Public-Private Partnerships Initiative

Public-Private Partnerships in Health and Long-term Care in China

Alan M. Trager
President
PPP Initiative, Ltd.

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Stanford University
Agenda

5 minutes: Introduction by Karen Eggleston, Director of Stanford Asian Health Policy Program

30 minutes: Keynote speech by Alan M. Trager

10 minutes: Discussion with two experts from Beijing

- Gordon Liu, PKU Yangtze River Scholar Professor of Economics, Peking University National School of Development (NSD) & Director, PKU China Center for Health Economic Research (CCHER)
- Linlin Hu, Associate Professor, Executive Chair, Department of Health Policy and Management, School of Public Health, Peking Union Medical College

20 minutes: Question & Answers moderated by Alan M. Trager
Introduction

Alan M. Trager

• Founder & President, PPP Initiative Ltd.
• Chief Specialist, Tsinghua University PPP Center
• Global Expert, Global Initiative on Health and the Economy, US Chamber of Commerce
• Technical Expert, WHO Independent High-level Commission on NCDs
• Faculty Member, Stanford’s Leadership Academy for Development
• Former Faculty Member: Harvard Kennedy School (HKS) and Johns Hopkins SAIS
PPP Initiative Ltd. (PPPI) facilitates innovation and education among major participants in healthcare public-private partnerships. Participants include governments, leading research universities, multilateral institutions and multinational corporations. As an independent entity, PPPI serves as an intermediary between the public and private sectors and its work is informed by world class research, teaching, and skills development.
International Experience

**United States**
First to apply PPP skills and frameworks to healthcare.

Created first PPP course at Harvard Kennedy School and the PPP Initiative at Johns Hopkins SAIS.

**International**
Technical Expert, World Health Organization Independent High-level Commission on NCDs (US Dept of Health and Human Services)

- Saudi Arabia
  Skills-building workshops: Johns Hopkins Aramco, Ministry of Health, National Center for Privatization and PPP

- Lesotho
  Ministries of Health and Development Planning: 2017 PPP Advanced Negotiation Workshop, a sole source procurement by WB

- China
  Tsinghua University PPP Center, International Chief Specialist: 
  - US-China Health Summit 
  - TUPPP BRI Conference

  November 2017 Healthcare PPP Forum (TUPPP co-spons); Case Study Development Program

- India
  2015 Mapping PPPs Across countries study (China, India)

- Singapore
  November 2017 Healthcare PPP Forum (LKY co-spons); Case Study Development Program.
Moving From Awareness to Action

PPP Initiative’s goal is to urge *policy makers and multi-sector stakeholders to move from awareness to action* and to use PPP to pioneer solutions to major public policy and public health problems.
PPP Initiative in China

Research, teaching and advisory activities in China through:

- **2003-2014:** Harvard Kennedy School
  - 2007: PPP Case Study, MDR-TB
- **2014-2017:** Johns Hopkins Public-Private Partnerships Initiative presence in Beijing
  - 2014-16: Xicheng District, Beijing, Economic Advisor
  - 2014 - Present: Tsinghua University, Executive Education, TUPPP Chief Specialist, International
- **2017- Present:** PPP Initiative Ltd.
  - 2017-18: Case Development Program (Amgen funding)
The objective of the Case Development Program is to facilitate teaching, learning and the practice of healthcare PPPs in leading Asian research universities. Funding for the research and preparation of the case studies, the white paper and the forums was provided by Amgen, Inc.

The case study that will be discussed today is part of a larger set of six case studies:

1. Pilot Project for Beijing’s Elderly: A Public-Private Partnership
2. Do the Elderly Have to Be Ailing? Singapore’s Health Promotion Board
3. National Kidney Foundation: Charity Juggernaut or Semi-Public Agency?
4. Wenchuan Rebirth: Partnership for Life
5. Hongqiao International Medical Center
6. Steward Healthcare System
Healthcare PPP Forums

PPP Initiative Ltd., Tsinghua University in Beijing and the National University of Singapore (NUS) co-sponsored four forum events in China and Singapore in 2017 and 2018 to provide platforms for a public discussion of healthcare PPP issues, applications and the results of the Case Development Program.
Issue

Challenges of an Aging Population
Aging Population Worldwide

Percentage of Population Aged 65 and Over: 2015 and 2050

By 2050, it is projected that China will have 348.8 million older people aged 65 and over

