

~ Asia Care Group ~



Healthcare Market Report |
China 2020/21



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Introductory Section

An Introduction to Healthcare in China

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- Life Expectancy, China, 2000 – 2016
- Structural view of the entities involved in China's health system
- Descriptions of the key offices involved in China's health policy decision-making
- Population with urban basic medical care insurance, 2011-2018
- Coverage basic medical insurance, 2013 – 2018
- Explanation of social health insurance schemes
- Old age dependency ratio as a percentage of the working age population, 2009 – 2025(F)
- Funding sources for every 100 mil of hospital revenue, 2018 or nearest year
- Explanation of the hospital classification system
- Number of hospitals by public and private ownership, 2013 – 2017
- Average percentage of income saved by regions, 2012 – 2017
- GDP growth rate, 2008 – 2017
- Events of note and policy decision, 2016 – present

Social health insurance has brought many within the “safety net” but high co-pays mean access issues abound

Scheme	Explanation	Population Covered	Coverage %	
			2013	2018
UEBMI(2017)	Compulsory Health insurance that covers urban employees funded by companies and employees	316,730,000	24%	20%
Urban basic Medical Insurance Total Coverage URBMI+UEBMI (2018)	The UEBMI plus the voluntary health insurance for urban residents who cannot get UEBMI.	1,344,520,000	96%	42%
NRCMS (2017)	Voluntary health insurance for rural residents funded by the both the state and the residents.	133,000,000	100%	99%
Total Coverage (~)		1,391,000,000	98%	96%



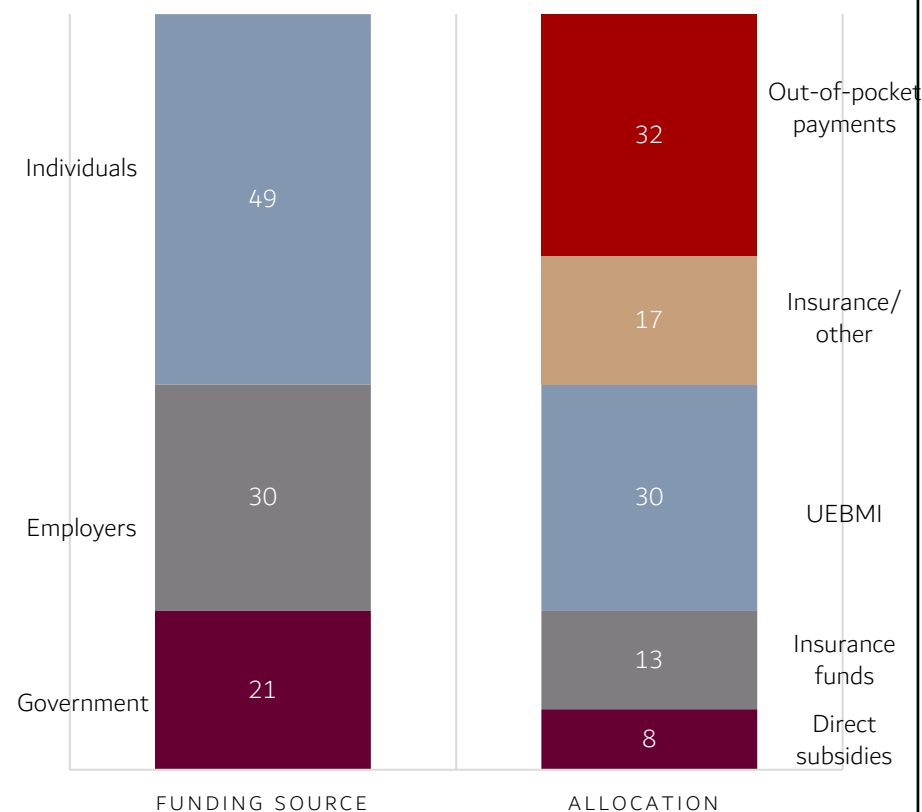
Source: National Bureau of Statistics

Public hospitals are the cornerstone of health delivery in China, but reforms to the way in which they are financed aim to reduce oversupply and evolve better models of care

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- Public hospitals are organised into a tiered system, with the largest and most prestigious tertiary hospitals being rated as Tier 3 and smaller, provincial hospitals servicing general acute needs being rated lower.
- Public hospitals are only partially funded by direct Government subsidy; the remainder to their funding has historically come from the sale of drugs and service fees - paid by social insurance and out-of-pocket payment. Concerns over the perverse incentives inherent within this funding arrangement coupled with widespread reports of overprescribing and oversupply of health services has led to major reforms. Restrictions on the profits that can be derived from the sales of drugs have led public hospitals to review – and increase – their service fees. Service fees which are largely organised on a fee-for-service basis are now the focus of the next wave of reform, which seeks to introduce new funding methods that incentivise better models of care.
- DRG payments and capitation arrangements are being piloted across China and there is considerable pressure to implement a system that limits the tendency to over-service or induce demand. Whilst these reforms are positive, they require a major shift in the ways in which public hospitals deliver care and balance their books. Lower Tier hospitals, which often do not have the same volume of patients as their better established urban counterparts, are particularly affected by these changes, which are placing some strain on their mid-term viability.

FUNDING SOURCES FOR EVERY 100 MIL OF HOSPITAL REVENUE, 2018 OR CLOSEST AVAILABLE YEAR



Source: Asia Care Group analysis, Süßmuth-Dyckerhoff & Wang

An overview of
the social and
macroeconomic
factors affecting
healthcare

1. The social determinants of health

Section 1: The social determinants of health

An overview of the social and macroeconomic factors affecting healthcare

- GDP ('000 ¥) and growth rate, 2008 – 2017
- Regional GDP (¥) per capita and GDP PPP per capita (int \$), 2008 – 2017
- Regional GDP growth rates, 2009 – 2017
- Average annual disposable income , 2017
- Growth in annual disposable income, 2013 vs 2017
- Per capita disposable income by region, 2013 – 2017
- Per capita expenditure by region, 2013 – 2017
- Total per capita disposable income vs total per capita expenditure by region, 2017
- CAGR of per capita disposable income, expenditure and gross amount saved by region, 2013 – 2017
- Average percentage of per capita savings by region, 2013 – 2017
- Disposable income compared to expenditure per capita, 2013 – 2017
- Consumer confidence levels (annualized), 2013 – 2017
- Annual per capita expenditure pattern, 2013 – 2017
- CAGR of per capita expenditure pattern, 2013 – 2017

Section 1: The social determinants of health

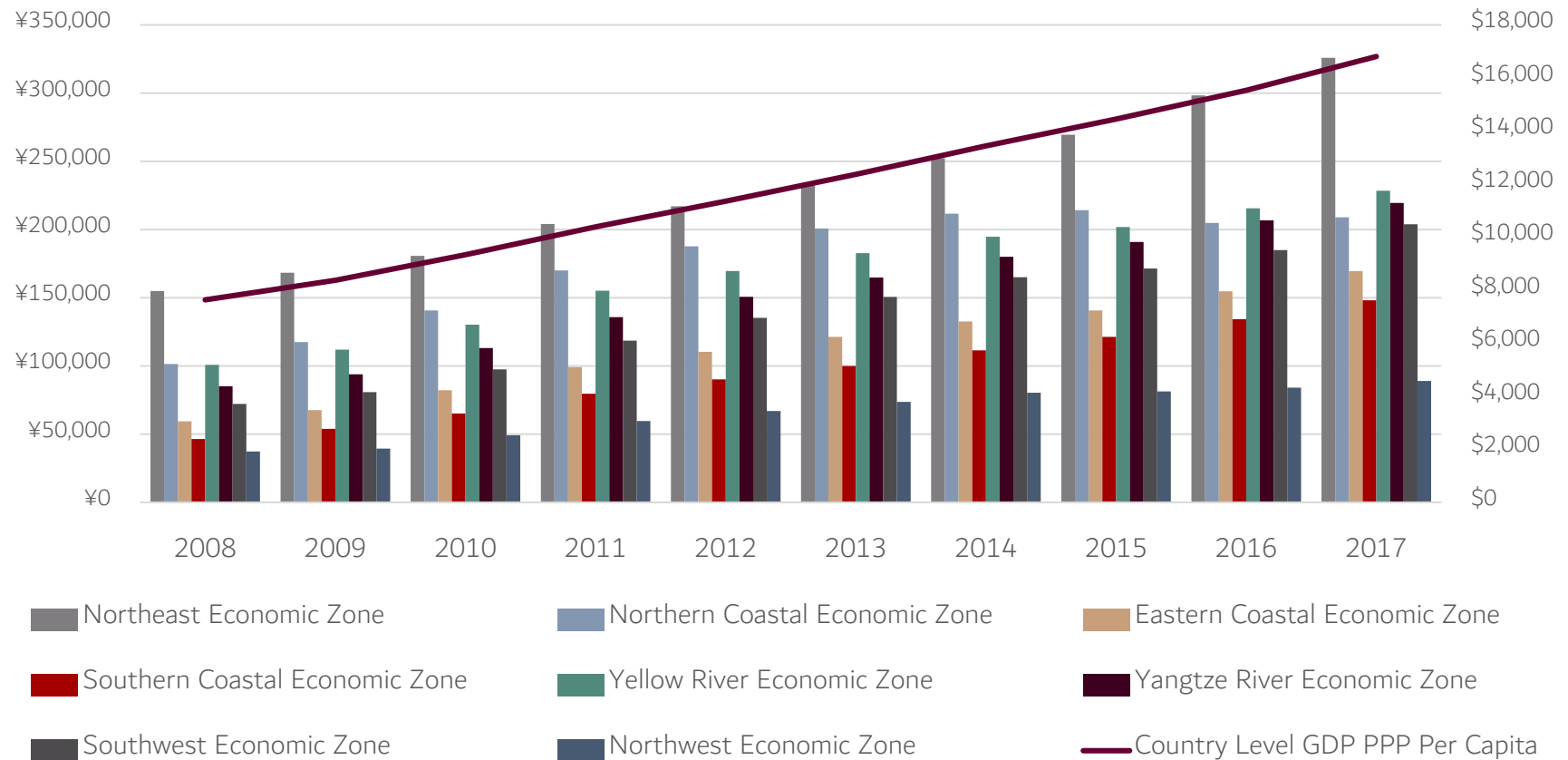
An overview of the social and macroeconomic factors affecting healthcare

- Composite price index all items vs healthcare, 2008 – 2017
- CPI compared to health care inflation from a fixed base, 2009 – 2018
- Stratification of income in China (in int. \$, PPP), 1978 – 2015
- Stratification of income, China benchmarked against developed countries, 2015
- GDP per capita (PPP, in INT \$), China and 6 developed countries, 2004 – 2016
- Gini coefficient, China and selected developing countries
- Median residential property price per M² in top 6 cities in China, 2013 vs 2018
- Urban and rural employment (in tens of thousands)

All regions in China have seen growth in GDP per capita, but the trend is much more pronounced in - both absolute terms and percentage increases - in some regions of the country

