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Healthy ageing in China: key takeaways on expanding health protection for the middle-age and elderly



This report summarises the key findings from a new academic study by Peking University.

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Ageing, and staying healthy

Key takeaways from a report prepared by the Department of Risk Management and Insurance, School of Economics at Peking University, in cooperation with Swiss Re Institute.

China has a rapidly ageing population in need of more support to maintain good health.

China is ageing rapidly. Its population aged 65 years or more grew by 84 million between 2000 and 2020, accounting for one in every four people of this age in the world during this period. By 2030, around 17% of China's total population will be aged 65 or over, according to the United Nations Population Division. The research team at Peking University's (PKU) Department of Risk Management and Insurance, in the School of Economics, has undertaken an in-depth study into healthy ageing. A main finding is that while acknowledging significant progress over the years, there is still room to improve the health status of China's middle-age and elderly populations. A large proportion (25%) of this cohort report that they are in either poor or very poor health.

Healthy ageing is about both physical and mental well-being.

Providing for healthy ageing is a question of both delivery of healthcare services, and the financing mechanisms that support them. It holds significant implications for public finances: a report on ageing concluded in 2010 that globally, "without sweeping changes to age-related public spending, sovereign debt will soon become unsustainable".¹ With respect to service provision, PKU's research team recommends that the government makes healthy ageing a national strategy/programme, with a focus on whole life-cycle health management. This would ensure that all persons are able to access high-quality and affordable treatment, and preventative, rehabilitative and long-term care (LTC) services. It should recognise that "health" means both physical and mental well-being.

An increase in state health and pension scheme provisions would encourage greater private sector participation in protection solutions.

On how to provide for and finance healthcare services, this study finds spending on pension and health insurance protection typically leads to better health status, up to a certain limit. As such, while an increase in the provisions of state pension and health insurance schemes would be helpful, an optimal policy response would be to encourage and provide a framework for the participation of commercial insurers in a multi-layered pension, medical and LTC insurance system. The aim would be for the market to provide supplemental services to increase the range and quality of healthcare services as a complement to state provisions. Public-private partnerships can facilitate more efficient allocation of resources in this overall endeavour.

Insurers can provide health and pension solutions, and be long-term investors in health services and infrastructure.

Insurers can serve three important functions supporting healthy ageing in China. They should provide comprehensive products covering healthcare, disease treatment, rehabilitative care and LTC services, and can also help consumers manage longevity risk by developing commercial pension solutions. And, with a supportive fiscal and regulatory framework, insurers could invest their long-duration funds into health and old-age care services and infrastructure.

China's government's ambition is healthcare services for all...

The Chinese government's *Healthy China 2030* programme is the blueprint for reform of the country's healthcare system, the ambition being access to healthcare for the entire population.² This is similar to the health plans set out by advanced markets, such as Singapore's *Healthcare 2020 Masterplan* launched in 2012; *The Japan Vision: Health Care 2035* published in 2015; Australia's *Long-Term National Health Plan* in 2019, and the US government's *Healthy People 2030*, implemented since 2020. The *Guideline to Healthy China 2030 Plan* covers areas such as development of the healthcare system; promoting healthy lifestyles; improving the quality of healthcare and levels of protection services, including through public and private insurance; and establishing major health status indicators comparable with those in high-income countries.

¹ *Global Aging 2010: an irreversible truth*, Standard and Poor's, 2010.

² See the *Healthy China Action Plan (2019–2030)* at <http://en.nhc.gov.cn/HealthyChinaActionPlan.html>

Ageing, and staying healthy

...including for the country's rapidly ageing population.

In relative terms, China's population aged 65 and more is low, estimated at less than 12.0% of all inhabitants as of 2020. This is far below Japan, which has the world's highest proportion of elderly at 28.4% of its total population, according to the United Nations. However, in absolute terms China has the largest population aged 65 or more globally, at 172 million as of 2020. This was almost double the number in second-ranked India. The population aged 65 or more in China is also growing at pace, increasing from 88 million in 2000 (7.0% share of total population) and is projected to increase to 247 million in 2030 (16.9%).³ The number of people in China aged 60 or over has changed rapidly too, growing from 126 million in 2000 (10.3% of the population) to 249 million in 2018 (17.9%). Given this demographic, in recent years policymakers have focused more on healthy ageing to improve the health status of the middle-age and elderly populations.⁴

Peking University research team has analysed the state of play of health for China's middle age and elderly populations...

