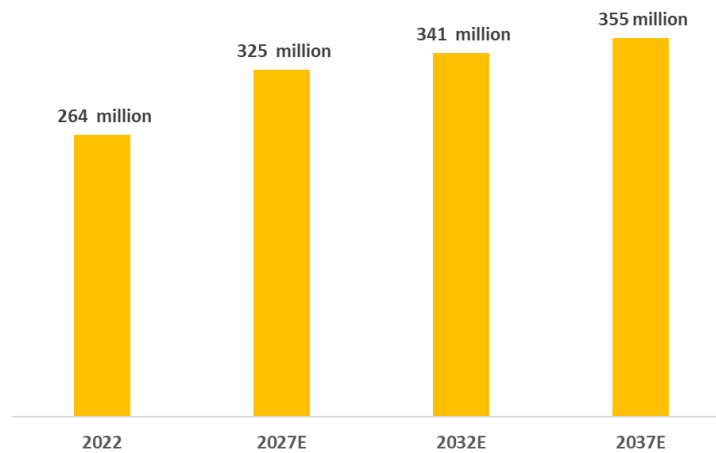


2024 China Healthcare Update

The Ageing population in China over the next 15 years will drive highly resilient demand for healthcare services

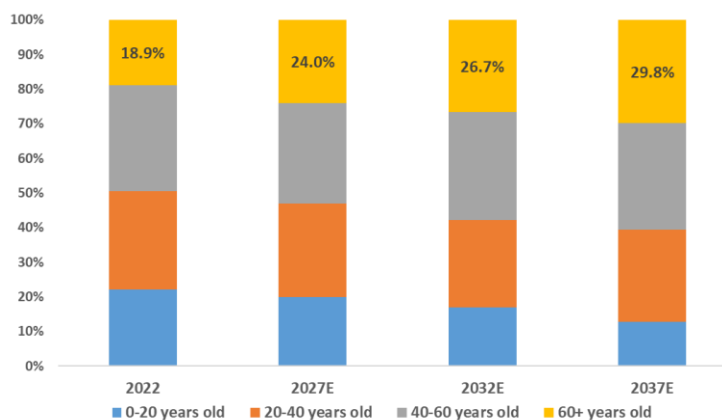
The **ageing population is an unavoidable topic**. By 2037 the number of elderly people aged 60 and above in China will reach 355 million, a net increase of 91 million compared to 264 million at the end of 2022. The proportion of elderly people aged 60 and above will increase from 19% at the end of 2022 to 30% by 2037 (Charts 1 & 2). As people get older healthcare related expenses increase. Young people in their twenties and thirties rarely go to a hospital maybe once a year, but after the age of 60, going to the hospital becomes almost a common occurrence. In China there are no separate doctor's surgeries so any medical issue requires a visit to a hospital.