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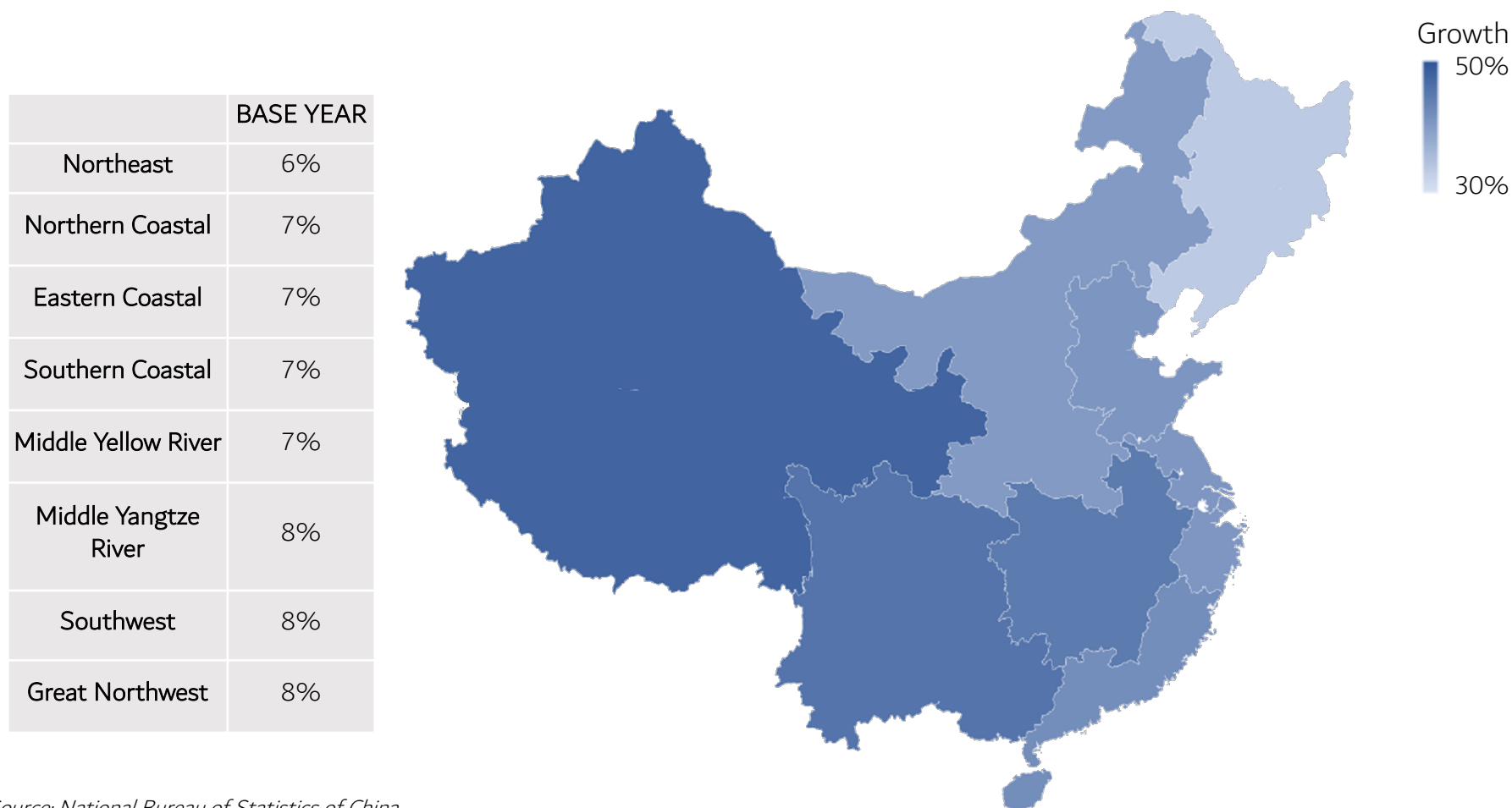
REGIONAL GDP (¥) PER CAPITA AND GDP PPP PER CAPITA (INT \$), 2008 – 2017



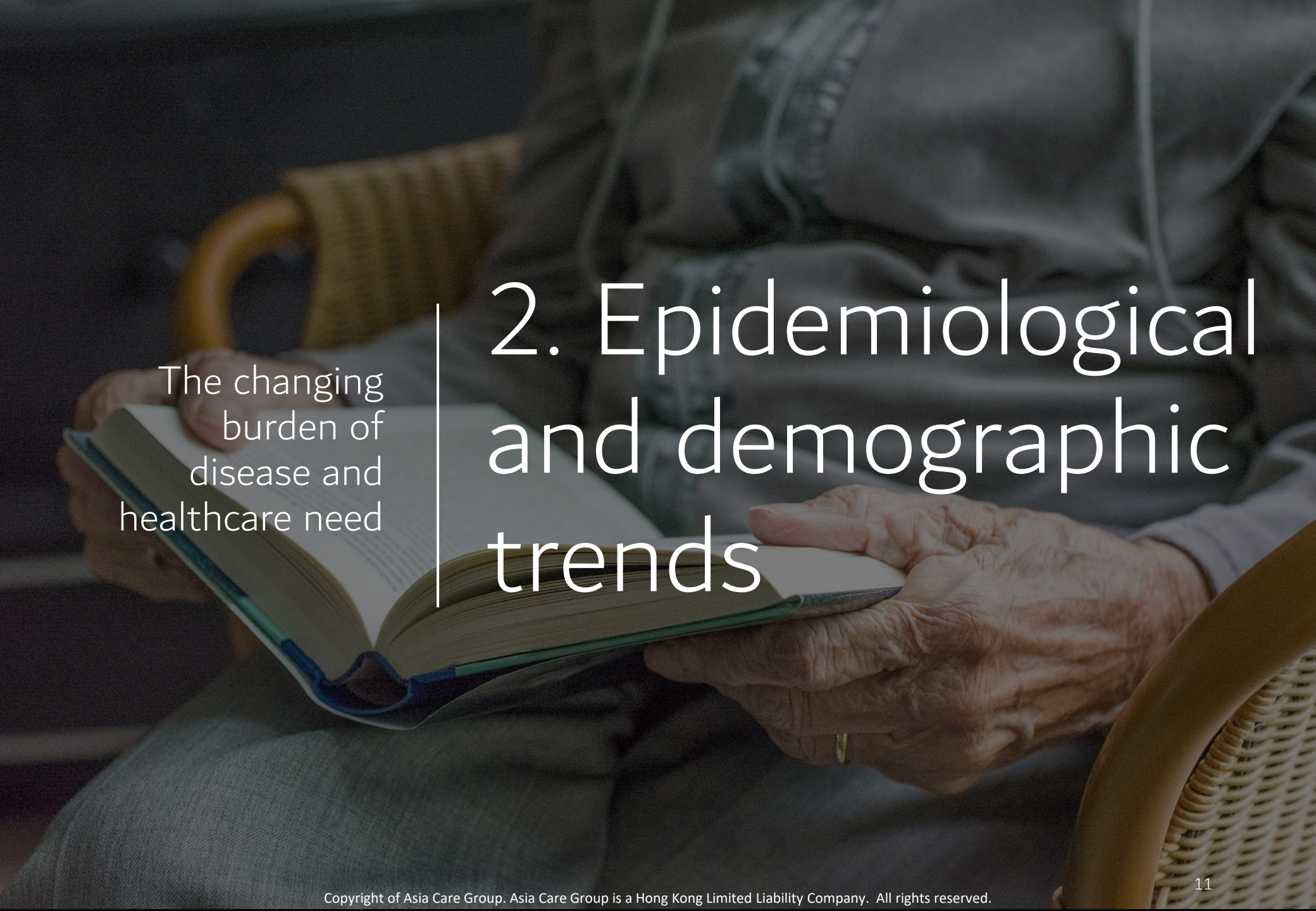
Source: National Bureau of Statistics of China

Although Western provinces have less disposable income per capita in absolute terms, growth is highest in these regions indicating a change in wealth equality over time

GROWTH IN ANNUAL DISPOSABLE INCOME (%), 2013 – 2017



Source: National Bureau of Statistics of China

An elderly person with wrinkled hands is sitting in a wicker chair, reading a book. The person is wearing a light-colored, long-sleeved shirt. The background is softly blurred, showing the person's legs and the chair's structure. The overall tone is calm and focused.

The changing
burden of
disease and
healthcare need

2. Epidemiological and demographic trends

Section 2: Epidemiological and demographic trends

*The changing
burden of
disease and
healthcare need*

- Percentage of the population aged 65 and over (projected to 2030)
- Population pyramid of China for the year 2005 in thousands
- Population pyramid of China for the year 2015 in thousands
- Estimate of the population pyramid for the year 2020 in thousands
- Top 10 cause of mortality in urban and rural China, 2017
- Age-standardized growth rate of causes of mortality and morbidity from selected diseases in urban China, 2007 – 2017
- Age-standardized growth rate of causes of mortality and morbidity from selected diseases in rural China, 2007 – 2017
- Percentage of the population (over 15) with a chronic condition, 1998 – 2013
- Percentage of the population with a chronic condition by age group, 2013
- Age-standardized mortality and prevalence rate of cerebrovascular disease by region, 2014
- Age-standardized mortality and incidence rate of cancer by region, 2014
- Prevalence of diabetes
- Prevalence of obesity
- Prevalence of hypertension
- Percentage of people with disabilities, 2010

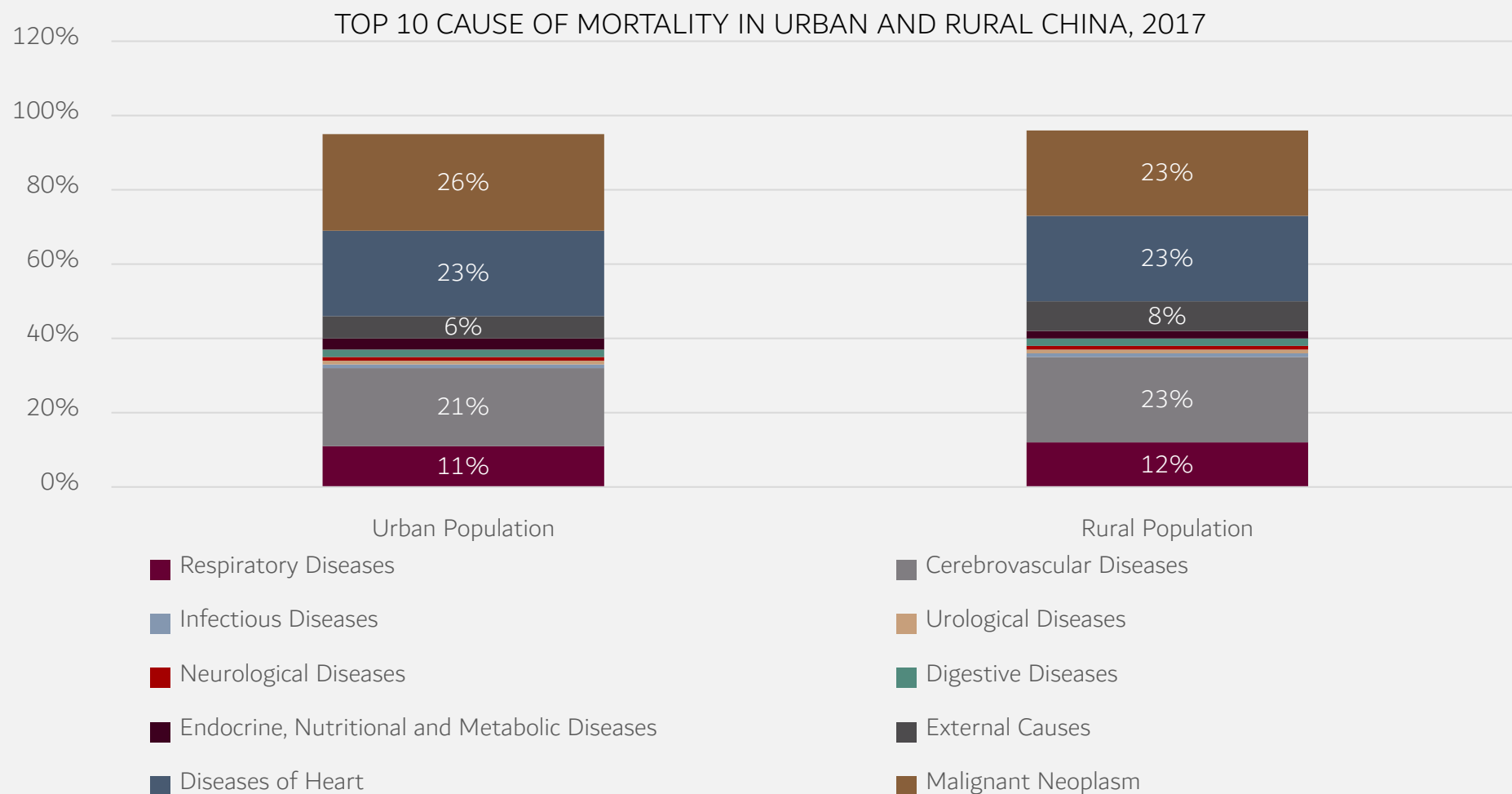
Section 2: Epidemiological and demographic trends

