eligibility based on a person's income and assets, and only become available when such resources have fallen below a set threshold. Asset spend-down refers to the situation where people have to exhaust their own savings before they can qualify for government assistance, which is financially devastating. This is especially important for long-term care because these individuals may need support for years rather than just during a short hospital stay. While medical care generally focuses on treating diseases and managing acute health conditions, long-term care is for elderly people with everyday activities when they can no longer do them independently, which easily overlap for an older person with a chronic illness. The way governments separate the two determines which program pays and whether people can end up stuck between different types of coverage.

3. Institutional divergence between the Chinese and United States

None of these problems are unique to one country, for which they provide a foundation for comparing the healthcare systems of China and the United States. These two systems diverge starkly in terms of how they have each chosen to structure their response, including how risks are pooled, where the boundary medical and long-term care is drawn, and who bears the cost when that boundary leaves someone exposed. Instead of technical differences, these reflect two different answers to the same underlying question of who should be covered by long-term financial protection, and they produce very different real-world consequences for an older adult with chronic illness trying to navigate either system.

Therefore, comparing the two countries is not simply an exercise of cataloguing different institutions, but has important implications for the growing older populations with demands for long-term care across the world. Both countries are currently experimenting with financial solutions to this issue. Through the expansion of its Long-Term Care Insurance pilots, China has been developing a more layered social insurance system that connects basic medical insurance, serious-illness protection, and long-term care. The United States divides these responsibilities more clearly across programs such as Medicare and Medicaid, and shares the burden with private insurance. By comparing these two approaches, this paper looks at how well each system protects chronically ill older adults from both large medical bills and unmet long-term care needs, to better understand what each country's choices are likely to cost.

3.1. Healthcare systems for older adults

Both China and the United States run insurance programs that somehow cover medical expenses of the elderly population, yet their approaches are distinct. In general, China has built a social

insurance system primarily operated by the government. The two main health insurance programs, namely the "Urban Employee Basic Medical Insurance" (UEBMI) and the "Urban-Rural Resident Basic Medical Insurance" (URRBMI), cover nationwide and almost everyone in the Chinese society. On top of this, China also has an extra health insurance program called "Critical Illness Insurance" (CII), which offers supplementary protection against high medical expenses for serious diseases.

This multi-layered insurance system aims to pool risks across a wide population. Yet the effectiveness is not consistently as expected: CII has been found to risk raising total health and out-of-pocket spending among China's elderly overall, even as it strengthened protection specifically for rural and low-income elderly in recent years [1]. The level of financial protection may vary according to the type of insurance and the region where a person lives. Meanwhile, unevenness is a major concern as reflected in China's rural population compared with their urban counterparts who are enrolled in UEBMI. the dual-track system between formal employees and regular residents. The CHE numbers reveal that URRBMI enrollees, the population without an employer-linked plan, carry the largest share of catastrophic risk [2].

In the United States, Medicare is the main government-run health insurance program that covers the majority of Americans aged 65 and above. Out of pocket expenses under Medicare depend heavily on the coverage of their enrolled plans, among which only Medicare Advantage plans set an overall annual limit on out-of-pocket expenses for all covered services. Some Traditional Medicare enrollees supplement Medigap insurance to cover this gap. This means that two older adults who both say that they "have Medicare" could still face different levels of financial risks. This discrepancy in financial protection against catastrophic health expenditure becomes especially important if someone has a chronic disease that requires ongoing care. Even though health insurance provides financial protection, the scope of coverage and the copayments that patients still have to pay can also be important.

For the most financially vulnerable population, however, the difference of Medicare plans doesn't seem to matter. A national study of low-income Medicare beneficiaries found no significant differences between Medicare Advantage and Traditional Medicare in access to care, use of preventive services, or financial strain from medical bills [3]. Whatever an OOP cap is supposed to guarantee matters less for the low-income older population than the barriers that hit everyone anyway, such as long waits and high cost-sharing, before the cap even kicks in [4].

3.2. Medical insurance vs. long-term care insurance

Zooming into the older population who require long-term care in addition to medical care, the differences between the health insurance systems in China and the United States become even more obvious, particularly on the gap between medical insurance and long-term care demands.

Despite its very thin institutional foundations for long-term care, China has been making efforts to build a health insurance program called "Long-Term Care Insurance" (LTCI) to cover these expenses of the elderly since 2016. LTCI is supposed to be connected to China's existing medical insurance system instead of operating separately [5]. Empirical findings across the around fifty pilot cities where LTCI now operates show that the integration has clearly not produced one uniform level of protection: average policy scores sit at 71.8 out of 100, ranging from as low as 57.5 to as high as 92.5 [6], which indicates that a government-led national mandate does not guarantee same outcomes.

