Aging and Health Policy in China

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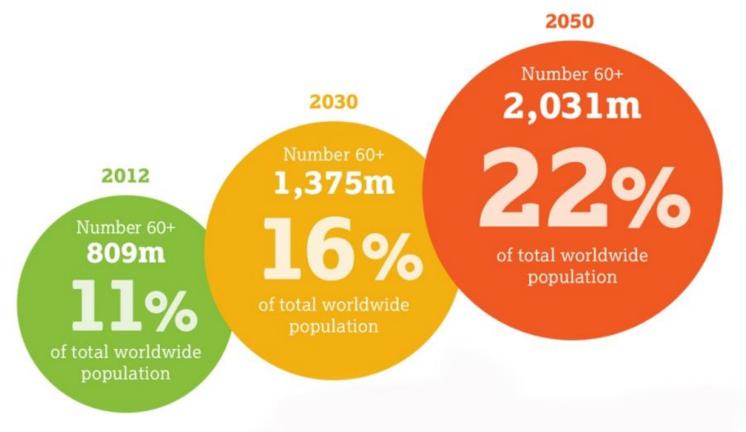




- 1. Overview of Population Aging in China
- 2. Health Policies in China

Overview of Population Aging in China

The World is Getting Older

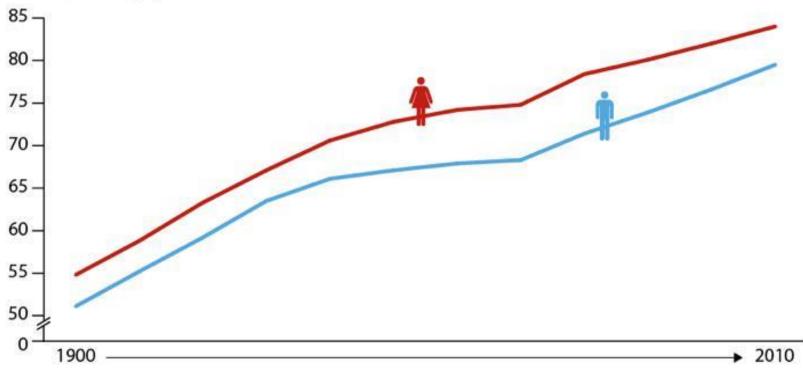


80+ years: 0.13 billion in 2015 - 0.43 billion in 2050

We are Living Longer

Life expectancy at birth since 1900

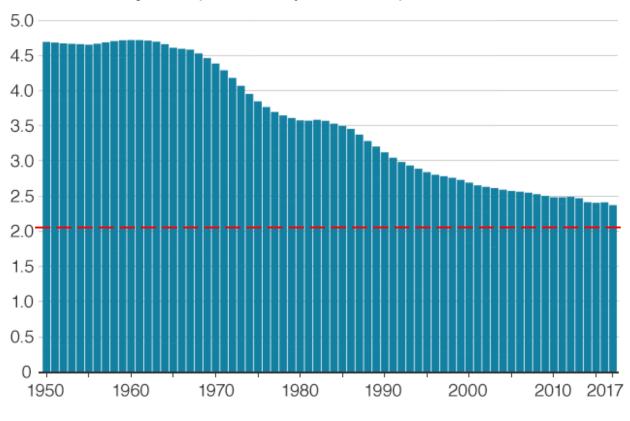
Life expectancy (years)



We are Having Fewer Kid

Women are having fewer children

Global fertility rate (livebirths per woman)



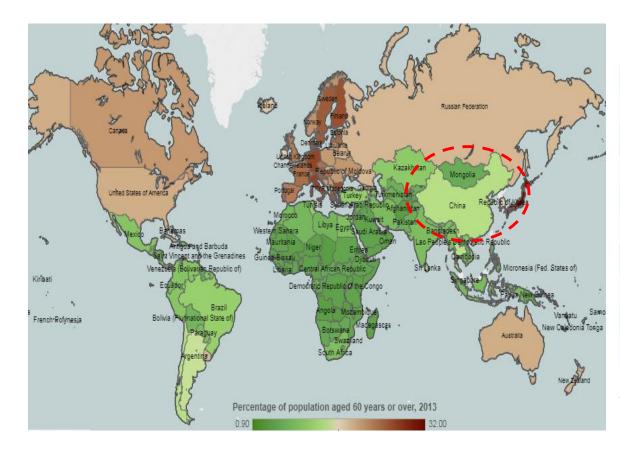
BBC

Number of New Births Declining in China

China Economy

China's birth rate falls again, with 2018 producing the fewest babies since 1961, official data shows