Chart 1: Total Population above 60 in China



Sources: iFind, Bin Yuan Capital, National population census

Chart 2: Population Structure in China

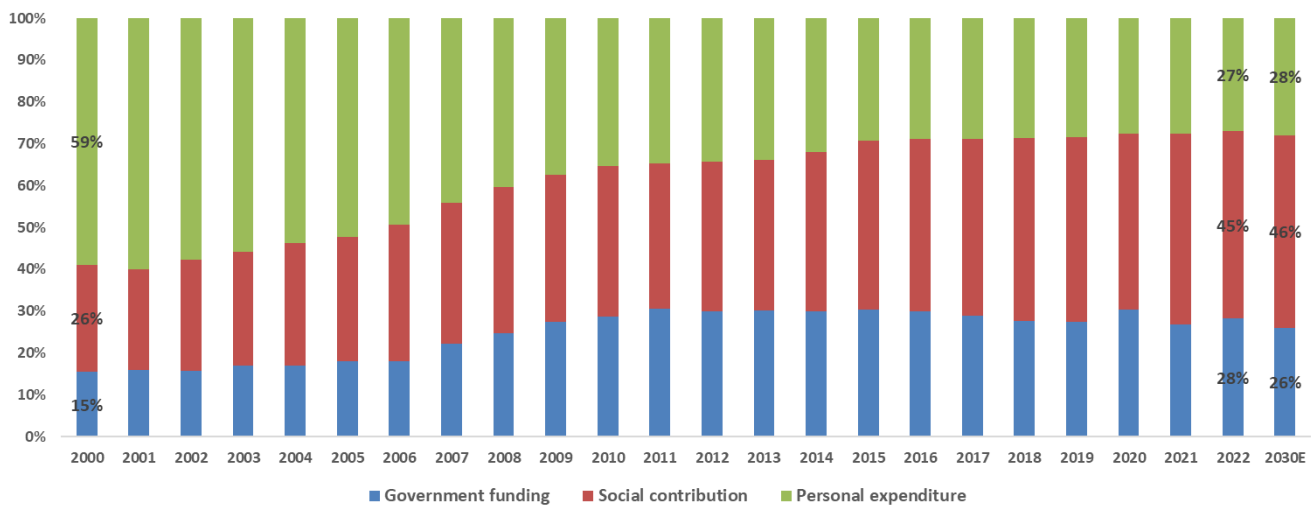


Sources: iFind, Bin Yuan Capital, National population census

China's medical expenditure payments are relatively balanced with government funding, social contribution, and personal payment the three main sources – going forward commercial medical insurance will become more important

The strong demand brings about the issue of affordability. At the beginning of the 21st century, Chinese citizens paid directly nearly 60% of the total health expenditures. The government's investment in healthcare was insufficient, and the social medical security system was still in its infancy. But now, after 20 years of development, including increasing government budget allocations and social security coverage, China's medical expenditures have been balanced, with government funding, social contribution, and personal payment the three main sources. At the end of 2022, the BMI system (Basic Medical Insurance¹) covered 30% of total health expenses. This also explains why over the past 20 years, China's total health expenses have grown 14.2% per year while the average annual growth of individual expenditure on healthcare was only 10% (Chart 3 & Chart 4).

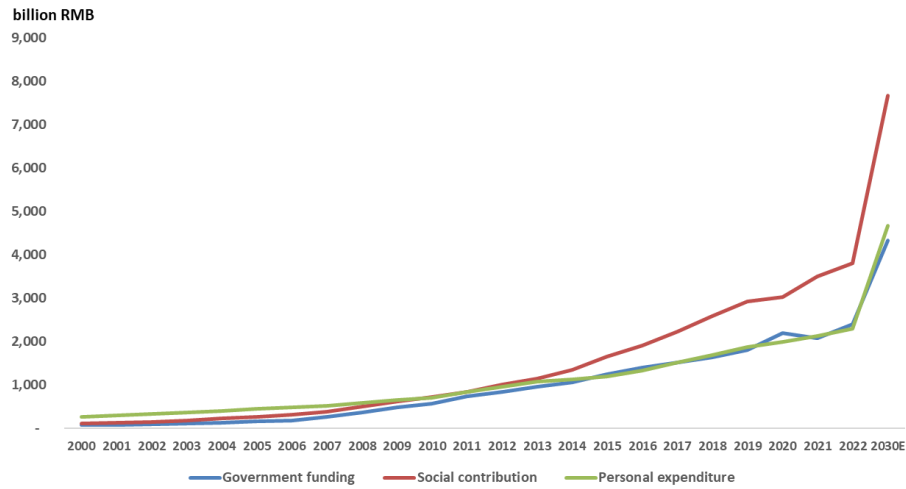
Chart 3: China's Medical Expenditure Participants



Sources: iFinD, Bin Yuan Capital

¹ The BMI system serves two groups of people: employees and residents. Employees are enrolled in the employee basic medical insurance (EBMI) program, and non-working residents are enrolled in the residents basic medical insurance (RBMI) program. After being established in 2018, the National Healthcare Security Administration (NHSA) has continued to improve the national medical insurance system so that RBMI can be better integrated. As of September 2022, more than 1.35 billion people (over 95% of China's population) are covered by one of the BMI programs, making it the world's largest healthcare security network. Among those covered, 354 million are covered by the EBMI, and 1.01 billion people are covered by the RBMI. The medical insurance fund is sustainable and growing. In 2022, the revenue of the national basic medical insurance fund (including maternity insurance) was CNY 3.09 trillion, and the expenditure was CNY 2.46 trillion.