Source: U.S. Census Bureau, 2013, 2014; International Data Base, U.S. population projections
Aging Population in China

**Average life expectancy**

<table>
<thead>
<tr>
<th>Year</th>
<th>1960</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52 years</td>
<td>72 years</td>
</tr>
</tbody>
</table>

**Fertility rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>1960</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.7 births/woman</td>
<td>1.6 births/woman</td>
</tr>
</tbody>
</table>

- Economic development
- Better health care
- Better nutrition
- One Child Policy
- Female labor force participation
- Change in fertility behavior

Source: World Bank data bank
Burden of Population Aging

**Age dependency ratio** will increase: 10 working people (age 15-64) will support 4.5 people over age 65 in 2050, compared to 10 people supporting 1 person.

**GDP growth will slow** with declines in labor force and population growth.

**Public sector transfers for pensions, health care, and long-term care** will absorb a large portion of public budgets.

Changes in lifestyle and diet, as well as aging, have resulted in the rise of deaths and disability caused by noncommunicable diseases (NCDs).

While NCDs affect all countries and age groups, they account for the **highest burden among the population of age 70 and over**.

The elderly population contracts **multiple NCDs** and **combinations of NCDs and infectious diseases** (e.g. TB and diabetes), making them particularly vulnerable.

*Figures in millions
Source: The Lancet

NCDs in China

Economic loss for China (2012-2030)

<table>
<thead>
<tr>
<th>Disease</th>
<th>Loss, 2010 USD (trillions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>0.49</td>
</tr>
<tr>
<td>Ischemic heart disease</td>
<td>1.63</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>4.66</td>
</tr>
<tr>
<td>COPD</td>
<td>4.03</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>0.19</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>11.0</strong></td>
</tr>
</tbody>
</table>

Source: Bloom et al. 2013
Risk Factors for NCDs in China

- There are over 315 million smokers in China
- Nearly 10% of adults (140 million) have diabetes and 35.7% (500 million) have prediabetes
- The rate of harmful alcohol consumption among drinkers over 18 years of age was 9.3% in 2012
- The average daily amount of salt intake of Chinese residents above 18 years of age is 10.5 grams per person (more than twice than 5.0 grams per day recommended by the WHO)
- Only 18.7% of the population aged between 20 and 69 exercise regularly

Source: WHO 2018
Convergence of Aging and NCDs

The prevalence of NCDs in the elderly over 65 years of age in China was 65.4%
(2013 National Health Statistics Yearbook)

Source: 2013 National Health Statistics Yearbook

Photo: Frederic J. Brown/AFP/Getty Images (left); Lancet (right)
Aging and Social Trend

“For thousands of years, filial piety was China’s Medicare, Social Security and long-term care, all woven into a single family value.” - Feng Z et al. (2012)

- Eroding filial piety
- Massive migration of young people to cities for work
- Shifting attitudes toward independence and autonomy
Aging and Migrant Workers

China has the world’s largest migration population, which increased significantly from 50 million in 1990 to 252 million in 2014.

Two characteristics of aging and migrant workers:

1. Massive migration of young people to cities for work, leaving their parents alone without family support. In rural areas, 65 percent of the elderly live below the poverty line, compared to 11 percent in cities. Infrastructure in rural areas is often poorer than those in urban areas.

2. The migrant population in the city is aging, and the number of elderly migrants to cities has increased during the past two decades. Without local hukou (local residents’ registration), these migrants are less likely to have complete access to healthcare services and comfortable housing.

Source: PPP initiative 2017; Wang 2017
Aging: Interaction between individual capacities and physical, social and policy environments
Healthy Aging: Process of developing and maintaining the functional ability that enables well-being in older age

Elderly Care in China

Background

- For decades, only the members of the **Three No’s group (No children, No income, No ability to work)** were eligible for state-run institutions and senior homes while other groups relied primarily on their children.

- **1980s - 90s:** the government tried to address the eldercare crisis with improved home- and community-based care. However, these options were not preferable due to high cost and changing social norms. Demand for residential facilities grew.

- **1990s onwards:** while the government maintains the standard model (facilities developed, owned and managed by the government targeting Three No’s elders), there is an increasing number of private companies to develop, own and run senior housing.
Elderly Care in China

Awareness

The 13th Five-Year Plan (2016-20) elevated the improvement of elder care services to a primary goal:

- Increasing to 90 percent those enrolled in basic pension insurance
- Maintaining the 95 percent who had basic health insurance
- 35 percent of middle- and top-tier hospitals to have geriatric care departments

In December 2016, the State Council announced that government would make the senior care market even more readily accessible to private investors.