- New births in China fell to 15.23 million last year, the lowest since China relaxed its onechild policy in 2014.
- It also marks the lowest official birth rate in China since 1961, however there are widely held concerns about the historical data collection, experts said

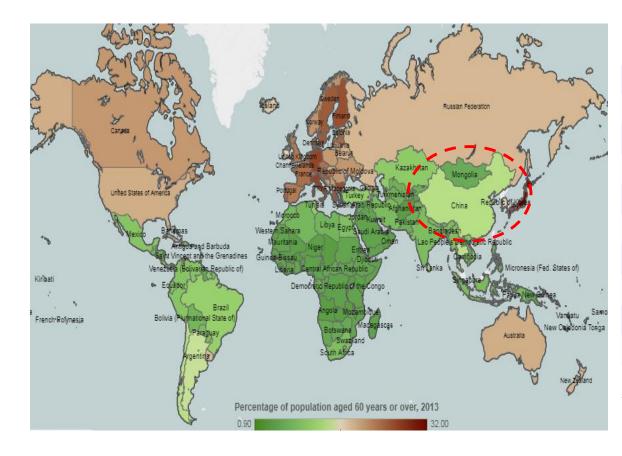


| Which nations have the highest percentage of people aged 60+? | COMMITTED TO MPROVING THE STATI OF THE WORLD |
|--|--|
| Japan | |
| Italy | |
| Germany | |
| Finland | +- |
| Sweden | |
| Bulgaria | |
| Greece | |
| Portugal | ۲ |
| Croatia | |
| Channel Islands, UK | Ж |
| | |

Source: Global Agenda Council on Ageing Society

Ranking of China?

WØRLD



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| Croatia | |
| Channel Islands, UK | Ж |
| | |

Source: Global Agenda Council on Ageing Society

Ranking of China?

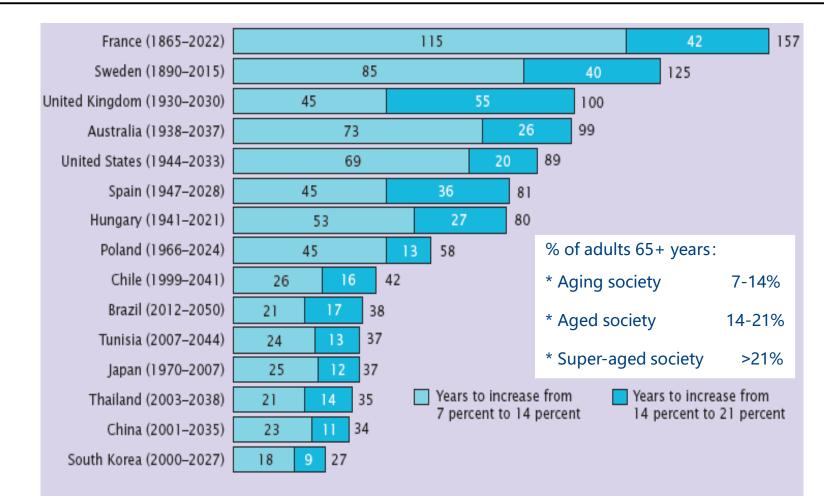
 85^{th}

WORLD

| Country | 60+ years (million) |
|-----------|------------------------|
| China | 215 |
| India | 117 |
| US | 66 |
| Japan | 44 |
| Russia | 29 |
| Brazil | 24 |
| Germany | 22 |
| Indonesia | 21 |
| Italy | 17 |

| Country | 60+ years (million) | Country | Total population (million) |
|-----------|------------------------|-------------|-------------------------------|
| China | 215 | China | 1393 |
| India | 117 | India | 1267 |
| US | 66 | US | 323 |
| Japan | 44 | Indonesia | 253 |
| Russia | 29 | China (60+) | 215 |
| Brazil | 24 | Brazil | 202 |
| Germany | 22 | Pakistan | 185 |
| Indonesia | 21 | Nigeria | 179 |
| Italy | 17 | Bangladesh | 158 |

Population Aging is Accelerating

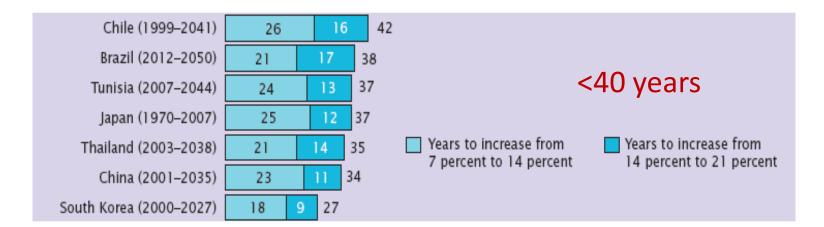


Sources: Kinsella and Gist, 1995; U.S. Census Bureau, 2013, 2014; International Data Base, U.S. population projections.