*The changing
burden of
disease and
healthcare need*

- Premature death per 100,000 by disease classification in China, 1990 – 2017
- Disability adjusted life years per 100,000 China compared to 5 other emerging economies
- Disability adjusted life years per 100,000, 1997 – 2017
- Prevalence of communicable diseases in China per 100,000, 1992 – 2017
- Under-5 mortality per 100,000 (all causes) in China compared to 5 emerging economies, 1990 – 2017

There is a surprising degree of parity between the causes of mortality in urban and rural populations

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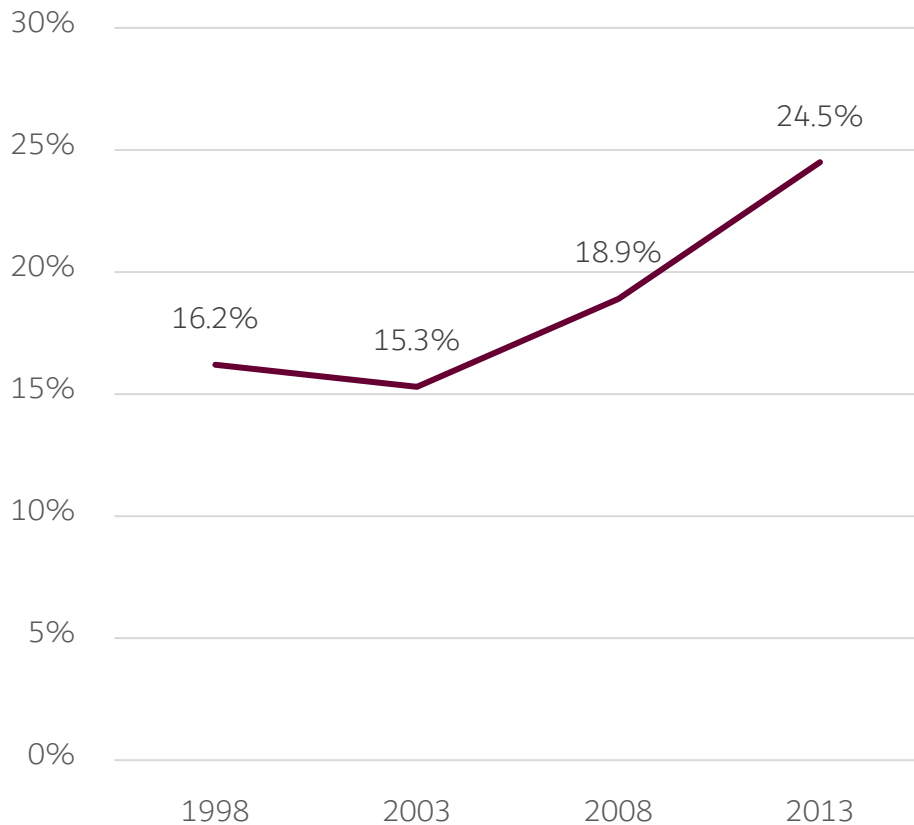


Source: National Bureau of Statistics of China

The burden of non-communicable disease is increasing markedly; placing pressures on delivery systems and health financing

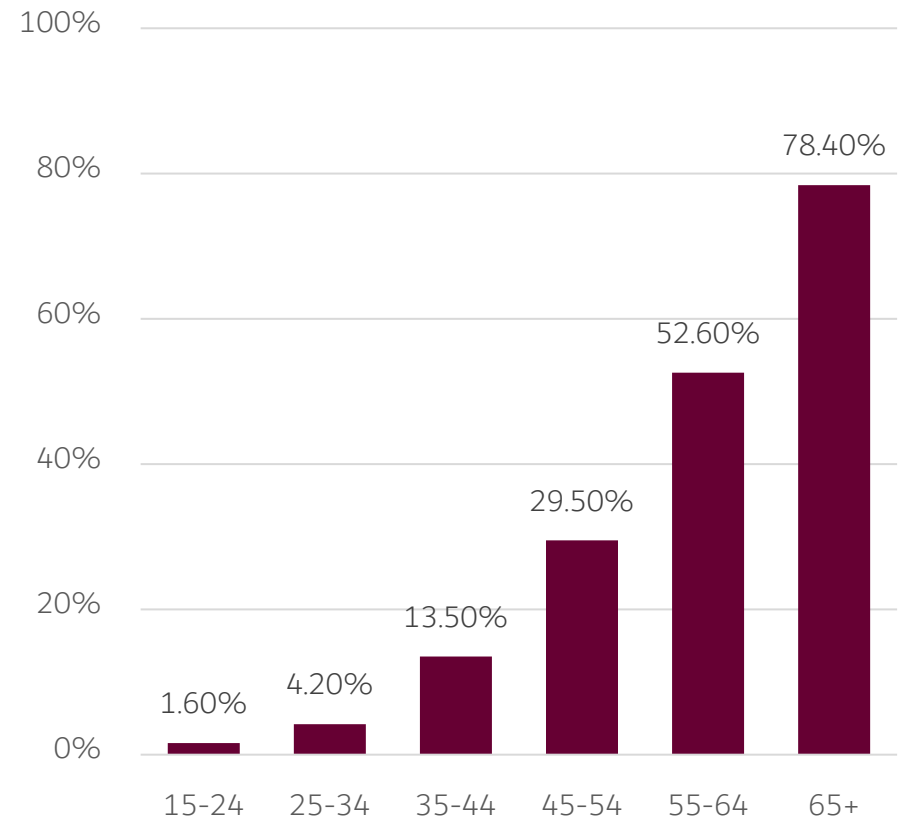
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PERCENTAGE OF THE POPULATION (OVER 15) WITH A CHRONIC CONDITION, 1998 – 2013



Source: NHFPC

PERCENTAGE OF THE POPULATION WITH A CHRONIC CONDITION BY AGE GROUP, 2013



Source: NHFPC

The changing
supply and
demand
landscape for
healthcare
workers in China

3. Healthcare workforce

Section 3. Healthcare workforce

*The changing
supply and
demand
landscape for
healthcare
workers in China*

- Doctors to population ratio (per 1,000), China versus OECD average and nine benchmark regions, 2010 VS 2016
- Number of nurses per 1000 people in china and selected countries, 2009 VS 2015
- Number of registered doctors and nurses in china, 2012 – 2018
- Number of pharmacists & clinical laboratory technologists in china, 2012 – 2017
- Doctor and nurse density per 1,000 elderly population (over 65) projected to 2030
- Number of doctors by specialty, 2005 vs 2017
- Medical workforce distribution in urban & rural hospitals, 2017
- Medical workforce distribution in urban & rural primary care facilities, 2017
- Distribution of doctors by region, 2017
- Doctors density per 1,000 population by region, 2017

Section 3. Healthcare workforce

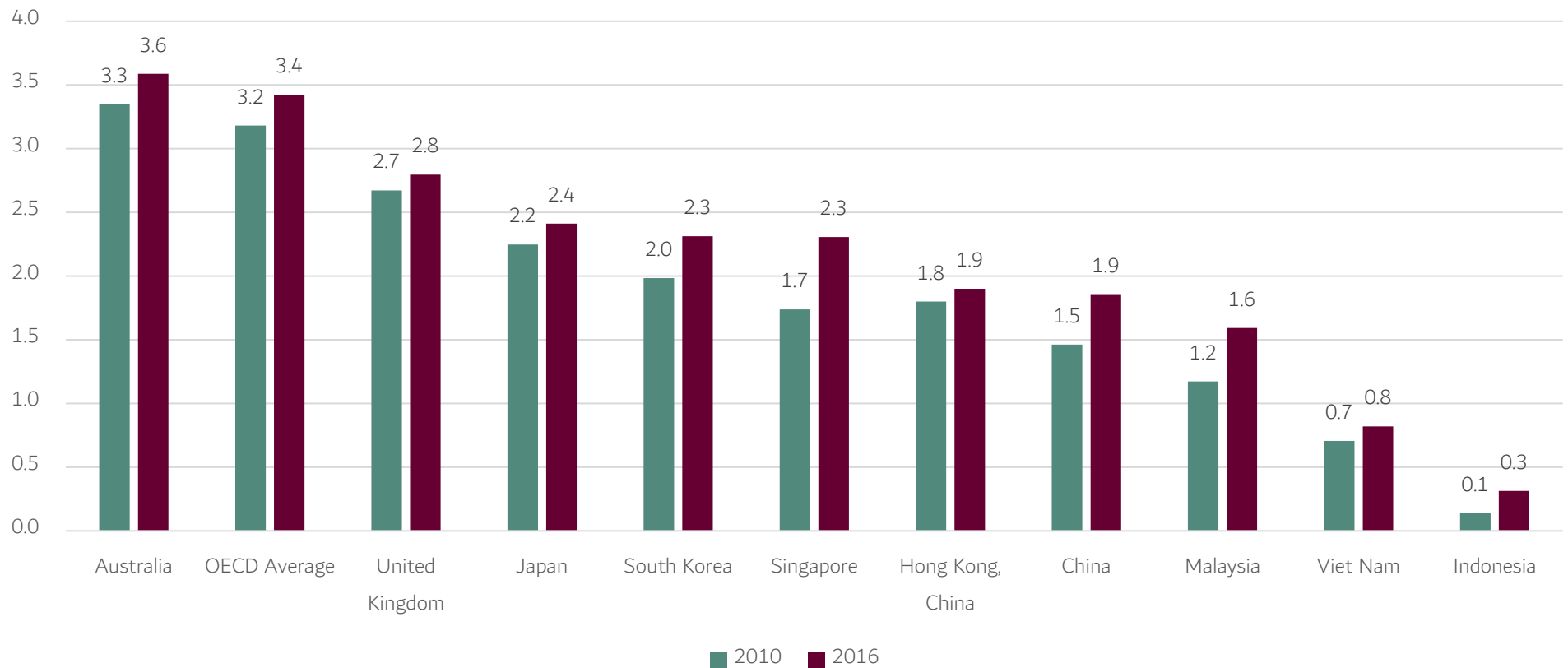
*The changing
supply and
demand
landscape for
healthcare
workers in China*

- Annual income of doctors in China, 2017
- Annual income of nurses in China, 2017
- Distribution of doctors and nurses in public and private hospitals, 2017
- Perceived trustworthiness of doctors, china, 2013 vs 2015

China has been increasing the supply of doctors, however it lags behind other countries in the region

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DOCTORS TO POPULATION RATIO (PER 1,000), CHINA VERSUS OECD AVERAGE AND NINE BENCHMARK REGIONS, 2010 VS 2016