The United States has taken almost the opposite approach, Medicare only covers medical care and limited skilled nursing care, and Medicaid is the one supposed to cover long-term care, which heavily depends on the income and assets of the elderly. As a means-tested program, Medicaid is

only available for those who are either financially ruined in the first place or have already exhausted their current savings.. The asset spend-down process could be devastating for elderly people who do not have enough income to support the long-term care demands of themselves while still waiting to qualify for long-term care coverage [7]. This separation between Medicare and Medicaid leaves a gap between being insured for medical care and being financially protected for long-term care, which reflects the aforementioned boundary problem.

3.3. Equity gaps

Another challenge is that neither China's nor the United States's health insurance system financially protects its entire older population equally. China's medical inequality is reflected between URRBMI and UEBMI, as well as between urban and rural populations. The China Health and Retirement Longitudinal Study reveals that URRBMI integration actually decreased the probability and frequency of outpatient visits among enrollees while having no significant effect on the probability of being hospitalized at all, even though the policy did shift utilization in a pro-poor direction overall [8]. Despite its broad coverage, the basic insurance programs do not provide equal medical benefits and accessible medical resources across all groups. In fact, it fails rural and lower-income enrollees as outpatient care in particular appears to be getting harder to access for this group.

In contrast, the equity gaps in the United States are more multifaceted. Geography matters because state regulations determine how programs like Medicaid actually function. In addition, older adults sometimes have various combinations of health insurance, such as Medicare, Medicare Advantage, Medigap insurance, and others [4]. States with stronger Medigap consumer protections are found with lower Medigap enrollment, higher premiums, and greater Medicare Advantage uptake, than states without those protections [9]. In addition, Medigap coverage among Medicare beneficiaries ranges from just 3 percent in Hawaii to 51 percent in Kansas [10]. Income, insurance type, along with state regulations, affect the financial protection of older populations.

Taken together, China's health insurance system builds a broad foundation of coverage but has inequality issues reflected in the differences among regions and insurance programs available to different populations. The United States offers a more multilayer insurance protection, yet the protection is not consistently available for all populations who need it, especially those already vulnerable groups. While both countries face the challenging gap between safeguarding medical insurance and supporting long-term care expenses, solutions adopted by each have different implications for older adults with chronic illness. .

4. Case studies and comparison

National health insurance policy design reflects what a government intends to address issues in medical equity and security, yet it is inadequate for understanding what an older adult with chronic diseases will encounter in real life. Outcomes may vary according to how policies are implemented at the city or state level within a country. China and the United States provide examples for such divergence, including the city-level variation of LTCI adoption and state-level Medicaid implementation. The following case studies and comparison within and between these two countries show how their current medical institutions fail this group in structurally different ways.

4.1. China: city-level variations of LTCI institutional design

While the LTCI is designed as a national program, Qingdao and Nantong provide examples of how it operates differently at the city level. Qingdao implemented an "attached" LTCI model in 2012, which remains a part of the basic medical insurance program that gets uses a portion of medical insurance funds includes benefits related to medical nursing care. In comparison, Nantong adopted a more independent approach in 2015, which draws on multiple funding sources and designs a wider scope of benefits that included both medical nursing and daily living assistance [11].

Discrepancy on the scope of LTCI coverage is an important determinant of medical support for older populations. The average out-of-pocket share for the three major types of services in Qingdao was merely 8.9 percent, indicating that the insurance program effectively provided financial protection for the services it covered [11]. Yet given that Qingdao's insurance program mainly focuses on medical nursing care, an older adult who needs daily living care still faces a coverage gap and be excluded by the institutional design, no matter how effective the program is.. On the other hand, Nantong's insurance program aims to cover those daily living needs independently, which helps restructure the system for better coverage.

4.2. China: medical equity in individual outcomes

Another inequality issue in China's insurance system is the discrepancy among types of insurance applicable to different populations, which also has implications over the LTCI's actual effects. Drawing from a sample of 125 Chinese cities, of which only 21 had adopted an LTCI policy, researchers found that residents of adopting cities reported significantly better self-rated health and higher life satisfaction than residents of non-adopting cities, and that these health benefits were strongest specifically among rural older adults and those with chronic conditions [8]. While the findings suggest positivity on what LTCI improves where it exists, it also gives a warning that the population that benefits the most from LTCI is also the population least likely to live somewhere the policy has actually been adopted, given that fewer than 20% cities in the sample had implemented it at all.