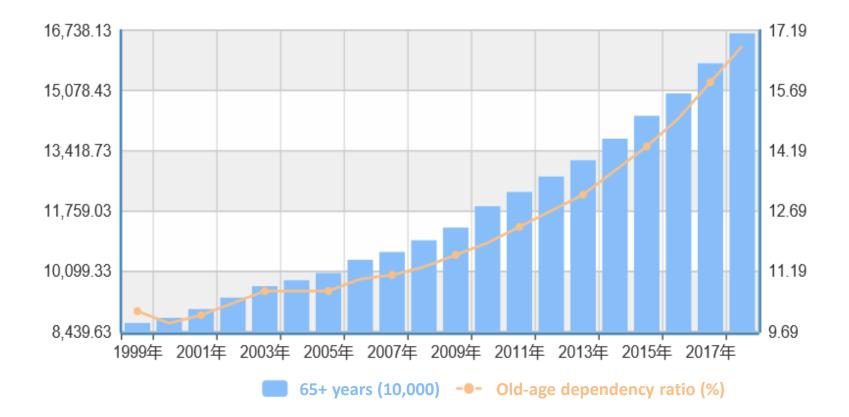
Population Aging is Accelerating



Population Aging is Accelerating



Old-Age Dependency Ratio



Health Policies in China

UN's 2030 Sustainable Development Goals

25-27 Sep. 2015, New York City

High-level plenary meeting



UN General Assembly adopted the 2030 Agenda for Sustainable Development

- Wipe out poverty, fight inequality, and tackle climate change
- 17 goals
- 169 targets

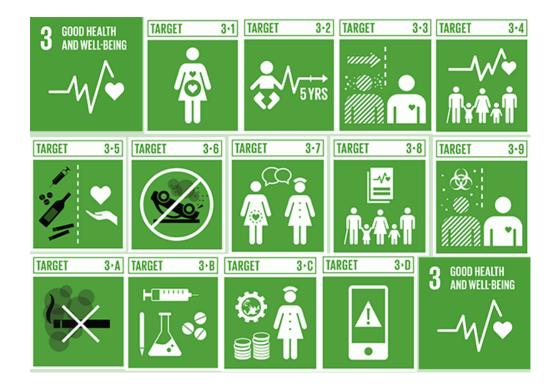
UN's 2030 SDGs





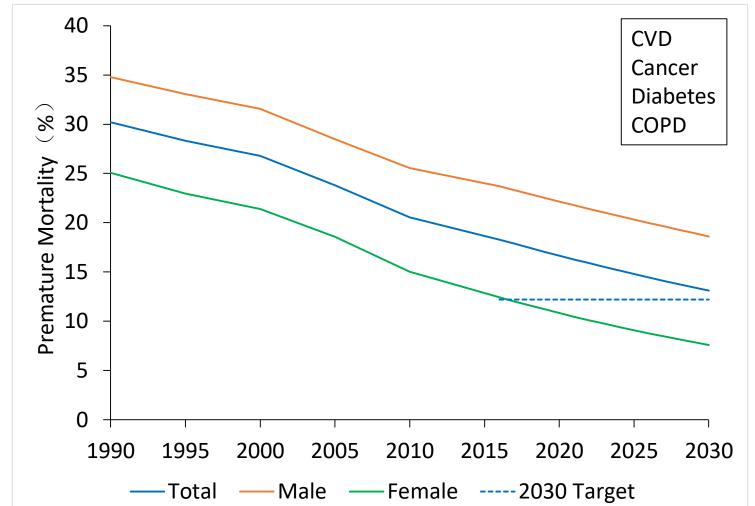
Ensure healthy lives and promote well being for all at all ages

- 1. Maternal mortality
- 2. Neonatal & under-5 mortality
- 3. Infectious diseases
- 4. Premature mortality
- 5. Substance use
- 6. Road injuries & deaths
- 7. Sexual & reproductive health
- 8. Universal health coverage
- 9. Environmental health