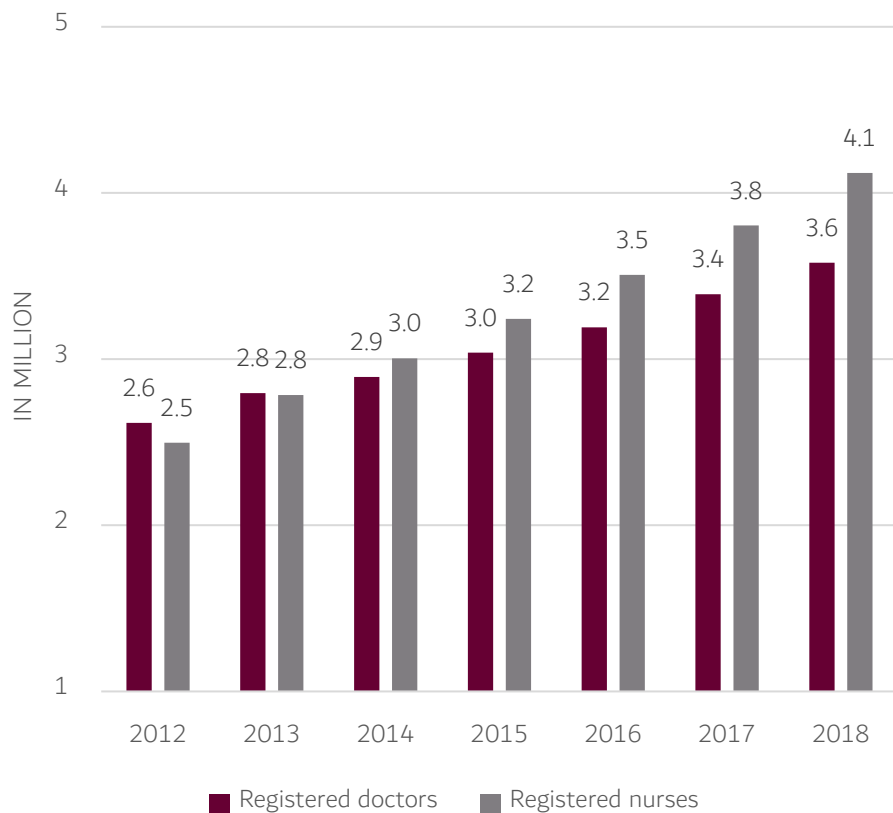


Source: WHO, Food and Health Bureau of Hong Kong, Asia Care Group analysis

There is surprising alignment between the number of doctors and nurses; this is atypical and indicates an heavily medicalised model of care

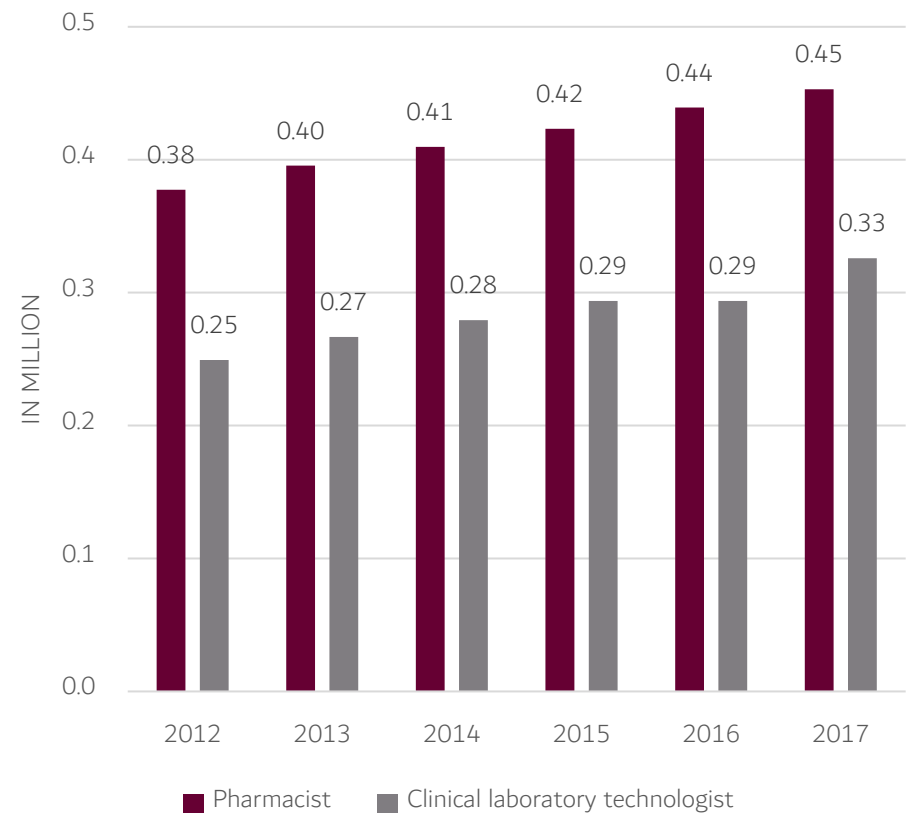
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NUMBER OF REGISTERED DOCTORS AND NURSES IN CHINA, 2012 – 2018



Source: China Health Statistics Journal

NUMBER OF PHARMACISTS & CLINICAL LABORATORY TECHNOLOGISTS IN CHINA, 2012 – 2017



Source: China Health Statistics Journal

Key health expenditure trends that affect system dynamics

4. Healthcare Financing

890	73 967
969	804 029
817	1 296 731
58	1 859 317
	2 499 808
	3 227 076
	4 050 935
	R 28 331

Investment	Investment Value at Year end
424 963	467 459
446 211	1 005 037
468 522	1 620 915
491 948	2 324 149
516 545	3 124 764
542 372	4 033 850
569 491	5 063 675
Start at monthly	R 35 414

Can we do this?

Section 4: Healthcare Financing

Key health expenditure trends that affect system dynamics

- China's health expenditure in billion (¥), 1978 – 2016
- China's health expenditure in billion (¥) and as a percentage of GDP, by financing source, 2012 – 2017
- CAGR of China's health expenditure as a percentage of GDP, by financing source, 2012 – 2017
- China's health expenditure in billion (¥) by region and CAGR of the regional expenditure, 2013 vs 2018
- China's government health expenditure in billion (¥) by region and CAGR of the regional expenditure, 2013 vs 2018
- China's social health expenditure in billion (¥) by region and CAGR of the regional expenditure, 2013 vs 2018
- China's total health expenditure as a percentage of GDP, 1999 – 2017
- China's total health expenditure projected to 2030 in billion (US\$)
- The proportion of China's expenditure on primary and acute care, 2016
- China's health expenditure by public and private health sector, 2017
- Revenue of public hospitals in billion (¥) in China by classification, 2012 vs 2017

Section 4: Healthcare Financing

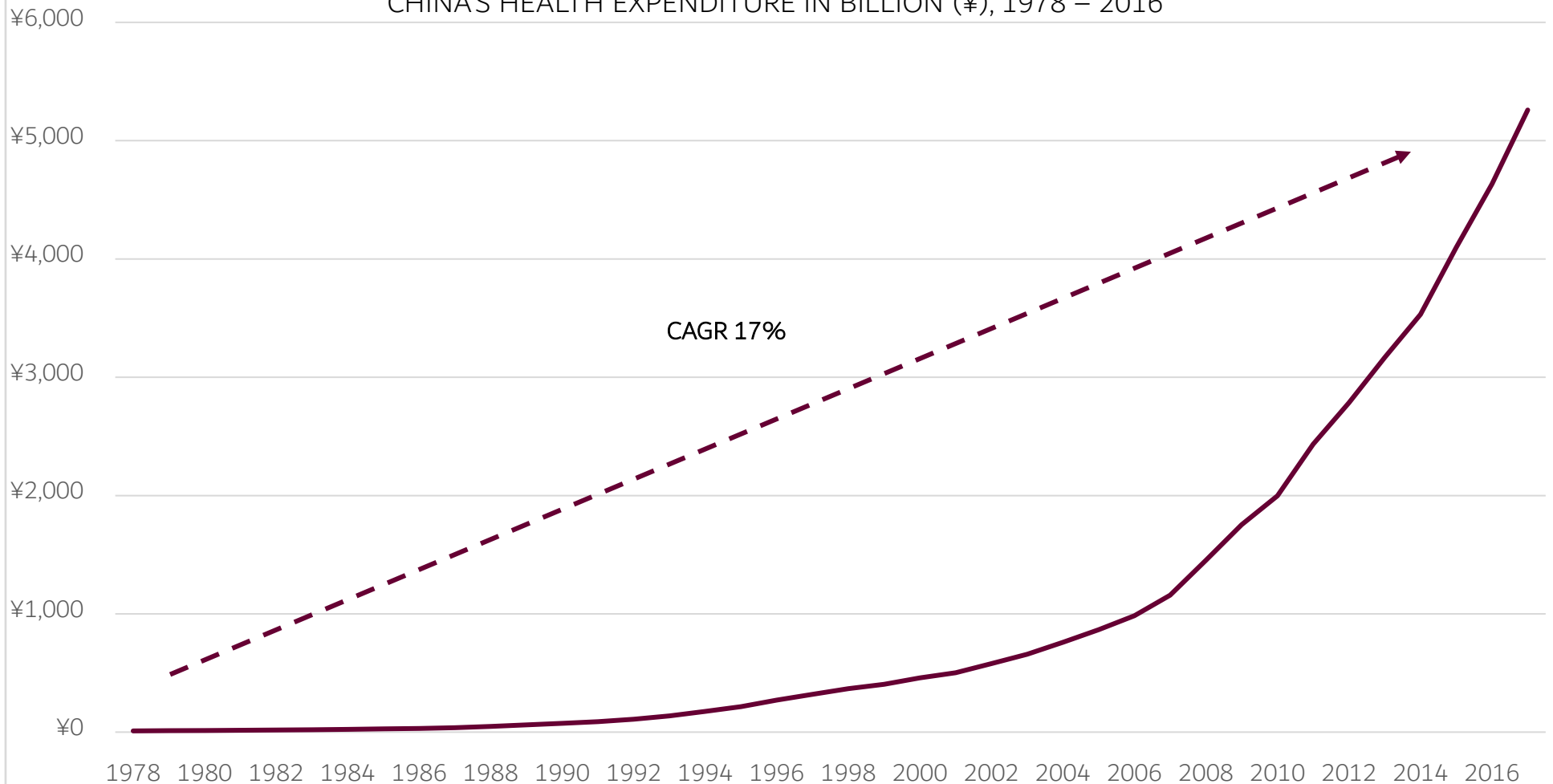
Key health expenditure trends that affect system dynamics

- Revenue of public hospitals in billion (¥) in China by functionality, 2012 vs 2017
- Financial subsidy income of public hospitals in major years in China, 2010 – 2017
- The average cost of one inpatient day across all public hospitals in major years in China, 2010 – 2017
- Average out-of-pocket expenses (¥) for inpatients in public hospitals in China, per patient, 2010 – 2017
- Average out-of-pocket expenses (¥) for outpatients in public hospital in China, per patient, 2010 – 2017
- Average profit of all public hospitals in China, 2010 – 2017
- The average per capita medical expenses for hospitalization for common diseases in China, 2012 vs 2017

China's health expenditure has grown markedly over a relatively short period of time, with just over 6% of GDP now being spent on healthcare across the country

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CHINA'S HEALTH EXPENDITURE IN BILLION (¥), 1978 – 2016