Another city-level study further confirms this conjecture. Following 12,930 disabled older adults in one pilot city, researchers found that the ability of LTCI participants to manage their basic daily tasks decreases at a slower rate compared to non-participants, and the mortality reduction from LTCI enrollment was significantly larger among married, women, younger-old adults, potentially with family care and more care resources [12]. In other words, the policy's effectiveness is not evenly distributed, but depends on demographic background and local care infrastructure, which the policy itself cannot make a difference. LTCI also does not fully absorb the different cost of care even where it operates, as it does not price in the time and labor of unpaid family caregivers at all [13].

With such an equity gap, two older adults with the same illness and care needs might receive different levels of financial protection because they are eligible for different types of insurance and live in different regions. China has built a broad foundation of insurance accessible for all at the national level; however, the distributional consequences of such a system reveal that medical equity in insurance coverage is still a challenge, especially for this specific group of older adults with chronic diseases .

4.3. United States: state-level expansion of medicaid

In the United States, geography matters because of differences in states' decisions and regulations regarding Medicaid expansion under the Affordable Care Act, which then leads to measurable differences in chronic-disease care. A comparison of Kentucky and Arkansas which participate in the expansion, as well as the non-expanding Texas, found that in 2015, regular care for chronic illnesses rose 12 percent more in the two expansion states than in Texas [14]. Another earlier study that looked at Medicaid expansions prior to the ACA in New York, Maine, and Arizona found a 6.1 percent relative decline in all-cause mortality compared to neighboring states that did not expand Medicaid [14].

However, the impact of Medicaid expansion was not uniform among expansion states either. A four-year national follow-up study found that mortality reductions associated with expansion were real overall but varied substantially depending on state characteristics [15], suggesting that the choice to expand is necessary but not sufficient to guarantee better performance and implementation of the expansion matters substantially. Depending on the state where they live, older adults could have better or worse access to chronic disease treatment when they are close to meeting Medicare eligibility.

4.4. United States: best practices and uneven performances of PACE

The Program of All-Inclusive Care for the Elderly (PACE) is an attempt that financially protects adults aged 55 and older who need nursing-home-level care but can continue living in the community. It combines Medicare and Medicaid funds to provide medical care, long-term care, transportation, and social services under one system, to allow older people to continue living in their own homes rather than moving into nursing homes.

PACE has experimented the best practices of supporting older adults with chronic diseases. In New York, PACE enrollees had fewer hospital admissions during their first year than enrollees in a Medicaid-only managed long-term care plan [16]. However, the outcomes also show state-variations. An evaluation of eight states showed that New York saw cost savings through PACE, while California did not [17]. In Massachusetts, PACE significantly reduced nursing home residency, and the impact lasted up to 20 months.

PACE illustrates that the United States health insurance system can provide strong and successful financial protection. However, whether an older adult can enjoy such protection depends heavily on implementation at the state level and on whether a PACE program is available in someone's region.

4.5. Cross-national analysis

Put together, these cases suggest that the difference between China and the United States is not simply about one system being better than the other. Both systems have different strengths, yet their actual impact on older adults comes from how national policies are carried out by local governments instead of from the national design itself.

In China, the system creates a more uniform floor because the high rate of insurance enrollment means fewer people are left out. Meanwhile, the cases of Qingdao and Nantong show that city-level decisions can affect what an older adult's LTCI actually covers, while the gap between UEBMI and URRBMI shows that eligibility for different insurance plans determines certain benefits someone can access.

In the United States, the system creates a higher ceiling. Programs such as PACE combine medical and long-term care, and Medicaid expansion has increased access to care for chronic diseases. Yet both examples show the access to a higher level of benefits varies depending on where someone lives and what programs are available in their states. This "uniform floor" versus "higher ceiling" is the central finding of cross-national variation in this paper. Therefore, a more meaningful perspective than saying which system outcompetes is to evaluate how consistently each system provides protection to the population who needs it.

5. Conclusion

China and the United States have both attempted to ensure that older adults have coverage for medical treatment and long-term care. However, both countries have failed to address the "double risk," faced by this group for different reasons.

China's development of a social insurance system creates a strong floor in which a large portion of the population is covered, and the implementation of LTCI shows an attempt to combine medical and long-term care. However, the cases of Qingdao and Nantong, as well as the differences between UEBMI and URRBMI, show that the quality of this floor is uneven. The same disadvantaged groups, who are rural, chronically ill, without strong family or local care infrastructure, are also the ones most excluded from the framework. In the United States, some programs provide a higher level of care despite lacking the same basic floor. PACE, for example, provides more well-integrated medical and long-term care, while Medicaid provides coverage for lower-income groups. These programs are effective in providing strong protection to those who are able to access them. However, the division between Medicare and Medicaid, along with the greater autonomy of state governments, means that actual protection depends heavily on where someone happens to live and which programs they are able to access.