“Meeting the various needs of the huge elderly population and properly solving the social problems that an aging population brings are matters relating to overall development.”

- President Xi Jinping
Elderly Care in China

Challenges

- **Supply/demand imbalances:** there is still a shortage of supply of similar facilities for middle- and low-income populations (31.6 beds for every 1,000 citizens over 60).

- **Workforce:** in 2013, only 20,000 elder care nurses were registered nationwide, a shortfall of some 600,000.

- **Need for integrated care:** more people have serious medical needs that a standard senior home cannot meet, requiring more facilities with integrated medical services.

- **Lack of credibility of acceptance:** of the private sector (Chinese and multinational) by the Chinese public to present a large alternative to government provided health care.
Elderly Care in China

How can China meet the high demand for elder care, increase workforce capacity and promote healthy aging?
A public-private partnership is a collaborative organizational structure supported by public, private or nonprofit partners who agree to share risks, resources, and governance in developing and implementing certain projects.

**Social PPPs** are those that depend largely on government subsidies to provide public assets or social services (e.g. healthcare or water) to citizens across the income distribution.

Eldercare is defined as a **social PPP**. Users, except for the wealthy, not expected to pay market tariffs for goods and services and instead, providers must rely on substantial government subsidies.
Case

Pilot Project for Beijing’s Elderly: A Public-Private Partnership
Gonghe Senior Apartments: A PPP

Public partner:
District Civil Affairs Bureau Welfare Division
- Donated the land and building
- Conduct monthly inspections and annual audits

Private partner:
Yuecheng Senior Living
- Operate as a nonprofit
- Equip and operate Gonghe
- 80%+ occupancy within 3 years

400-bed non-profit nursing home in Chaoyang District for middle-income seniors who are disabled or suffer from dementia.
Terms: 10 Years

Conditions
- Gonghe is required to accept up to 20% of Three No’s elders.
- Government subsidized 3,000 yuan/elder/month for Three No’s elders, compared to an average of 7,600 yuan/elder/month for private payers.
- Need to be run as a non-profit due to small profit margin.
- A four-star or better rating achieving the occupancy rate of 80 percent or above.

Collateral
- A winning bidder posts a bond and contributes towards:
  - Renovation and equipment purchases before opening
  - Operations and maintenance annually after year 2
- Physical building, land and equipment stay with the state.
Ongoing Challenges

● Occupancy rate
  “In addition to a prime location, promotion and a good reputation, it requires practice and effort over a long period of time.”

● Quality of management and services
  “More government support will be conducive to promoting innovation as well as to improving management and services.”

● Cost containment
  “Technology could help bring down costs by automating tasks and reducing labor requirement.”
Additional Questions

- Would the paying residents get along with their impoverished neighbors?
- Government reimbursement for the Three No’s residents was low; how would Gonghe meet their extra expenses?
- Could technology help control costs and, if so, which products were best?
- How could they attract and retain qualified staff?
- What would it take to make a PPP venture as successful as a government-run or private sector eldercare facility?
Healthy Aging and NCD Prevention

**Eldercare**
*(Gonghe Senior Apartments)*

- Globally, MOH budgets are stressed by growing retirement populations eligible for government benefits, while costs continue to increase
- Supply/demand imbalances need to be addressed upstream of the issue

**Prevention**
*(Health Promotion Board-Singapore)*

- Healthcare issues cause slower GDP and productivity growth
- Especially crucial in newly-developed countries with a growing middle class susceptible to poor health behavior

The economics of eldercare involve diversifying sources of income (revenue and subsidies) and “bending the cost curve” via reducing high disease burden.

*Eldercare and prevention of non-communicable disease are two sides of the same coin.*
Singapore Health Promotion Board

Zee Yoong Kang, CEO of HPB, Kang created PPPs between government, companies, and nonprofits to promote public health by inviting private companies onboard as strategic partners

- Overcame engrained bureaucratic suspicions of the private sector
- Good-faith interactions by all parties
- Minimized negative impact of unnecessary government regulations
- PPPs seen as vehicles to share risks and opportunities
Changing a Culture

Worked with food and beverage industry:
- Change incentives to sell healthier products
- Work with companies to adjust product offerings and marketing strategy
- Forgo sanctions and regulations in favor of voluntary pledges to reduce sugar levels

Empowered members of the public:
- Implemented Healthier Choice symbol on healthy packaged food products to allow individuals to make informed food choices
PPP and NCD Prevention and Control

- In September 27, the United Nations High Level Meeting on NCDs endorsed the use of public-private partnerships in creating innovative solutions.