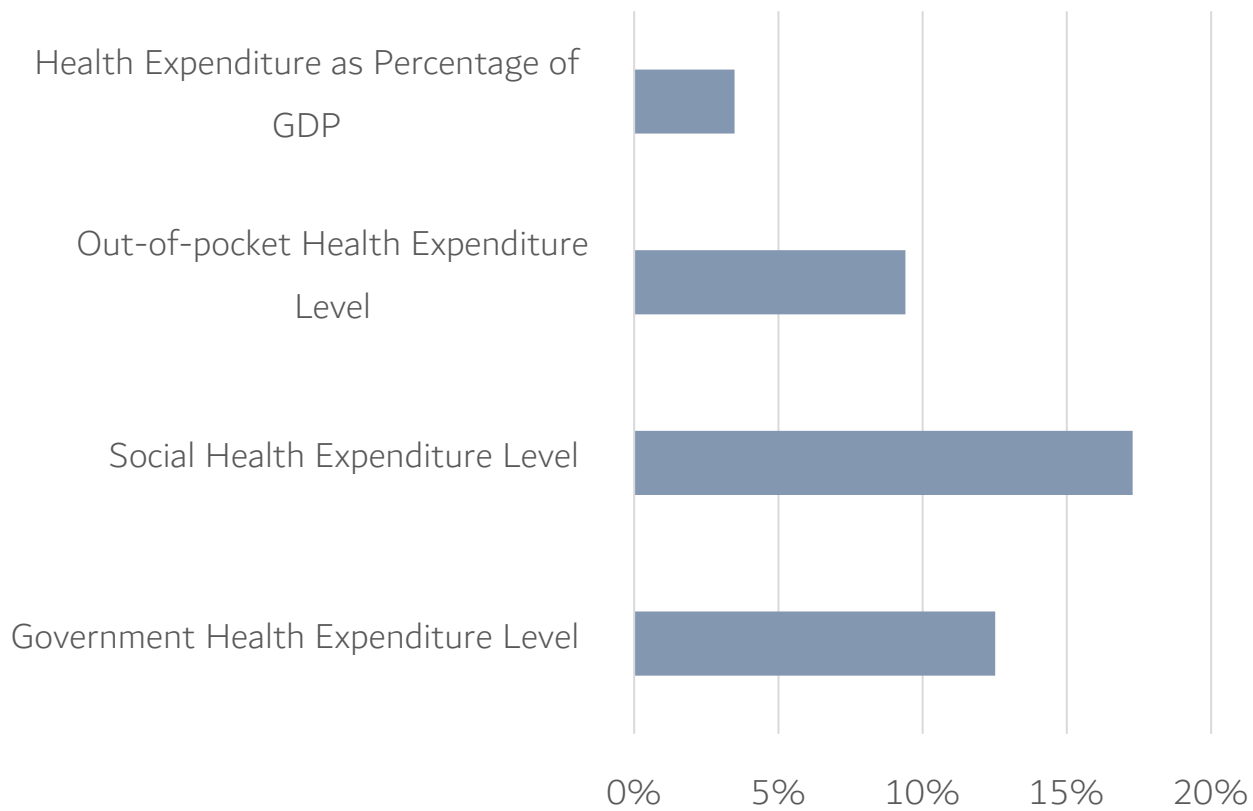


Source; National Bureau of Statistics

The growth rate of health expenditure is more keenly observed in Government-based finance and social health insurance

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CAGR OF CHINA'S HEALTH EXPENDITURE AS A PERCENTAGE OF GDP, BY FINANCING SOURCE, 2012 – 2017



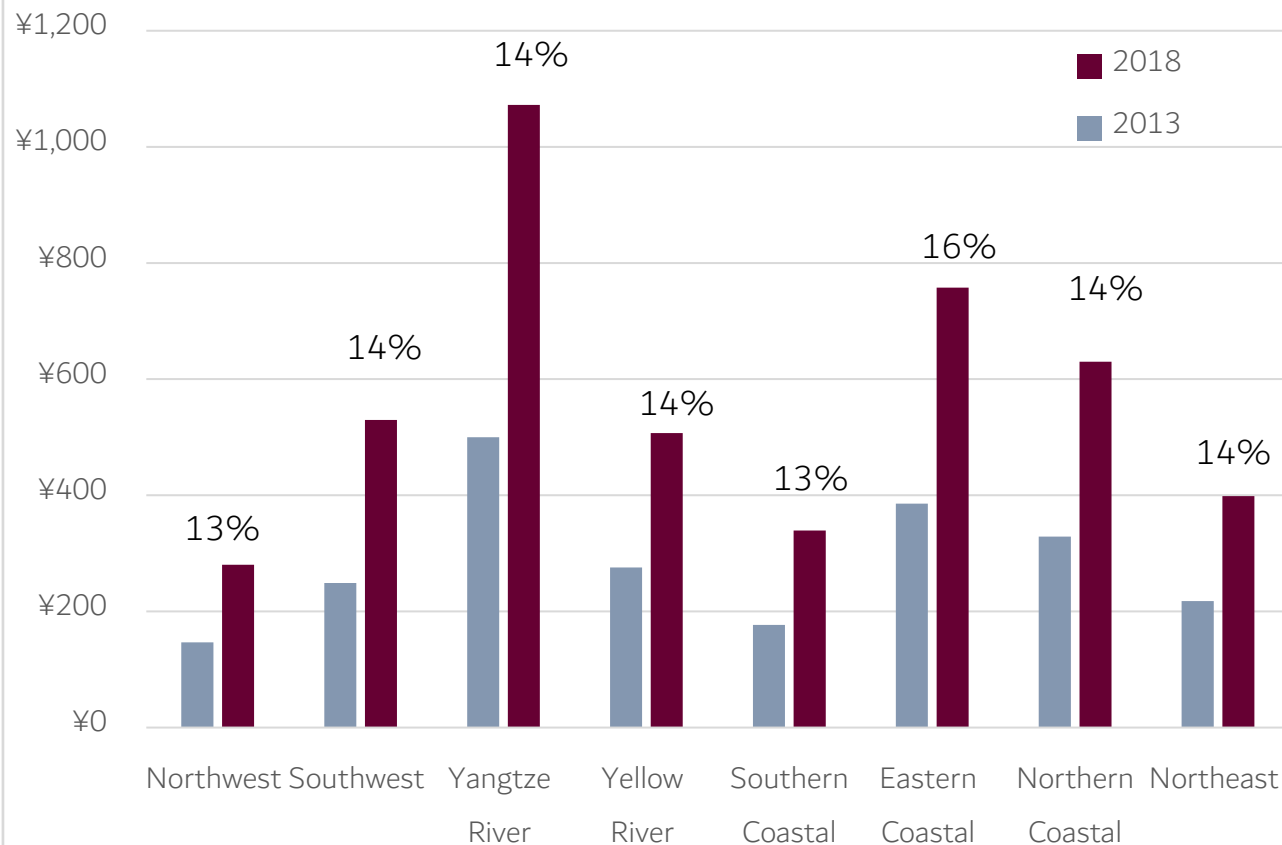
Source: National Health and Family Planning Commission, OECD, National Bureau of Statistics



The compound annual growth rate of health expenditure across regions, shows considerable parity – though an unequal starting base means resource allocation is still highly inequitable

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CHINA'S HEALTH EXPENDITURE IN BILLION (¥) BY REGION AND CAGR OF THE REGIONAL EXPENDITURE, 2013 VS 2018



*Excludes Tibet

Source: National Bureau of Statistics, Asia Care Group analysis





Trends across
the evolving
private
insurance
market

5. Health Insurance

Section 5: Health Insurance

*Trends across
the evolving
private
insurance
market*

- China gross health premium (RMB), 2012 – 2025E
- Gross premium of private health insurance by region (RMB), 2012 – 2018
- Eastern coastal, gross premium (RMB), 2012 vs 2018
- Northern coastal, gross premium (RMB), 2012 vs 2018
- Southern coastal, gross premium (RMB), 2012 vs 2018
- Northeast, gross premium (RMB), 2012 vs 2018
- Middle yellow river, gross premium (RMB), 2012 vs 2018
- Middle Yangtze river, gross premium (RMB), 2012 vs 2018
- Southwest, gross premium (RMB), 2012 vs 2018
- Great northwest, gross premium (RMB), 2012 vs 2018
- Percentage of population with private health insurance (individual or group policies), 2017 or latest year
- Percentage of population with private health insurance (individual or group policies) in china, 2013 – 2025E
- Health insurance provider market share by premium income, 2016

Section 5: Health Insurance

*Trends across
the evolving
private
insurance
market*

- Total health insurance premium and payout ratios, 2014 – 2018
- Health premium income of insurance companies by individuals and group policies, 2016
- Health insurance payout to premium ratio of insurance companies, 2017
- Total insurance gross premium and total gross health premium, 2014 – 2018
- Business share of life and health insurance of major insurance companies, 2016
- Market share of insurance companies by gross life & health premiums and respective gross health premium, 2016
- Benefits schedules of selected insurance products
- On mandatory liability reserves in China
- Business portfolio & operating ratio, Anbang, 2016
- Business portfolio & operating ratio, Pingan, 2016
- Business portfolio & operating ratio, China Life, 2016

Section 5: Health Insurance

*Trends across
the evolving
private
insurance
market*

- Business portfolio & operating ratio, PICC, 2016
- Business portfolio & operating ratio, New China Life, 2016
- Business portfolio & operating ratio, Taikang, 2016
- Business portfolio & operating ratio, China Pacific, 2016
- Life, accident & health insurance distribution channels, 2017
- Insurance sold online by category (by premium), 2017
- Number of insurance agents, China, 2012 – 2017
- Private medical insurance inflation rate, 2010 – 2017
- Insurance complaints and resolution rate, 2013 – 2017

Positive growth in health insurance premiums can be observed across all regions, though overall penetration rates vary significantly

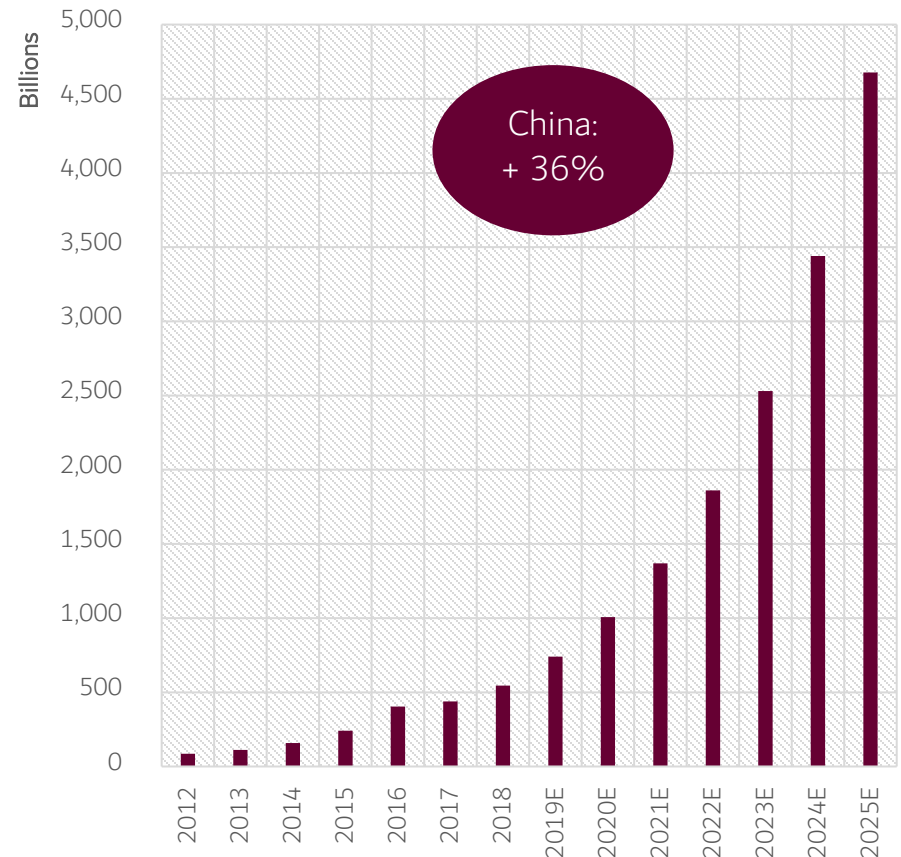
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China's private health insurance market exhibits strong signs of growth, with gross premiums expected to grow by some 36% from 2012 to 2025. However, China starts from a low base, with less than 10% of the population currently holding a private insurance product. Although growth will therefore be fast, penetrations rates – relative to other countries in the region – will remain comparatively low.