Peking University research team investigates healthy ageing in China

The PKU research team has undertaken a major study investigating the health status⁵ of the middle-age and elderly populations, using data from PKU's *China Health and Retirement Longitudinal Study* (CHARLS).⁶ CHARLS is a nationwide survey targeting respondents aged 45 years and over. The surveyed area covers 450 villages/urban communities from 150 counties/urban districts in 28 provinces of mainland China. Respondents are drawn using the proportional-to-size sampling method, comprising 14 076 households (59 697 individual observations). Three separate CHARLS surveys in 2011, 2013 and 2015 targeted the same respondents each time.

...including an investigation of long-term care services-related insurance.

With respect to those aged 60 years and more, the PKU study also assesses long-term care (LTC) provisions and insurance. Data shows that in 2017, 6% of the population between 60 and 79 years old needed LTC. Of those aged 80 years and above, 26% needed LTC.⁷ With rising life expectancy, higher female participation in the labour force, and reduced family size on account of the one-child policy (which also means less availability of the care traditionally provided by the family), China's need for LTC provisions will likely increase in the coming years.

This report presents the key takeaways of their major academic project.

Based on the survey findings and subsequent analysis, the PKU study offers policy recommendations to help the government achieve its targets on healthy ageing. The full study is available **here**. This extract prepared by Swiss Re Institute presents the key takeaways of the PKU study, including its main findings, the role of pension and health insurance in facilitating healthy ageing in China, and policy recommendations.

³ Data from United Nations Population Division.

⁴ The World Health Organization (WHO) defines healthy ageing as developing and maintaining the functional ability among the elderly to be and do what they want to be/do. That includes meeting one's basic needs, to learn, grow and make decisions, to be mobile, to build and maintain relationships, and to contribute to society.

⁵ To gauge "health status", the PKU study focuses on six specific measures: poor self-reported health status (survey respondents were asked to rank their general health status: very poor, poor, fair, good, and very good); body pain (respondents asked if they were bothered by constant body pain); diagnosis with any chronic disease; activities of daily living impairment (respondents were asked if they have any difficulty dressing, bathing, eating, getting into or out of bed, toileting, and continence); cognitive impairment; and depression risk.

⁶ See CHARLS homepage at: <http://charls.pku.edu.cn/index/en.html>

⁷ Data from the Insurance Association of China.

Main findings of the study

The following are the main findings from the CHARLS survey and subsequent analysis undertaken by PKU's research team.

- The general health of middle-age and elderly populations in China can be improved. One in four survey respondents reported poor or very poor health status. Two main areas of concern are: (1) chronic diseases, with 72% of respondents having been diagnosed with at least one listed disease; and (2) mental health, with one in three respondents reporting symptoms of depression. The ratio can also be found in other surveys. For example, according to a 2014 survey undertaken for Hong Kong (The Diplomat, 2016), more than 60% of local residents reported stress from work, far higher than global average.
- Separating out the elderly (ie, those aged 60 or over), the CHARLS survey yields equally concerning results, with 29% of respondents reporting poor or very poor health status, 79% having been diagnosed with at least one listed chronic disease, and 36% of respondents at risk of suffering depression.
- Among the middle-age and elderly populations, the following groups tend to be in better health:
 - those living in more developed provinces;
 - younger males;
 - those who have urban Hukou;
 - those who are well educated;
 - those who have higher levels of permanent income; and
 - those who are living with families.
- Pension and health insurance protection typically leads to better health status, up to a certain limit. The analysis shows that beyond a certain threshold, more spending on insurance and pension protection yields diminishing returns in terms of improved health status.
- Employee Basic Pensions offer better protection than the equivalent Resident Basic Pensions (see The pension and health insurance system in China). Empirical analysis also confirms that the health improvement effect from employee insurance schemes is more than from resident programmes.

Public pensions are the main source of retirement funding in China.

The pension and health insurance system in China

China's pension system consists of three pillars: public pensions (Pillar I), employer-provided private pensions (Pillar II), and individual private pensions (Pillar III). Pillar I is main source of pension cover for most Chinese. The second and third pillars are still in relatively early stages of development. Pillar I operates a two-scheme framework: The Employees' Basic Pension (EBP) and the Residents' Basic Pension (RBP). The EBP is compulsory for all employees in formally established enterprises, government, and public institutions. The RBP is a voluntary programme for those not eligible for the EBP. On average, the EBP offers much higher protection than the RBP. According to the Ministry of Human Resources and Social Security, in 2018 the average pension benefit for the EBP was RMB 37 841 per year (around USD 5 723). For the RBP, it was just RMB 1 828 (USD 276.48).