SDG: Premature Mortality Projection

Premature mortality from four NCDs combined in China, 1990-2030



20

SDG: Premature Mortality Projection

| | CVD | CVD Cancer | | COPD |
|-----------|-------|------------|-------|-------|
| | | Wor | nen | |
| 2016 | 5.9% | 5.7% | 0.41% | 0.93% |
| 2030 | 3.5% | 4.1% | 0.26% | 0.33% |
| Reduction | 40.1% | 28.4% | 37.8% | 65.0% |
| | | M | en | |
| 2016 | 11.4% | 11.7% | 0.45% | 1.99% |
| 2030 | 9.3% | 9.8% | 0.38% | 0.91% |
| Reduction | 19.1% | 16.7% | 15.1% | 54.0% |

Healthy China 2030 Plan

On 25 Oct. 2016, the Central Government and State Council issued the

Outline of the Healthy China 2030 Plan.

- A national medium- and long-term strategic plan in the health sector
- A blueprint and action plan for the development of Healthy China
- Approaches for implementing the country's commitment to the SDGs

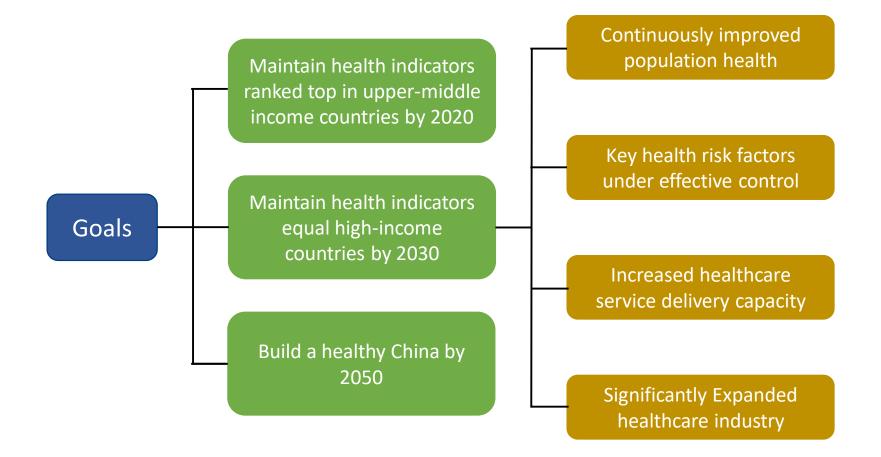
Healthy China 2030 Plan

On 15 Jul. 2019, the Central Government and State Council issued the

Healthy China Initiative

- Outlines the full implementation of the Healthy China 2030 blueprint
- Healthy China Program (2019-2030) will be printed and published

Healthy China 2030: Strategic Goals



https://www.sahealth.sa.gov.au/wps/wcm/connect/d39abd8041032c76a711ff1afc50ebfc/1645+Ning+Zhuang.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACEd39abd8041032c76a711ff1afc50ebfc-mMFIFcK

Healthy China 2030: Key Indicators

| Domains | Indicators | 2015 | 2020 | 2030 |
|------------------------|--|----------------|---------------------|---------------------------|
| | Life expectancy (year) | 76.34 8.1 | 77.3 7.5 | 79.0 5.0 |
| | Under-five mortality (‰) | 10.7 | 9.5 | 6.0 |
| Health status | Maternal mortality (1/100,000) | 20.1 | 18.0 | 12.0 |
| | People meeting the fitness standards defined in the National Physical Fitness Standards (%) | 89.6 (2014) | 90.6 | 92.2 |
| | Health literacy (%) | 10 | 20 | 30 |
| Healthy living | Frequent physical exercises (100 million) | 3.6 (2014) | 4.35 | 5.3 |
| Health | Premature death rate from major chronic diseases (%) | 19.1 (2013) | 10% lower than 2015 | 30% lower than 2015 |
| service and | Practicing or assistant physicians per 1,000 | 2.2 | 2.5 | 3.0 |
| protection | Out-of-pocket payment as a share of total health expenditures (%) | 29.3 | Around 28 | Around 25 |
| Healthy | Percentage of days with good air quality in cities at prefecture or above level (%) | 76.7 | >80 | Continuous improvement |
| environment | Percentage of surface waters at or above level III (%) | 66 | >70 | Continuous improvement |
| Healthcare industry | Total size of healthcare industry (trillion Yuan) | - | >8 | 16 |

13th Five-year Plan of China (2016-2020)