A complex set of factors influence the development of the private health insurance market. Low health and financial literacy rates create a lack of understanding on the value of increased health protection. In addition, current policies available on the market often have features which undermine the credibility of the market, such as annual re-underwriting and non-guaranteed renewables. These features, whilst managing insurers' risks tightly, often mean a poor first impression by customers which ultimately affects the sustainability and perception of the market.

International insurers have struggled to gain a strong foothold in the China market, which is still dominated by domestic life insurers. An easing of restrictions, which now allow foreign insurance firms to offer health insurance in China, may increase the competition and drive a better, more advanced private health insurance system.

CHINA GROSS PRIVATE HEALTH PREMIUM (RMB), 2012 – 2025E

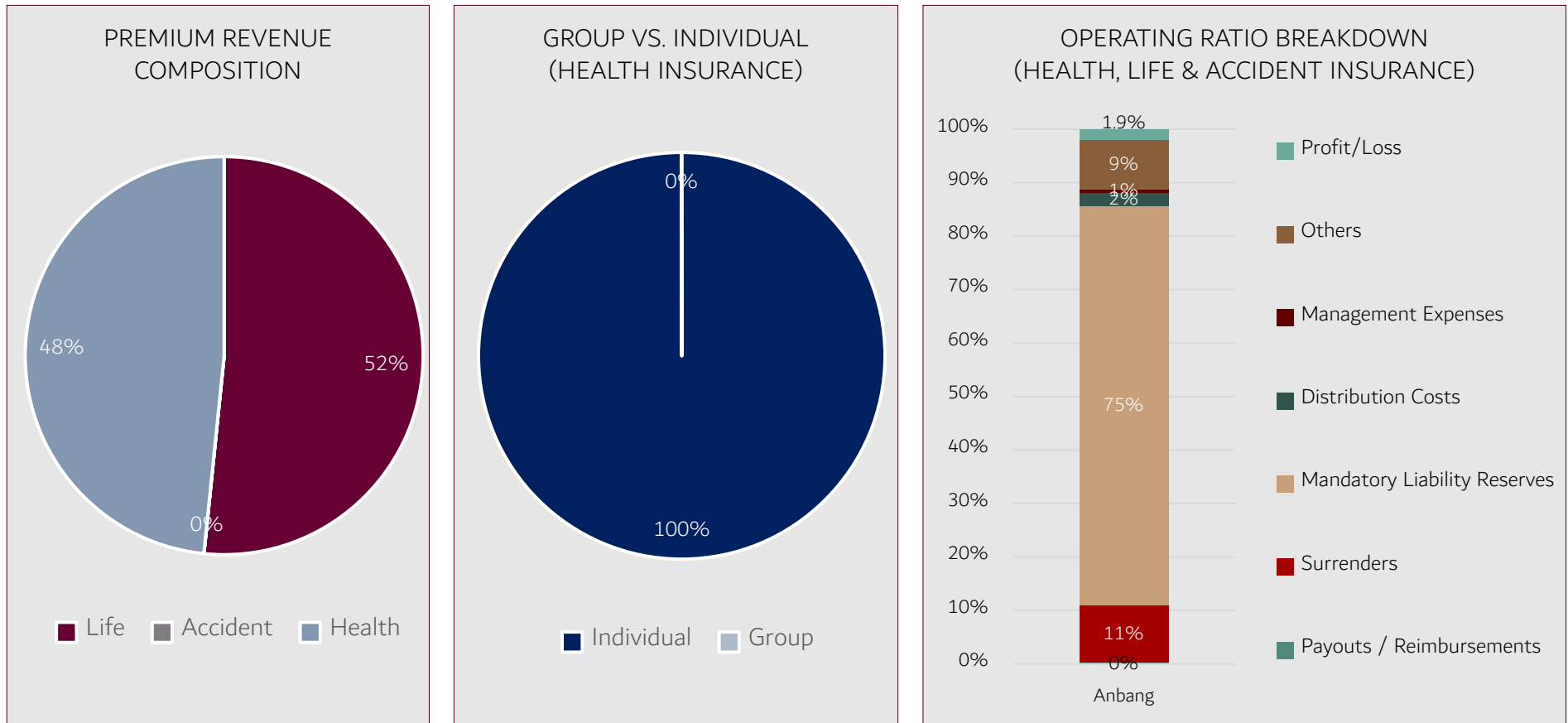


Source: China Insurance Regulatory Commission

At a company level, the majority of revenue is derived from individual health insurance sales. Claims paid are low, with a significant amount being allocated to mandatory liability reserves

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BUSINESS PORTFOLIO & OPERATING RATIO, ANBANG, 2016



Source: China Insurance Regulatory Commission

Trends in hospitalisation and the use and structure of secondary care

6. The acute care sector

Section 6. The Acute Care Sector

Trends in hospitalisation and the use and structure of secondary care

- Primary care facilities (public & private), 2013 – 2017
- Composition of public hospital financing, 2007 vs 2017
- Hospital by operator, 2010 vs 2017
- Proportion of hospitals by public and private operator, 2013 – 2017
- Medical workforce distribution in public and private hospitals, 2017
- Number of beds in public and private hospitals, 2013 – 2017
- Number of beds versus admissions (public & private), 2013 – 2017
- Total number of inpatient beds by regions (public & private hospitals), 2017
- Annual inpatient admission to (public & private hospitals), 2010 – 2017
- Distribution of inpatient admissions by (public & private hospitals), 2013 – 2017
- Beds per 1,000 population (public & private hospitals), 2015 or latest year
- Beds per 1,000 population (public & private hospitals), 2012 vs 2017

Section 6. The Acute Care Sector

Trends in hospitalisation and the use and structure of secondary care

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- Northern Coastal, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Northeast, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Southern Coastal, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Eastern Coastal, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Middle Yellow River, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Middle Yangtze River, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Southwest, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Great Northwest, beds per 1,000 population (public & private hospitals), 2012 vs 2017
- Public bed occupancy, all regions, 2012 – 2026E
- Private bed occupancy, all regions, 2012 – 2026E

Section 6. The Acute Care Sector

Trends in hospitalisation and the use and structure of secondary care

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- Northeast, public bed occupancy, 2012 – 2026E
- Northeast, private bed occupancy, 2012 – 2026E
- Northern Coastal, public bed occupancy, 2012 – 2026E
- Northern Coastal, private bed occupancy, 2012 – 2026E
- Eastern Coastal, public bed occupancy, 2012 – 2026E
- Eastern Coastal, private bed occupancy, 2012 – 2026E
- Southern Coastal, public bed occupancy, 2012 – 2026E
- Southern Coastal, private bed occupancy, 2012 – 2026E
- Middle Yangtze River, public bed occupancy, 2012 – 2026E
- Middle Yangtze River, private bed occupancy, 2012 – 2026E
- Middle Yellow River, public bed occupancy, 2012 – 2026E
- Middle Yellow River, private bed occupancy, 2012 – 2026E
- Southwest, public bed occupancy, 2012 – 2026E
- Southwest, private bed occupancy, 2012 – 2026E
- Great Northwest, public bed occupancy, 2012 – 2026E
- Great Northwest, private bed occupancy, 2012 – 2026E
- CAGR of public & private bed occupancy by regions, 2012 – 2026E

Section 6. The Acute Care Sector

Trends in hospitalisation and the use and structure of secondary care

- Average length of stay by (public and private hospitals), 2013 – 2017
- Number of general and specialist hospitals (public & private), 2017
- Distribution of hospitals by number of beds (public & private), 2017
- Number of specialist hospitals, 2017
- Number of specialist hospitals, 2017 (con't)
- Number of public specialist hospitals, 2007 vs 2017
- Number of private specialist hospitals, 2007 vs 2017
- Number of specialist hospitals by regions (public & private), 2012 vs 2017
- Number of private specialist hospitals, 2012 vs 2017
- Number of private specialist hospitals by regions, 2012 vs 2017
- Public hospitals inpatient admission by conditions, 2011 vs 2015
- Average length of stay of selected conditions (public hospitals), 2017
- Average length of stay (days, public & private), 2017

Section 6. The Acute Care Sector

Trends in hospitalisation and the use and structure of secondary care

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- Average charge of selected conditions (public hospitals), 2017
- Average inpatient charge by cost category (public & private hospitals), 2011 – 2017
- Hospital average revenue per bed (public & private hospitals), 2013 – 2016
- Cumulative increase in price level, average inpatient and outpatient charges (public & private hospitals), 2013 – 2017
- Distribution of discharge by age (public hospitals), 2017
- Distribution of discharge by gender (public hospitals), 2017

Changes to public hospital financing may have a significant impact on provider behaviour and financial viability

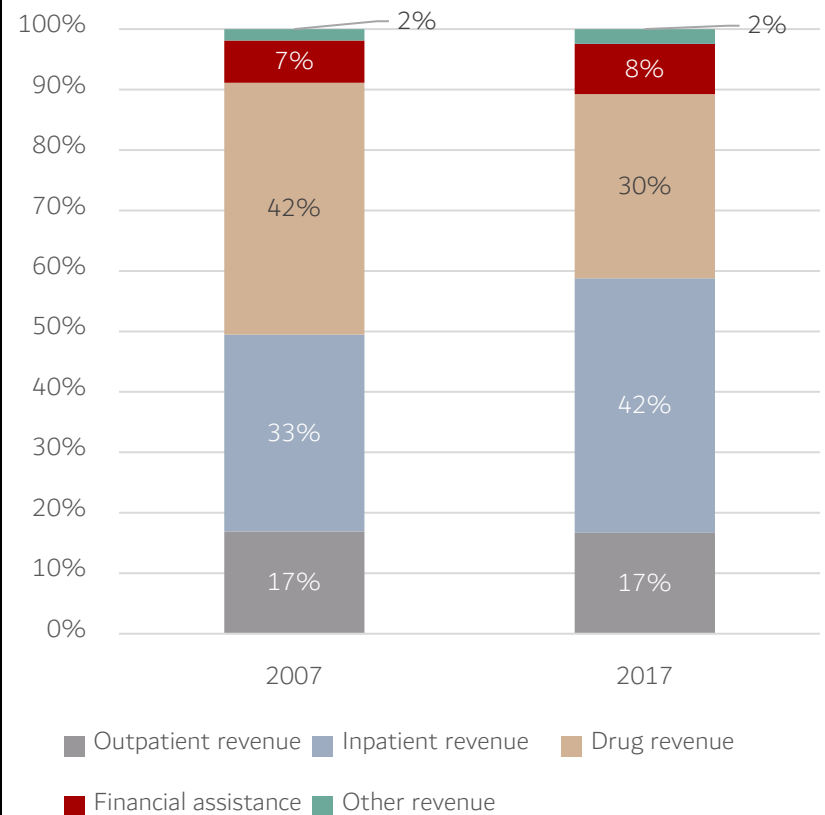
~ Asia Care Group ~

China has long grappled with the challenge of providing universal healthcare, whilst, at the same time, managing the significant fiscal challenge this presents. Historically, public hospitals derived revenue from a combination of direct Government funding, service fees - borne by social insurance and out of pocket payments - and sales of pharmaceuticals.

Growing concerns over the influence of pharmaceutical sales on hospital viability, together with evidence of an erosion of public trust in doctors, led the Government to introduce a “zero” mark-up policy on pharmaceuticals in 2015. Whilst this has started to have the desired effect on prescribing rates, it has created a set of financial challenges for hospitals – many of whom historically derived up to 40% of revenue from drug sales. Cost-shifting, from drug-sales to service fees, is widely evident; placing pressures on both social insurance schemes and out-of-pocket payments. The Government has increased flows of direct funding, though this is of marginal relief in the context of revenue lost from drug sales.

