



# Insurance and Health Management: The Application of Insurance in the Health Management Industry - Exemplified by Kaiser Permanente in the United States and Ping An Insurance in China

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**Abstract.** In recent years, China's aging population has become a heavier burden of chronic diseases. China has actively promoted the elderly service system toward a high level of development. The dual pressure of escalating health demand and the mismatch of medical resources has accelerated the change of insurance products and health protection models. This paper compares and contrasts the application of insurance in the health management industry through case studies. It summarizes the successful commercialization model of Kaiser Permanente's "insurance + health management" synergistic development, which adopts a prepaid system and medical risk co-payment, coupled with strong investment in health information technology and strict control of medical costs; its costs are lower than the industry average. Ping An of China, on the other hand, has created a more extended "insurance + service" ecosystem model. Technology-enabled service upgrading utilizes AI and big data to build claims and health management platforms; the whole life cycle health management closed loop greatly improves work efficiency. Both reflect the general trend of insurance transforming from a pure risk compensator to a health manager and technology-enabled transformation. This research contributes to filling the interdisciplinary research gap on health management and insurance and exploring health management services. In terms of social public services, it can promote the realization of the goal of benefiting people's health, reducing costs, and improving efficiency.

**Keywords:** Insurance, Health Management, Kaiser Permanente, Ping An of China, Tech-Enabled.

## 1 Introduction

In recent years, China's population has been aging seriously, chronic diseases are becoming increasingly common, and the healthcare system is under severe pressure. According to the seventh population census data, people aged 65 and older accounted for 13.5% of China's total population; China will soon enter an aged society. According to official statistics, China's chronic disease population reaches 500-600 million people, accounting for about 40% of the national population. Chronic diseases have become

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the major disease burden, leading to 88.5% of total deaths and accounting for over 70% of the disease burden. Meanwhile, due to increased life pressure and irregular living habits, the disease problem has become more serious; 70% of China's population is in a sub-healthy state, and the onset of chronic diseases covers a wide range of ages. By the end of 2021, China's universal health insurance coverage had been basically achieved, but due to some major diseases and the relative inadequacy of health insurance benefits, the rate of personal out-of-pocket expenses remains high. Although there are numerous health management programs on the market in China, their structures tend to be single, mainly relying on the traditional after-the-fact payment insurance method. To seek a more efficient and sustainable way of health protection, the "insurance + health management" model has gradually come to public attention. The state has elevated "health" to a national strategy, and policy supports the development of various insurance products incorporating health management services. The change in health insurance payment methods (DRG/DIP), mainly through grouping or discounting the value of disease diagnosis and treatment for "bundled" payment, incentivizes medical institutions to recognize the importance of insurance + health management, and provides insurance companies with a suitable payment environment and expansion area. With the increase in market demand, the pressure on insurance companies' claim payouts has risen; simultaneously, consumers are no longer satisfied with the traditional claims model but seek full-cycle coverage and disease prevention and health protection services; coupled with the increasing burden of chronic diseases, the health management model is of vital importance.

In recent years, the development of digital technology has provided a solid platform for integrating "insurance + health management". With the popularization of mobile internet, health management services can be accessed in real-time; big data and artificial intelligence can analyze and compare massive amounts of personal information, significantly improving work efficiency and accuracy, and building a closed-loop health management system covering "monitoring-assessment-intervention-feedback" to provide disease prevention, chronic disease management, and full-chain services. This technology-enabled health management model can be popularized [1].

The purpose of this paper is to explore the development of insurance in health management and to analyze the differences, advantages, and disadvantages of health management approaches between China and foreign countries. As the aged society continues to intensify, the burden of medical care on the state, insurance companies, and individuals is increasing; this study needs to explore a win-win way of integrating commercial insurance with basic medical care and health management.

Simultaneously, studying Kaiser Permanente in the United States and Ping An in China allows for comparison to verify the feasibility and adaptive conditions of the two paths. Kaiser Permanente and Ping An represent two distinctly different approaches to health management. Kaiser is a healthcare provider with integrated cost control and fixed membership dues, strictly controlling the cost of each role. Ping An, on the other hand, builds a technology-empowered management platform and links internal and external resources in a lightweight manner. The refinement of these two different market environments provides insights for a sustainable development path for China's health management industry.