Development of Senior Affairs and Elderly Care System

| Category | Indicator | Goal |
|------------------|---|------|
| Social cocurity | Basic pension insurance participation rate | >90% |
| Social security | Basic medical insurance participation rate | >95% |
| Eldorby coro | Public elderly care facilities | <50% |
| Elderly care | Nursing home facilities | >30% |
| Health support | Health literacy | >10% |
| | Hospitals with geriatric department | >35% |
| | Health management rate | >70% |
| Culture and | Townships with educational institution for the elderly | >50% |
| education | Participation in educational activities | >20% |
| Civic engagement | Volunteer rate | >12% |
| | Coverage rate of senior associations in urban and rural communities | >90% |

Filial piety (xiao): kids caring for elderly parents financially and emotionally

Article 49 of the Constitution of China:

"Parents have the duty to rear and assist their minor children, and children who have come of age have the duty to support and assist their parents."

However, the role of family in providing LTC has substantially declined

- One child policy
- Migration

Long-Term Care Policies in China

In 2009, the Central Government proposal a care service model:

- Family provides primary care
- Community serves as a back-up
- Institutional care is only a supplement

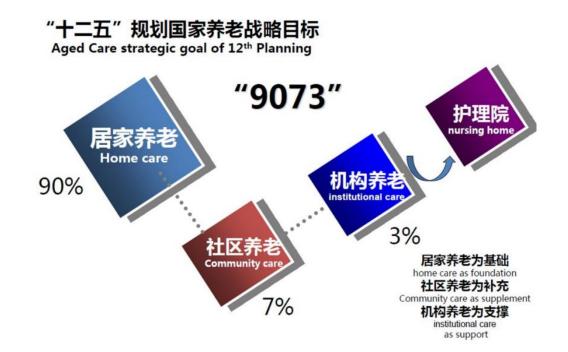
Beijing: "90-6-4" model

Shanghai: "90-7-3" model

Long-Term Care Policies in China

In 2011, the State Council published its 12th Five-Year Plan of China:

- Aging Undertaking Development (2011-2015)
- Social Care Service System Construction Plan (2011 2015)



Overview of ADL Disability in China

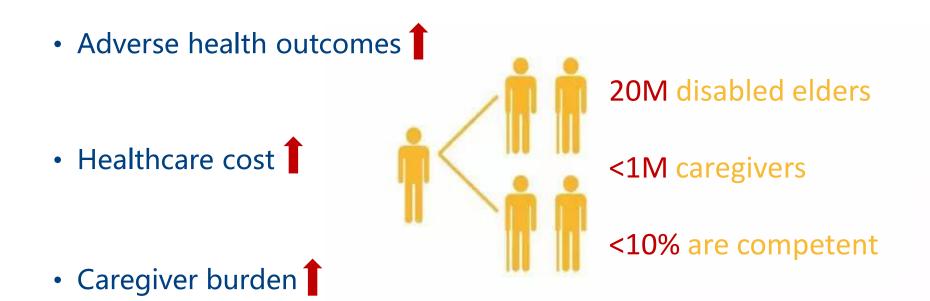
| Data source | Year | Mild (%) | Moderate (%) | Severe (%) | Total (%) |
|-------------|------|----------|--------------|------------|-----------|
| CLHLS | 2011 | 7.5 | 1.3 | 1.7 | 10.5 |
| CHARLS | 2011 | 7.8 | 1.6 | 1.9 | 11.3 |
| SSAPUR | 2010 | 11.8 | 0.6 | 1.0 | 13.4 |

CLHLS: Chinese Longevity and Health Longitudinal Survey

CHARLS: China Health and Retirement Longitudinal Study

SSAPUR: Sample Survey of the Aged Population in Urban/Rural China

Overview of ADL Disability in China



Data Source: Survey Report on the Living Conditions of China's Urban and Rural Older Persons

Long-Term Care Insurance in China

Since 2010, the Central Government has encouraged pilot projects to

identify the most suitable LTC insurance model.