In the medium-term, the Government aims to stabilise service fees through encouraging hospitals to operate with greater efficiency. Pilot projects have been established in over 14 provinces aimed at testing new financing models; both DRG (packaged pricing) and capitation models are currently under evaluation. The hardest hit, and most destabilised hospitals are those in rural areas, whose utilisation rates remain far below their urban counterparts. Significant redistribution, alongside a continued effort to steer patients to lower levels of the care system, will be vital to ensuring a transition to a more sustainable model of hospital financing.

COMPOSITION OF PUBLIC HOSPITAL FINANCING 2007 VS 2017

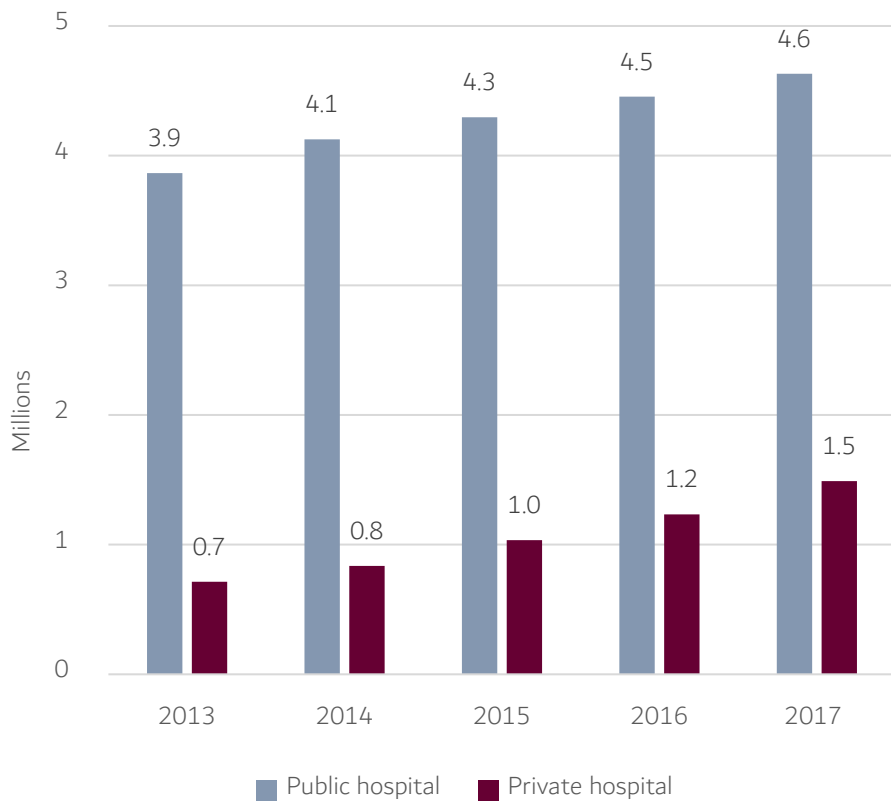


Source: China Health Statistics Journal

There is growing misalignment between the number of public and private sector beds and admission rates, meaning increased overcapacity in the public system and under capacity in the private.

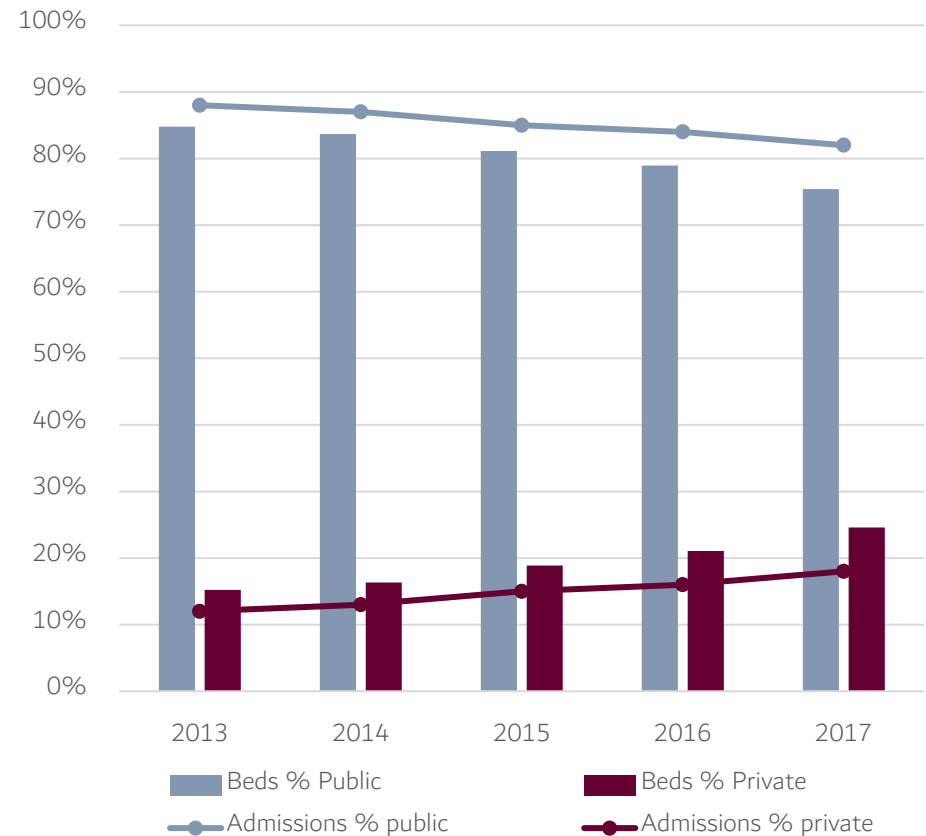
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NUMBER OF BEDS IN PUBLIC AND PRIVATE HOSPITALS, 2013 – 2017



Source: National Bureau of Statistics of China

NUMBER OF BEDS VERSUS ADMISSIONS (PUBLIC & PRIVATE), 2013 – 2017



Source: National Bureau of Statistics of China

Trends across
the evolving
digital health
market

7. The Digital Health Market

Section 7. The Digital Health Market

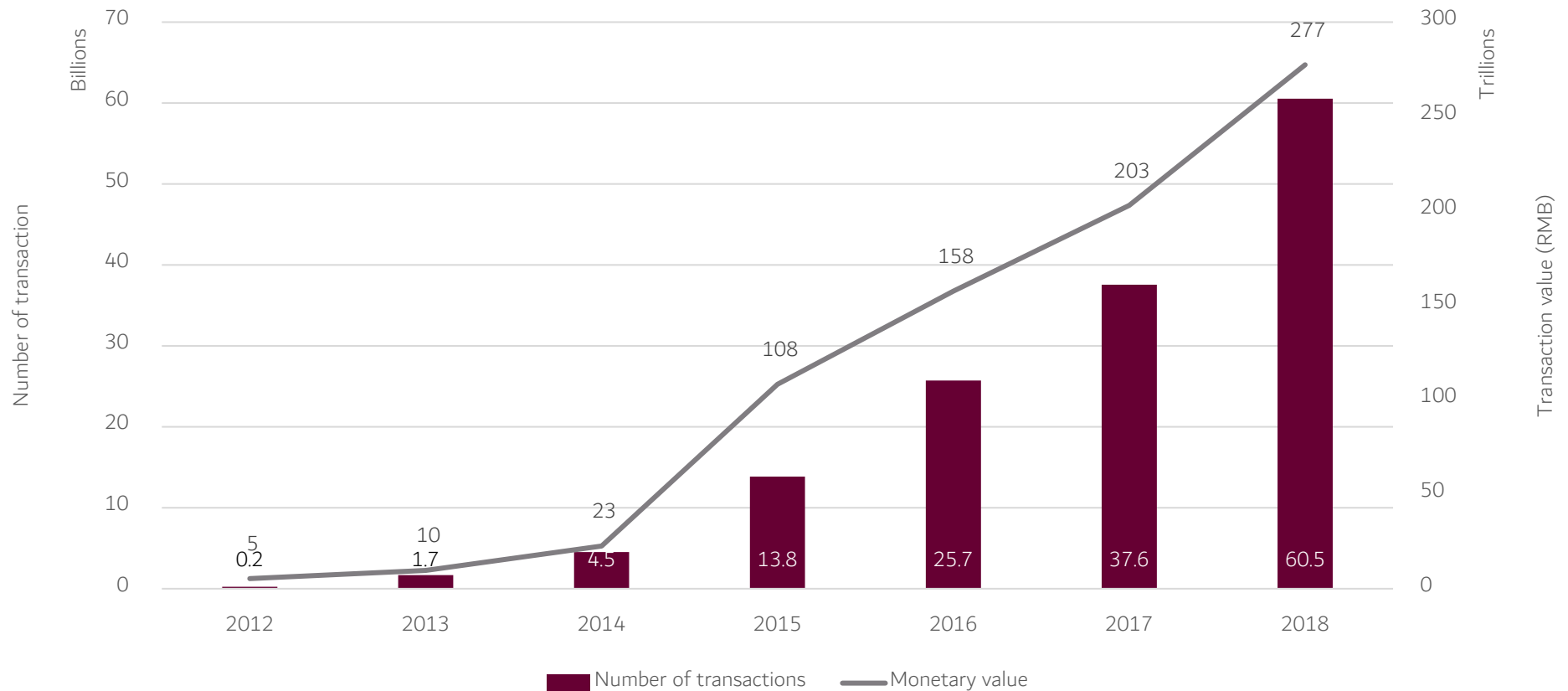
*Trends across
the evolving
digital health
market*

- Internet penetration rate, 2012 – 2025e
- Smartphone penetration rate, 2012 – 2025e
- Internet economy market size (RMB), 2014 – 2019e
- Digital payment service adoption rate, 2012 – 2018
- Online advertisement market size (RMB), 2012 – 2018
- The value of the Chinese telemedicine market, 2016 – 2025e
- Number of people to seek a 2nd medical opinion in Tier 1 Cities, 2014 – 2026e
- Market worth of 2nd opinion market, 2014 – 2026e
- IPO's and major Healthtec funding activities, 2016 – 2019
- Major mergers/acquisitions in the Healthtec space, 2009 – 2016
- Monthly active users, Pingan Good Doctor & We Doctor, 2019

2015 marked the beginning of rapid growth in digital payment service adoption; the monetary value of transactions doubled and there was nearly a four-fold increase in volume during the period

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DIGITAL PAYMENT SERVICE ADOPTION RATE, 2012 – 2018



Source: State Information Center

Healthtec funding continues to grow in China, driven by more efficiency in healthcare in areas like medical diagnostics, and the prevention of health issues via digital technologies

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IPO'S AND MAJOR HEALTHTEC FUNDING ACTIVITIES, 2016 – 2019

Company	Value (RMB)	Market	Date	Stage
Chun Yu Yi Sheng	1,200,000,000	N/A	1/6/2016	Pre-IPO
Jian Kang 160	22,000,000	N/A	6/7/2017	D round
Harbin Medisan Pharmaceutical	953,000,000	Shenzhen Stock Exchange	22/9/2017	IPO
DXY.cn	707,290,000	N/A	10/4/2018	D round
Pingan Good Doctor	8,773,000,000	Hong Kong Stock Exchange	4/5/2018	IPO
WuXi AppTec	2,251,000,000	Shanghai Stock Exchange	8/5/2018	IPO
WeDoctor	3,536,450,000	N/A	9/5/2018	Pre-IPO
easyhin	150,000,000	N/A	26/6/2018	C round
Medlinker	1,000,000,000	N/A	31/7/2018	D round
Jiankewang	919,477,000	N/A	5/9/2018	B round
Yao Shi Bang	940,695,700	N/A	16/12/2018	D round
miaoshou.com	500,000,000	N/A	7/1/2019	C+ round
Weimai	707,140,000	N/A	20/6/2019	C round
Xiaolu Yiguan	41,424,000	N/A	25/6/2019	Pre-C round