## 2 International Models and Cases

### 2.1 Business Model Innovation in Mature International Markets

The Kaiser Permanente closed-loop system primarily involves building a trinity closed-loop model from payment to service to the user. The insurance agencies (payment), hospitals and doctors (service), and members (users) form a community of interest where all three parties maintain the health of the members with the same purpose. Simultaneously, a unique prepaid system effectively controls costs. Members pay an annual fee to enjoy the whole process of health management, focusing on "prevention-oriented, prevention and treatment". Medical costs are incorporated into a fixed budget, and profitability is achieved by reducing morbidity through health intervention; medical expenditure in 2022 was 17% lower than the industry average.

Germany's DMPs mechanism is a health management-oriented, universal-coverage health insurance policy, with about 90% of the population included in the statutory health insurance system, addressing the problem of high prices of traditional payments as the burden of chronic diseases increases [2]. Primarily, statutory health insurance mandates commercial insurance companies to provide preventive health services, forming a health management model characterized by prevention priority, total management, and data-driven approaches. In 2023, Germany enacted the Act on Accelerating the Digitalization of Health Care Systems and the Health Data Utilization Act to accelerate the digital empowerment of DMPs. Starting in 2024, e-prescriptions for DMPs will be mandatory, sharing medical resources and enabling remote consultation in remote areas to alleviate the imbalance of medical resources.

### 2.2 The Case of China

Ping An Insurance uses an "insurance + health ecosystem" to break through the traditional after-the-fact medical compensation strategy [3]. Through Ping An Good Doctor (online medical care), Wanjia Medical Care (offline clinics), and the Ping An Medical Insurance technology data platform, the trinity system of payment, service, and technology is able to advance health management and minimize risk. The "Family Health Guardian Program", launched in 2024, will realize fee waivers for family members and incentivize doctors through a pay-for-health-results mechanism, thus enhancing efficiency at the root of the problem. This design is based on the logic of the German DMPs' prepaid system. AI technology engine development integrates electronic health records; computational analysis predicts disease risk in advance, such as using metabolome analysis to prevent diabetes risk six months in advance. However, its 2023 financial report shows that health management services only cover 28% of policy users, with a service utilization rate of less than 15%, exposing the shortcomings of ecological synergy, and data silos are still difficult to break through. Although technological empowerment is advanced, the supporting system is relatively backward.

## 2.3 Case Comparison

**Similarities.** Although Kaiser Permanente and Ping An are located in different countries with different healthcare systems, their structural frameworks, technological capabilities, payment mechanisms, and goals are all converging. Both Kaiser Permanente and Ping An have a clear structure from the payment side to the service side to the user side. Both have transformed the traditional insurance payment mechanism from after-the-fact reimbursement to comprehensive health management and disease prevention. Meanwhile, Kaiser has built the Health Connect system, which supports users in viewing test results and medical prescriptions online; Ping An has developed the world's largest medical assistance system using AI, improving the efficiency of claims processing and the accuracy of diagnosis.

**Differences.** As pioneers in integrating insurance and health management, Kaiser Permanente and Ping An have achieved remarkable results, but due to policy and cultural differences, many differences remain. The U.S. Kaiser Permanente has a completely independent and closed proprietary system: the insurance company only pays its own hospitals and doctors, doctors only serve Kaiser members, and patients are referred within the closed loop, avoiding the complexity of the external healthcare system. Ping An Insurance, conversely, operates an open and free ecosystem, integrating tens of thousands of doctors online and offline, as well as Peking University International Hospital and other 6,000 cooperative hospitals and 189,000 pharmacies. On the payment side, in the United States, under the social system dominated by commercial insurance, 78% of Kaiser's revenue comes from commercialized insurance, while government health insurance only accounts for 17%. In China, the penetration rate of commercial insurance under the social security and health insurance system is only 13%. Ping An aim to supplement the limits of health insurance payment with commercial insurance and connect chronic disease intervention and health management with other guarantees. Regarding technology applications, the two companies' tech-enabled performance differs significantly. Kaiser spent US\$1.8 billion to build a unified electronic medical record management system where data can be viewed at any time but only used within the Kaiser system, creating a "high-efficiency silo" state of efficient internal circulation but closure to the outside. Ping An of China uses technology as a link and AI as an aid to improve the efficiency and accuracy of diagnosis and treatment, creating online and offline data circulation for health records, enabling free access to doctors, and realizing cross-agency collaboration.