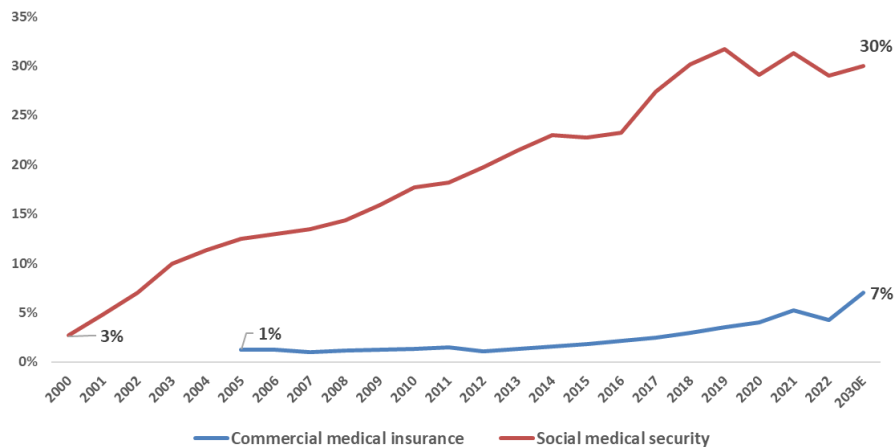
Chart 4: Total Healthcare Expenditure



Sources: iFinD, Bin Yuan Capital

We expect this healthcare payment structure to remain stable with the incremental allocation shared by the government, BMI system, and individuals. Commercial medical insurance will become an increasingly important part of the system. Commercial medical insurance accounted for only 1.3% of all health-related expenditures in 2005 and has grown in recent years to now account for about 5%. In recent years, leading insurance companies, such as Ping An (2318.HK) have launched various commercial medical insurance to meet the medical needs of different groups of people. By 2030, we estimate commercial medical insurance will account for 7% of total health expenditure (Chart 5). Compared to developed countries such as the United States, there is still a lot of room for growth. In the United States, commercial medical insurance accounts for over 30% of overall medical expenses.

Chart 5: Coverage from Social Medical Security & Commercial Medical Insurance



Sources: iFinD, China Banking and Insurance Regulatory Commission, Bin Yuan Capital

Our investment targets are the companies that can help improve productivity and efficiency.

While ongoing investment in 'Healthcare' from the government, BMI system, and individuals will continue to grow in line with demand, **investing in cutting edge technologies is particularly important to improve productivity and cost efficiencies.**

1) Import substitution is irreversible

In our past investment letters, we have emphasized our firm view that import substitution is one of the key trends in the healthcare sector. Unlike the market consensus, we have always been less concerned that VBP (volume-based purchasing policy) would negatively impact globally competitive companies. VBP underscores the emphasis for cost-effective products which is more an opportunity than risk for leading domestic companies. The rapid acceleration of import substitution in the past few years confirms our view.

2) More advanced technology and products emerging out to scale up productivity

In addition to the drive for cost-effectiveness, hospitals are committed to improving productivity through advanced technology. For example, more advanced testing methods can help doctors detect conditions much earlier, rather than when the patient is already critically ill. This can significantly improve the efficiency of the entire treatment cycle.

IVD (In-vitro diagnostic testing) is often the first step for medical staff to understand a patient's condition, so the efficiency of testing is crucial. In addition to an increasing number of early diagnostic projects, Chinese IVD vendors have been pushing for increased speed in recent years. **Snibe's (300832.SZ) X8** has boosted chemiluminescence testing from 300 T/h to 600 T/h. **Mindray (300760.SZ)** broke its own speed record with the CX-9000, accelerating coagulation testing to 450 T/h.