Similarly is public health insurance.

Similar to the pension system, health insurance comes from three sources: public health, employer-provided private health and individual private health insurance. The dominant public health insurance has two streams: Employees' Medical Insurance (EMI) and Residents' Medical Insurance (RMI). The EMI programme pays for reasonable medical expenses, subject to deductibles, coinsurance, and policy limits. The deductible of the RMI is broadly the same as that of the EMI, but the policy limit is much lower. There are also differences in the reimbursement rates: the RMI provides a relatively lower level of protection level than EMI.

Main findings of the study

- Financial protection provided by pension and health insurance programmes affects health status through various channels, such as utilisation of medical services. Precautionary investment in health (measured by participation in leisure activities and having a physical examination) and medical service utilisation (last outpatient visit expense in the last month, and last inpatient care expense in the last year) are the two main transmission channels through which pension and health insurance programmes influence health status. Recent Swiss Re Institute research also indicates that affordable health insurance can play a central role in enhancing protection and reducing this financial risk.⁸
- Willingness to pay for LTC insurance is relatively low. With a 20% loading fee, more than half of China's residents are not willing to purchase LTC insurance. Those most willing to pay are urban residents and females. These groups are also the most sensitive to government subsidies. This experience is in line with other emerging markets, Swiss Re Institute's sigma research shows. Though emerging markets' public finances are less stressed relative to many advanced economies, the low penetration of LTC spending (0.1% of GDP in 2010) and the immense growth in funds needed (between 0.5% and 0.6% of GDP by 2030) will still be a huge challenge to meet.⁹
- Other countries besides China have released national health plans targeted at improving the health status and welfare of their entire populations. For example, in 2015 the Japanese government launched *The Japan Vision: Health Care 2035* to build a healthcare system designed to motivate a healthy lifestyle throughout people's lives, as well as improve medical technology and engage society to support health and well-being. Beyond Asia, Australia's Department of Health released its *Long-Term National Health Plan* in August 2019, emphasising the importance of prevention and early intervention in the health system.

⁸ *sigma* Resilience Index 2020: global resilience put to the pandemic test, Swiss Re Institute, August 2020.

⁹ *sigma* 5/2014 - How will we care? Finding sustainable long-term care solutions for an ageing world, Swiss Re, 2014.

Policy recommendations

Based on the findings of its analysis, the PKU study recommends the following to assist policymakers in achieving China's Healthy Ageing targets.

- Make "Healthy Ageing" a national strategic plan/programme
 - The focus of the programme should be on whole life-cycle health management, not only older age. The study recommends early intervention in peoples' lives to manage health status and provide social support intended to maintain health and life expectancy.
 - The programme should ensure health equity. All middle-age and elderly persons should be able to access high-quality and affordable preventative care, treatment, rehabilitative care, health promotion and other health services. Particular attention should be given to those living in the less-developed central and west provinces, rural and low-income populations, and elderly persons living on their own.
 - The programme should recognise that "health" covers both physical and mental well-being. Chronic diseases and mental health are two main areas of concern.

- Establish and improve existing insurance and health protection services

The following policy responses are recommended:

- establish a multi-layered system for pension, medical and LTC insurance. This could involve increasing the protection level provided by the Residents' Basic Pension and the Residents' Basic Medical Insurance schemes. It should also establish a basic LTC programme as an additional layer of protection for middle-age and elderly people (see Deep dive: long-term care insurance).
- encourage the participation of commercial insurers in the multi-layered pension, medical and LTC insurance system.
- establish a synthesised and continuous old-age health service system that incorporates all of health education, preventative care, diagnosis and treatment, rehabilitative care, LTC and hospice care.
- establish a system of continuous, multi-level old-age living and healthcare facilities based on home and community care. This would invest more in professional care facilities, support the development of nursing homes and increase the quality of care delivered at all levels.
- leverage technology to increase R&D investment in innovative auxiliary appliances for the elderly, especially those related to old-age medical care, living care, and physical function assistance products.