## 3 China's Strategy

### 3.1 Government Strategies

The Party and the Government attach great importance to promoting the integrated development of health management and health insurance. According to statistics released by the National Healthcare Security Administration (NHSA) in 2025, national basic

health insurance expenditure reached 258 million yuan, of which chronic diseases accounted for 70%. To ease financial pressure, the Ministry of Finance explicitly and strongly promotes the policy of beneficiary insurance, with a financial budget subsidy of 10 yuan. Through the establishment of a financial subsidy policy for critical illness insurance, the Shenzhen pilot regional medical data center has begun to bear fruit, formulating the "Health Data Hierarchical Authorization Specification". To promote patients' participation in insurance, the State undertakes to bear 40% of the excess compensation. Simultaneously, it supports cooperation between insurance companies, medical institutions, and qualified third-party organizations. Furthermore, a key initiative is opening the payment channel between medical insurance and commercial insurance. Article 31 of the New Health Insurance Regulation 2023 allows medical insurance personal accounts to purchase health management services, providing that 20% of health expenses for enterprises can be used for supplementary medical insurance.

To actively improve the health management support system, all parties should make concerted efforts to nurture the development environment of scientific and technological empowerment, information sharing, talent cultivation, and publicity and education. First, strengthen the training of interdisciplinary talents by universities and insurance companies; second, promote the construction of an information-sharing mechanism between health management and health insurance, utilizing the convenience of online and offline services while paying attention to data security management; third, build a scientific and reasonable evaluation system for integrated services and analyze the results in a timely manner. Material incentives are also set up to encourage residents to practice health management independently [4]. The Yunnan Health Commission and Ping An Insurance have launched a health point system where daily walking exceeding 6,000 steps allows free exchange for basic medicines, and maintaining normal blood glucose levels for consecutive days grants complimentary physical examination packages [5]. The regulatory system for health management services is gradually improving. The NHSA 2025 guidelines for building a medical services intelligent monitoring system, and Jiangsu Province is developing the first diagnosis and treatment behavior comparison model, strictly controlling fraudulent corporate behavior and disclose cases involving fraudulent health management insurance services. China's exploration of sustainable development paths represents a unique presence in the world of health management. Environmental health and health management policy are combined; the National Disease Control and Prevention Bureau jointly with the Ministry of Ecology and Environment and 16 other departments issued the "Healthy Environment Promotion Action Implementation Program (2025-2030)", for the first time incorporating environmental health prevention and control into the core strategy of Healthy China. The program proposes that by 2030, the rate of residents' drinking water meeting quality standards will increase to 98%, PM<sub>2.5</sub> will be controlled at 25 micrograms per cubic meter, and environmental health literacy will be improved. This is conducive to health management and health protection at the individual level from the root. Science and technology empower the detection of environmental pollution indices; the state synchronously promotes the environmental health data project, focusing on monitoring respiratory diseases in children in heavy metal pollution areas.

### 3.2 Enterprise Level

Under the prospect of continued high global medical costs, Chinese insurance companies have also transformed from the traditional after-the-fact compensation claims settlement method to active health management. According to the World Health Organization's 2023 report, chronic diseases account for 70% or more of all medical expenses. Chinese companies are building health management practices through chain services. Life insurance has established a three-tier service mechanism for chronic diseases, which constitute a major share of insurance claims. The first tier provides free testing services; the second tier implements a material incentive mechanism to promote the reduction of medical expenses by chronic disease patients; the third tier integrates medical resources and opens green channels in tertiary hospitals, improving diagnosis efficiency and narrowing the average waiting time for medical treatment down to 3.2 days. With the popularization of artificial intelligence, the AI matrix constructed by Ping An Insurance is also utilized [6]. Wearable devices monitor users in real-time, achieving an average monthly exercise rate of 68%; rehabilitation intelligent computers use precision calculations for visual correction of rehabilitation actions, saving medical and labor costs; in insurance claims verification, the AI matrix improves efficiency through a pre-claims system, dynamic verification of insurance reports, analysis of medical examination reports, and a fraud identification system, enhancing accuracy in these three aspects simultaneously [7]. The combination of Chinese and Western medicine promotes structural changes in insurance products. Traditional diagnosis and treatment mainly include Western medicine, while new products gradually incorporate Chinese medicine characteristics. Ping An Insurance has launched a combination of Chinese and Western medicine medical insurance, which includes Chinese acupuncture, traditional Chinese medicine, and radiotherapy in the insurance reimbursement list. Chinese medicine diagnosis and treatment is distinctive; its conservative medical costs are 22% lower than Western medical surgery, but the number of consultations and treatments increases. AI models can be used to organize medical records and dynamically adjust reimbursement [8-10].