To conclude, neither country has solved the double risk faced by the older population with chronic diseases, and both systems need further reform for this purpose. Ideally, a future system should provide a broad basic level of coverage while also being strong enough to protect people as they transition from medical care to long-term care. The primary challenge for China is to narrow down the remaining coverage gap without costing the observed benefits in cases where LTCI has been adopted. For the United States, the strongest programs, like PACE and well-implemented Medicaid expansion, need to be more available regardless of which state a person happens to reside.

References

- [1] Cao, H., Xu, X., You, H., Gu, J., Hu, H., & Jiang, S. (2022). Healthcare expenditures among the elderly in China: The role of catastrophic medical insurance. *International Journal of Environmental Research and Public Health*, 19(21), 14313.
- [2] Miao, W., Zhang, X., Shi, B., Tian, W., Wu, B., Lai, Y., Li, Y., Huang, Z., Xia, Q., Yang, H., Ding, F., Shan, L., Xin, L., Miao, J., Zhang, C., Li, Y., Li, X., & Wu, Q. (2022). Multi-dimensional vulnerability analysis on catastrophic health expenditure among middle-aged and older adults with chronic diseases in China. *BMC Medical Research Methodology*, 22(1), 151.
- [3] Aggarwal, R., Gondi, S., & Wadhera, R. K. (2022). Comparison of Medicare Advantage vs traditional Medicare for health care access, affordability, and use of preventive services among adults with low income. *JAMA Network Open*, 5(6), e2215227.
- [4] Jacobson, G., Cicchiello, A., Sutton, J. P., & Shah, A. (2021). Medicare Advantage vs. traditional Medicare: How do beneficiaries' characteristics and experiences differ?. *Commonwealth Fund*, 10.
- [5] Cousins, M. (2025). Developing long-term care insurance in China: A review of structure, impact and future directions. *International Social Security Review*, 78(1), 83-106.

- [6] Li, Q., Chen, Y., Zhang, Y., & Liu, X. (2024). Evaluation of China's long-term care insurance policies. *Frontiers in Public Health*, 12, 1252817.
- [7] Aboulafia, G., Chen, A. C., & Grabowski, D. C. (2025). Asset spend-down and Medicaid enrollment in nursing homes. *JAMA Network Open*, 8(12), e2546876.
- [8] Zhang, Y., Chen, Y.-C., & Wang, J. S.-H. (2023). Long-term care insurance and health and perceived satisfaction of older Chinese: Comparisons between urban/rural areas, chronic conditions, and their intersectionality. *International Journal of Health Policy and Management*.
- [9] Ryan, A. M., Warrier, A., Bejarano, G., Whaley, C. M., Meyers, D. J., & Dixit, M. N. (2025). Trends in plan offerings, enrollment, and premiums in Medicare Advantage and Medigap. *Health Services Research*, 60(3), e14456.
- [10] Boccuti, C., Jacobson, G., Orgera, K., & Neuman, T. (2018). Medigap enrollment and consumer protections vary across states. *Kaiser Family Foundation (KFF)*. <https://www.kff.org/medicare/issue-brief/medigap-enrollment-and-consumer-protections-vary-across-states/>
- [11] An, P., Chen, N., & Xiong, B. (2017). System practice, experience and trends on the long-term care insurance of China: Based on a comparative study of Qingdao model and Nantong model. *Chinese Journal of Health Policy*, 1-6.
- [12] Zeng, L., Zhong, Y., Chen, Y., Zhou, M., Zhao, S., Wu, J., ... & Dou, Q. (2024). Effect of long-term care insurance in a pilot city of China: Health benefits among 12,930 disabled older adults. *Archives of Gerontology and Geriatrics*, 121, 105358.
- [13] Liu, W., Lyu, T., Zhang, X., Yuan, S., & Zhang, H. (2020). Willingness-to-pay and willingness-to-accept of informal caregivers of dependent elderly people in Shanghai, China. *BMC Health Services Research*, 20(1), 618.
- [14] Sommers, B. D., Blendon, R. J., Orav, E. J., & Epstein, A. M. (2016). Changes in utilization and health among low-income adults after Medicaid expansion or expanded private insurance. *JAMA Internal Medicine*, 176(10), 1501-1509.
- [15] Lee, B. P., Dodge, J. L., & Terrault, N. A. (2022). Medicaid expansion and variability in mortality in the USA: A national, observational cohort study. *The Lancet Public Health*, 7(1), e48-e55.
- [16] Nadash, P. (2004). Two models of managed long-term care: Comparing PACE with a Medicaid-only plan. *The Gerontologist*, 44(5), 644-654.
- [17] Ghosh, A., Schmitz, R., & Brown, R. (2014). Effect of PACE on costs, nursing home admissions, and mortality: 2006-2011. US Department of Health and Human Services.