Source: Snibe website

Medical imaging is the key to medical diagnosis and is crucial for doctors to decide on the next treatment step. While large medical imaging machines such as CT (Computed Tomography) and MRI (Magnetic Resonance) are extremely expensive, we estimate strong ongoing demand from hospitals. Leading domestic companies not only have price advantages, but also have made considerable advances to increase diagnostic efficiency. For example, **United Imaging's (688271.SH)** MRI equipment has reduced a 10 minute abdominal scan to just over 10 seconds.



Source: United Imaging website

The emergence of minimally invasive surgery has also made a huge difference. Compared with standard open surgery, minimally invasive surgery can reduce the amount of bleeding, after-effects, and reduce the patient's hospitalization time from two weeks or more to one week or even less, thus increasing the utilization rate of hospital beds. **Kangji (9997.HK)** provides related consumables. **MedBot's (2252.HK)** and **Wiseking's (subsidiary of Kanji)** laparoscopic surgical robots can further reduce surgeon fatigue and helps surgeons take on additional surgeries in the same amount of time.



Source: MedBot website



The efficiency of patient monitoring has also improved. The digital monitors from **Mindray** have freed up healthcare professionals and can provide critical information immediately with limited staff input. Nurses can remotely obtain real-time data of patients, including blood pressure, blood oxygen, electrocardiogram, etc.



Source: Mindray website

3) Reshaping of distribution channels and processes also help improve efficiency

Channel and process improvements also help improve efficiency.

Historically, hospitals worked with a large number of distributors to access a wide range of vendors, which not only required a lot of experience, but also entailed significant cost. With the consolidation of distribution channels, hospitals can streamline their communication and payment processes with distributors. Large distributors like **Sinopharm (1099.HK)** offer a comprehensive range of products and distribution services and can provide more cost-effective solutions. Their market share has increased to 19% this year from 5% in 2010.

With strong medical demand, many general hospitals are becoming increasingly saturated, which has given rise to a demand for **specialty hospitals** in some categories. The queuing time required for medical treatment in these specialty hospitals is shorter, making medical treatment more convenient. The rapid growth of companies such as **Aier Eye Hospital (300015.SZ)** has allowed for the diversion of patients with specific needs, reducing the load on large hospitals while still ensuring that patients have access to specialized care.

More efficient **Homecare** is becoming increasingly popular. For example, diabetic patients using **Yuwell's (002223.SZ)** CGM (Continuous Glucose Monitoring) device can measure their blood glucose in real time at home and communicate with their doctors online to confirm their treatment plans.

In summary, the long term trend of an ageing population will support China's Healthcare demand. In terms of payment capacity, we believe that the current government + BMI system + individual payment model can meet the growth in demand. Our investment focus are those companies offering advanced technology and simplified processes which will improve productivity and drive cost efficiencies.

After the bear market in healthcare following VBP, the Covid period and the recent corruption crackdown in the healthcare industry; healthcare companies are the cheapest they have been for decades (Chart 6). Our Healthcare portfolio sells on a 2024 PER of 20.2X with 3 year estimated earnings growth of 21.9%. We believe selected companies in Healthcare offers significant investment potential over the next investment cycle. We also see a more benign regulatory environment.

Chart 6: Historical PE Band for Chinese Healthcare Sector



Sources: iFind, Bin Yuan Capital



彬元资本

Investing for Better Life



Signatory of:



Principles for Responsible Investment

Previous Healthcare Newsletters

August 2021: <Chinese Healthcare Market Update>

September 2021: <The Impact of China's Volume Based Purchasing – Briefing on Public Healthcare Reform>

October 2021: <Healthcare Equipment Companies>

November 2021: < Mr. Gu and iRay Technology>

December 2021: <Tap into the Prospering Biomedical Industry in China>

February 2022: <Chinese Healthcare Update>

April 2022: <Minimally Invasive Surgery in China>

July 2022: <"Chips" in Biopharm Manufacturing – Chromatographic Fillers>

November 2022: <The "Crown Jewel" of the Medical Device Industry - Medical Imaging Equipment>

February 2023: <Chinese Innovative Bio-Pharma – Follow the Global Giants>

April 2023: <3.0 Era Technology in Clinical Surgery - Minimally Invasive Surgical Robots>

August 2023: < Next Blockbuster Drug – GLP-1s>