"Opinions on the Establishment of a LTC Insurance System"

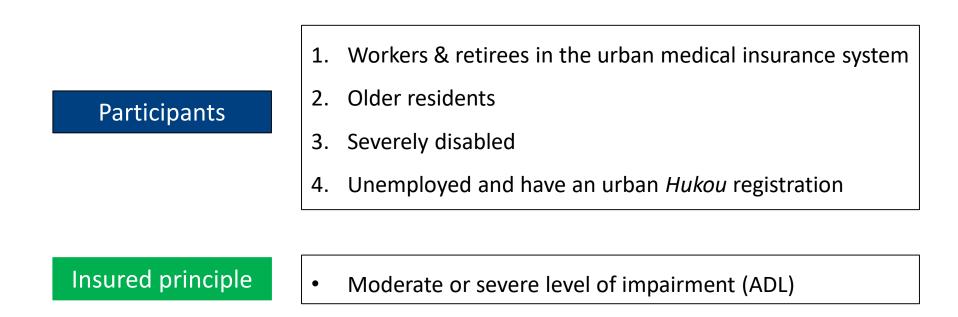
Qingdao model



Qingdao, Shandong Province

Participants

- 1. Workers & retirees in the urban medical insurance system
- 2. Older residents
- 3. Severely disabled
- 4. Unemployed and have an urban *Hukou* registration



| Participants | 1. 2. 3. 4. | Workers & retirees in the urban medical insurance system Older residents Severely disabled Unemployed and have an urban <i>Hukou</i> registration |
|-------------------|----------------------|--|
| Insured principle | • | Moderate or severe level of impairment (ADL) |
| Funding source | • | Urban medical insurance system (0.5%) Fiscal system (from Public Welfare Fund; 20M per year) |

Service content

- 1. Home-based LTC
- 2. LTC in institutions
- 3. LTC in hospitals

Service content

- 1. Home-based LTC
- 2. LTC in institutions
- 3. LTC in hospitals
- 1. Paid to care providers directly
- 2. CNY 60 per bed per day for home-based and institution-

based care

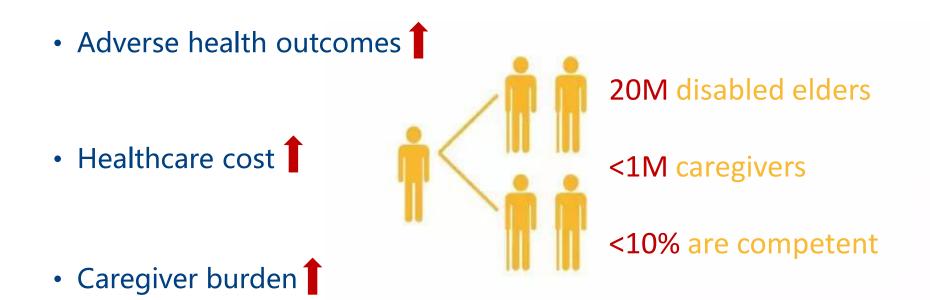
- 3. CNY 60 per bed per day in Grade II hospitals
- 4. CNY 200 per bed per day in Grade I hospitals

Insured content

Challenges: Heterogeneity

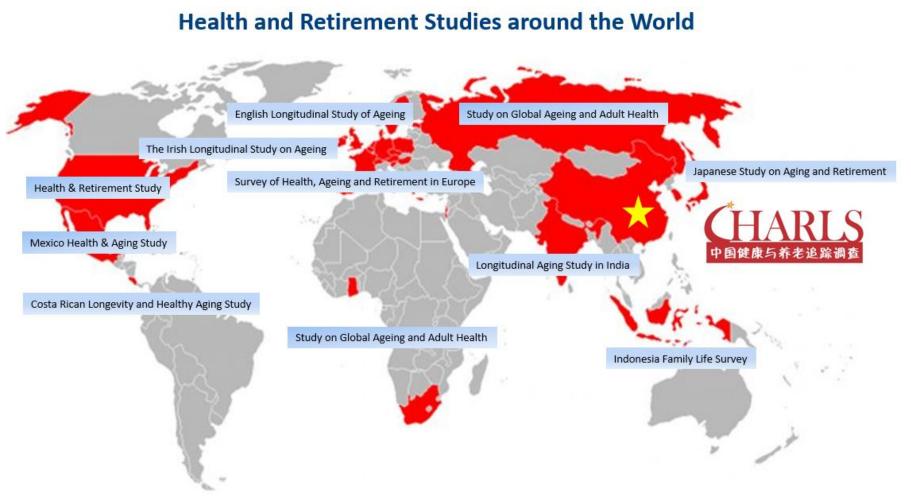


Challenges: Lack of Skilled Caregivers



Data Source: Survey Report on the Living Conditions of China's Urban and Rural Older Persons

China Health And Retirement Longitudinal Study



Chinese Longitudinal Healthy Longevity Survey

• To have a better understanding of the determinants of healthy

longevity among Chinese older adults.

- Largest sample of centenarians in the world
- Initially 80+ years
- 65+ years were added since 2004





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