Source: TianYanCha.com

Key trends
driving China's
rapidly-evolving
pharmaceuticals
and life sciences
sector

Pharmaceuticals and Life Sciences

Section 9: Pharmaceutical and Life Sciences

*Key trends
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and life sciences
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- The pharmaceutical value chain in Mainland China
- Events of note and policy decisions from the National Medical Products Administration
- Profits in 4 pharmacological industries in billions (¥), 2009 – 2017
- Profits in the medical devices industry in billions (¥), 2009 – 2017
- Profits from the pharmaceutical and medical devices industries, 2009 – 2017
- CAGR of profits in the pharmaceutical and medical devices industries, 2009 – 2017
- The production of chemical and Traditional Chinese Medicines in 10,000 tons, 1999 – 2017
- The value of exports in pharmaceuticals in billions (¥) by the pharmacological industry, 2010 – 2017
- The number of patents in force, 2011 – 2017
- The number of patent applications in China, 2011 – 2017
- The number of new patents approved each year, 2011 – 2017
- Expenditure on R&D in the manufacture of medicines
- The total number of businesses and total revenue in the manufacturing of medicines
- CPI compared to health care inflation from a fixed base, 2009 – 2018
- The total market capitalization of the 15 top pharmaceutical companies

Section 9: Pharmaceutical and Life Sciences

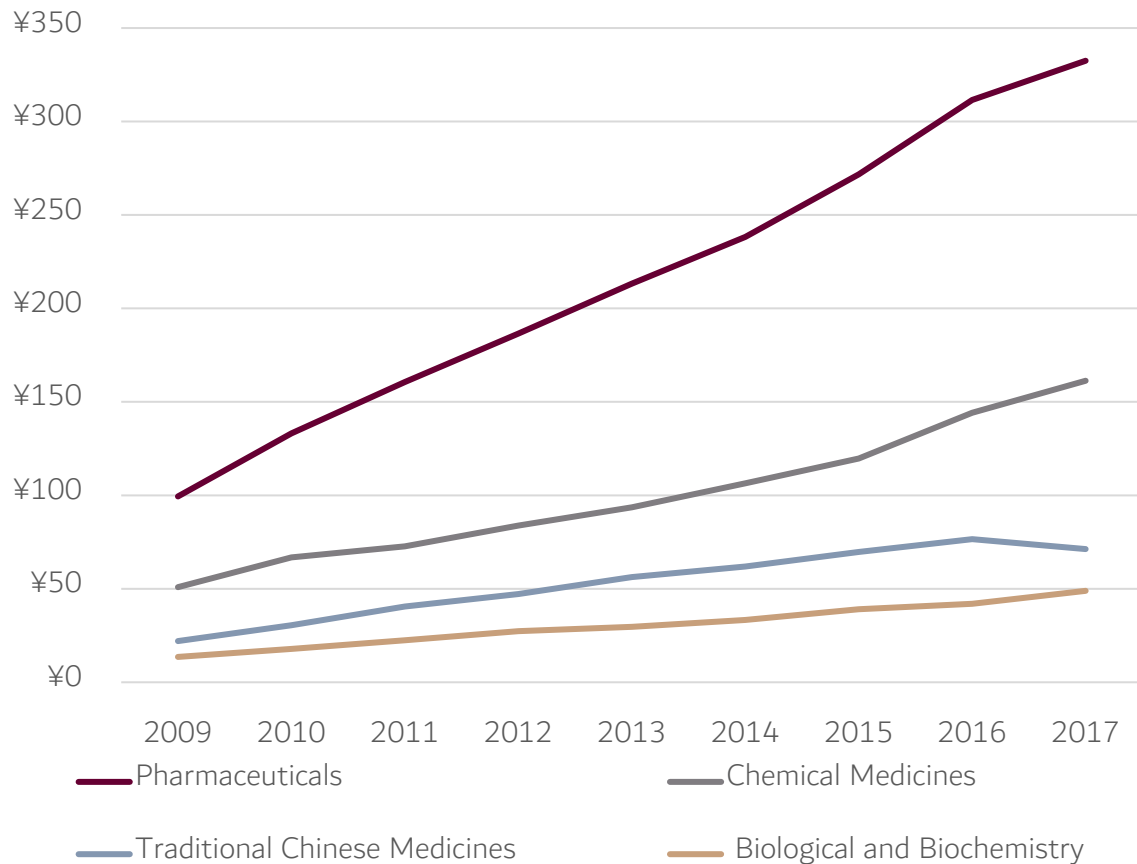
*Key trends
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- Private equity and venture capital by investor domicile into the Chinese pharmaceutical market in 2018
- Pharmaceutical and life sciences merger & acquisition trends in the Chinese and Hong Kong markets, 2012 – 2018
- Pharma and life sciences sub-sector M&A data from 2018
- Performance of Chinese pharmaceutical stocks

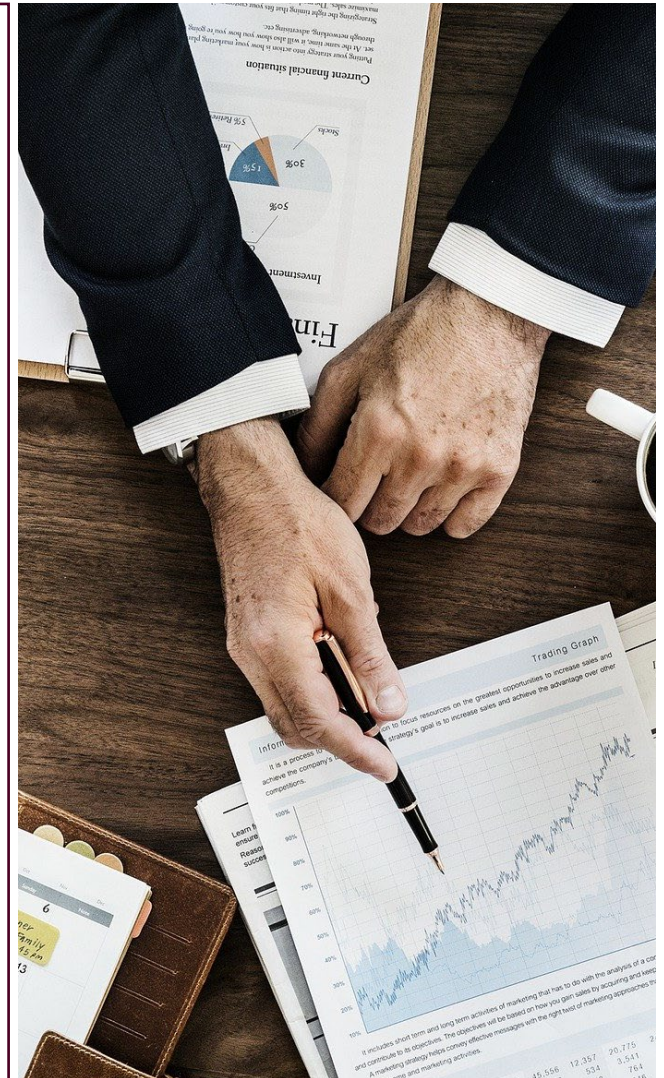
By 2016, China surpassed Japan to become the world's second-largest pharmaceutical market behind the US, driven by sales in prescription pharmaceuticals

~ Asia Care Group ~

PROFITS IN 4 PHARMACOLOGICAL INDUSTRIES IN BILLIONS (¥), 2009 – 2017



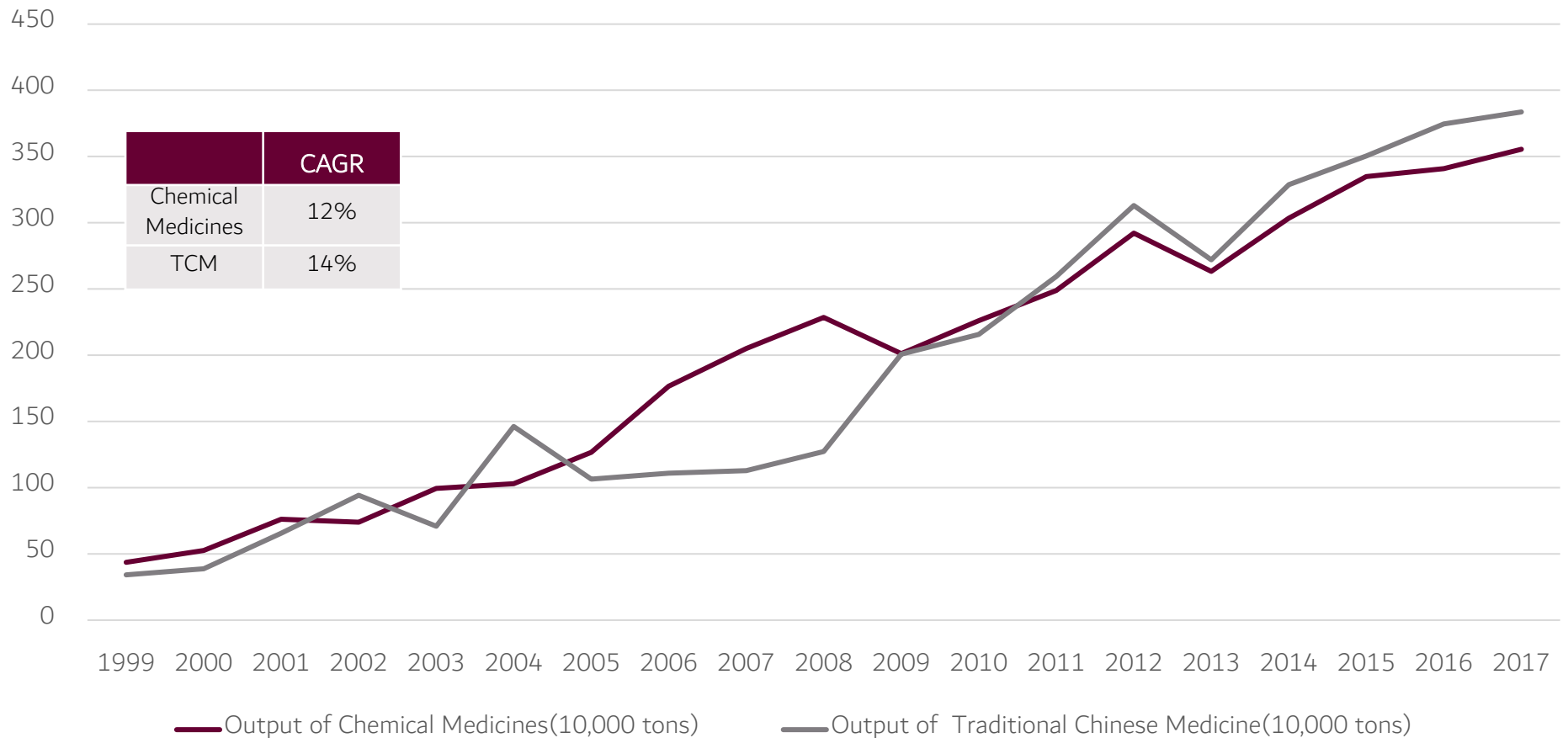
Source: Bureau Of National Statistics China



The TCM market has been rapidly evolving since the late 90s; by 2017 the output value was just under RMB 400 billion, up from RMB 317.2 billion in 2010

~ Asia Care Group ~

THE PRODUCTION OF CHEMICAL AND TRADITIONAL CHINESE MEDICINES IN 10,000 TONS, 1999 – 2017



Source: National Bureau of Statistics of China

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