“Scale up efforts to use information and communications technologies, including e-health and m-health and other innovative solutions as well as promote public-private partnership to accelerate action towards the prevention and control of non-communicable diseases”
Implications for Future PPPs

“A Flexible Model for Health and Long-term Care in China”

1. Integration of prevention and treatment
2. Public as a partner
3. Ability to attract capital, innovation and long-term commitment
4. Interplay between labor and technology
5. Context-specific PPPs
Implications for Future PPPs: A Flexible Model

1. Integration of prevention and treatment

Prevention and a healthy lifestyle will help narrow the funnel and balance supply and demand in the future.

Many adult and older-age health problems were rooted in early life experiences and living conditions, ensuring good health during early ages can yield benefits in the future.

Building integrated healthcare systems alone is not enough to fix the current and projected supply/demand imbalance.
Implications for Future PPPs: A Flexible Model

2. Public as a partner

The public must be a partner in its own health outcomes to bend cost curves in the future.

There should be an increased public awareness of the convergence of NCDs and aging and the importance of healthy aging.

NCDs prevention requires numerous types of public engagement strategies.
Implications for Future PPPs: A Flexible Model

3. Ability to attract capital, innovation and long-term commitment

Increasing readiness requires a longer term economic paradigm and new financial models to reflect this.

The government and private sector should increase their readiness to tackle challenges of population aging:
- Sustainable financing for pensions, health care and long-term care
- Age-friendly physical and social infrastructure
- Workforce capacity to meet the demand created by the aging population
Implications for Future PPPs: A Flexible Model

4. Interplay between labor and technology

To increase quality of care (both prevention and treatment), there must be a corresponding willingness to automate certain types of labor.

Digital health does not replace a doctor, but provide patients with broader access to health and long-term care.
Implications for Future PPPs: A Flexible Model

5. Context-specific PPPs

A long-term, mutually beneficial partnership is based on a deep understanding of specific contexts in which PPPs will be executed as well as capacity building.

There should be acknowledgement that each country has unique needs, resources and politics/cultures.
Capacity Building

One of the key recommendations of PPP Initiative’s latest White Paper is to build capacity for public-private partnerships in healthcare.

In order for China to meet the demand created by the aging population and high NCD burden, it must build institutional capacity to improve resource utilization, preparation, and ability to forge proactive, cross-sector partnerships.
Takeaways from consultations:

“Business as usual is insufficient and urgent.”

“Progress will be accelerated by … building capacity to engage constructively and negotiate with the private sector, including Public-Private Partnerships (PPPs), to encourage their contribution to effective implementation of government-determined and government-led NCD policies and interventions, including by encouraging the private sector to provide sustainable financing and share knowledge, expertise, and technology.”
Moving From Awareness to Action

PPP Initiative’s goal is to urge *policy makers and multi-sector stakeholders to move from awareness to action* and to use PPP to pioneer solutions to major public policy and public health problems.

Through the two curricular programs, **PPP Initiative will equip present and future decision makers with the advanced skills and frameworks necessary** to address the 21st century megatrend of the convergence of eldercare and NCDs.

Different countries may have different timelines, but all will face this convergence at some point, so it is better to be **proactive and prepared**.
Expert Commentators

Dr. Gordon Liu
PKU Yangtze River Scholar Professor of Economics, Peking University National School of Development (NSD); Director, PKU China Center for Health Economic Research (CCHER)

Dr. Linlin Hu
Associate Professor, Executive Chair, Department of Health Policy and Management, School of Public Health, Peking Union Medical College
Commentaries, Questions & Answers
Takeaways

- The convergence of NCD and China’s aging population is beyond the capacity of government to be the only source of solutions.

- PPPs can be an important tool to contribute to effective responses to NCDs and aging population.
  - Integration of prevention and treatment
  - Public as a partner
  - Ability to attract capital, innovation and long-term commitment
  - Interplay between labor and technology
  - Context-specific PPPs

- China must build institutional capacity to meet the capacity to tackle these challenges.