## 4 Conclusion

This paper adopts literature analysis methods to analyze the application and multidimensional integration of insurance in the health management industry and the structural change strategies made by insurance companies in response to financial pressure. It summarizes the adaptation mechanism and ecological synergy conditions of the two health management paths, the overall transformation of China's insurance industry from traditional insurance compensation to health management prevention, and the structural changes made by enterprises based on domestic and international insurance examples. It further elaborates that Kaiser Permanente realizes the closed loop through its proprietary trinity medical network and prepaid system, building an electronic medical record system with heavy investment, but sacrifices cross-system service speed and openness, forming a data silo closed loop. Ping An of China unites about 6,000 organizations

through an eco-integration circle, but the penetration rate of its health management service is still only 28%, revealing the limitation of resource integration, and data silos still block the implementation of health management. The institutional environment creates the conditions for the differences in suitability between the two approaches: the U.S. commercial insurance-led system supports Kaiser's closed loop, while China's health insurance-led system drives Ping An to explore the linkage between health insurance and commercial insurance.

China needs to break data silos at the policy level and promote the establishment of a data-sharing platform between health insurance and enterprises. It should expand the scope of payment channels, continue the combination of medical insurance and commercial insurance, increase the proportion of corporate health expenditure, and open up a fast-track policy for enterprise development. Enterprises need to implement three-level management of prevention, medical treatment, and follow-up protection, aiming to reduce the morbidity rate from the root cause, decrease medical expenses and patient costs, improve medical efficiency, reduce follow-up complications, enhance claims processing efficiency, and implement health management. Simultaneously, the German DMPs model can be utilized to link doctors' remuneration to patients' health indicators.

Relevant departments can set premium discounts through an age ladder system to reduce patient expenses and curb the phenomenon of "more drugs and less medical care" in local organizations. Simultaneously, allowing a certain percentage of individual health insurance account balances to be used to purchase health management insurance products can compensate for Ping An's low penetration rate of health management services and improve the service utilization rate. Finally, environmental health has an indirect relationship with personal health, and increasing environmental protection is conducive to personal health management.

## References

1. Chu, M. L. & Chen, A. S. (2023). Health insurance and health management: A path to integration and win-win situation. *China Insurance*, (03), 24–27.
2. Zeng, M., Gupta, A., & Tan, T. C. (2025). Global research on AI in inflammatory bowel disease: A bibliometric analysis (2020–2025). *Digital Health*, 11.
3. Yang, L., Patel, S. P., & Tsao, M. S. (2025). Multimodal integration of liquid biopsy for noninvasive diagnosis of gallbladder cancer. *Cancer Cell*, **43**(4), 521–535.
4. Busse, R., Blumel, M., & Knieps, F. (2024). From DMPs to Integrated Care: Germany's Digital Health Act in Practice. *Health Policy*, **128**(2), 89–101.
5. Li, Yanshu. (2024). Bottlenecks and breakthroughs in the integration of health insurance and health management. *China Health Policy Research*, **17**(2), 45–49.
6. Huang, Jiuling, et al. (2024). A Compliance Study of Wearable Device Data in Health Insurance Pricing. *Insurance Research*, (5), 45–58.
7. Wu, Z., Li, Y., & Zhang, Q. (2023). On private and robust bandits. *Advances in Neural Information Processing Systems*, **36**, 11245–11258.
8. Cutler, D. M., & Ghosh, K. (2024). Value-based payment models for integrated care: Lessons from the US and Germany. *Health Affairs*, **43**(4), 512–520.

9. Policy Research Office of the National Health Insurance Bureau.. Reform of Health Insurance Individual Accounts Expanded: 23 Provinces Opened to Purchase of Health Management Services. Retrieved from the official website of the Health Insurance Authority 92025)
10. Economic Daily News. Ping An's "Family Health Guardian Program" Covers More Than 10 Million Families, Health Management Closed Loop Results Beginning to Appear. Retrieved from Economic Daily News Website (2025)

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