- Improve inter-departmental collaboration, and more PPP

The study recommends the following policy proposals:

- improve inter-departmental collaboration. Healthy Ageing involves the health and various other ministries (eg, national development and reform, education, industry and information technology, civil affairs, finance, human resources and social security, among others). Each department requires clear mandates and targets.
- promote public-private-partnerships (PPP) to facilitate efficient allocation of resources. Within the multi-level protection system, the role of the government would be to provide basic protection and a safety net. The market can then provide supplemental services to increase both the range and quality of healthcare services available to the middle-age and elderly populations.

Policy recommendations

- Public participation: policy proposals to promote healthy lifestyles
 - Health literacy is currently relatively low in China. It would be good policy to support health education for all residents, including knowledge and training on preventative care, early symptoms of disease, emergency care, knowing when to seek medical advice, and appropriate use of prescription drugs.
 - Policymakers have an opportunity to educate China's residents about healthy habits, including a balanced diet and regular exercise. Smoking, excessive drinking, unhealthy diets and lack of exercise are common in China.

A comprehensive LTC system requires collaboration among local government, insurers and service providers.

Deep dive: long-term care and associated insurance

China's government is running pilot LTC insurance programmes in 15 cities. PKU's research team has reviewed three of these ongoing pilots, yielding the following understanding: a multi-layered LTC system requires cooperation among local government, commercial insurers and professional LTC service providers. PKU's research team recommends:

- LTC insurance programmes should be designed top-down. As part of the national Healthy Ageing strategy, the programmes should include both an LTC insurance and LTC service market component. Further, central government should facilitate cooperation among state departments involved in the LTC system to avoid conflicts in policy and regulation. It should also establish a unified disability assessment system and LTC service standard.
- The roles of government and the market should be very clear. (1) In a multi-layered system, the government's LTC programme should provide basic aid and protection. Commercial LTC insurance should step in to cater to supplementary demand. (2) Within the basic LTC insurance programme, the government acts as policymaker, supervisor and service purchaser, purchasing professional services from insurers to form an efficient PPP model.
- There needs to be proper management of relationships within the LTC insurance system. This includes (1) a clear link between contribution and benefit, incorporating actuarial principles; (2) a fair system that covers both urban employees and all residents; (3) the programme should provide services for both disabled and those suffering from dementia; (4) it should provide both medical and living care service; and (5) it should provide early-stage preventative care to reduce onset of severe disability and dementia.
- The programme should: (1) promote home, community and institutional care to establish a diversified LTC care service system; (2) encourage a diversified range of LTC care service providers, including from the private sector, with favourable industry policy and tax treatments; and (3) improve efficiency in the LTC care services through technology/innovation in product design and the development of auxiliary appliances.

The role of commercial insurance

Insurance solutions should cover the costs of healthcare, disease treatment, rehabilitation and LTC services.

With respect to the role of commercial insurance in supporting healthy ageing, the PKU study recommends that insurers develop products to narrow the health protection gap left by the basic medical insurance programmes. These should provide comprehensive products covering healthcare, disease treatment, rehabilitative care and LTC services.

- As provider of health insurance covers, the industry should:
 - provide high-quality and customised services in operating the management of basic medical insurance, critical illness insurance, supplemental health insurance and medical assistance programmes.
 - participate in pilot LTC programmes, and explore innovative solutions such as combining LTC cover with reverse mortgage insurance policies by using a PPP model.
 - use new technology to design innovative health insurance products that can also help to merge health insurance and management, and motivate consumers to follow healthy lifestyles.
- In helping consumers manage longevity risk, insurers should:
 - help develop commercial pension products to narrow the old-age protection gap left by basic pension programmes, together with other financial institutions which are also authorised to sell pension products in Pillars II and III.
 - Insurers should leverage their expertise in annuities so that consumers can hedge against longevity risk.
 - They should also innovate by combining old-age insurance with old-age support services, develop reverse mortgage pension products, and promote annuitisation of Pillar II and III products.
- More can be done to leverage insurance funds to invest in the supply of old-age services:
 - The policy framework should enable and encourage the insurance industry to invest its long-duration and stable funds into health and old-age services and infrastructure, including building healthcare facilities that practice traditional Chinese and modern medicine, rehabilitation, LTC facilities, and nursing homes.
 - The focus should be on living and medical care support, to increase the supply of old-age services and the quality of care provided.

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