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Research on Innovation of Medical-Nursing Combined LTC insurance Mode in Urban China

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Sep 2nd 2014



Outline

- **Current LTC mode in urban china**
- **LTC insurance mode in Qingdao**
- **Model → Extend the LTCl mode to the whole urban China**
- **Financial demands and supplies**
- **Conclusion**

LTC mode in urban China

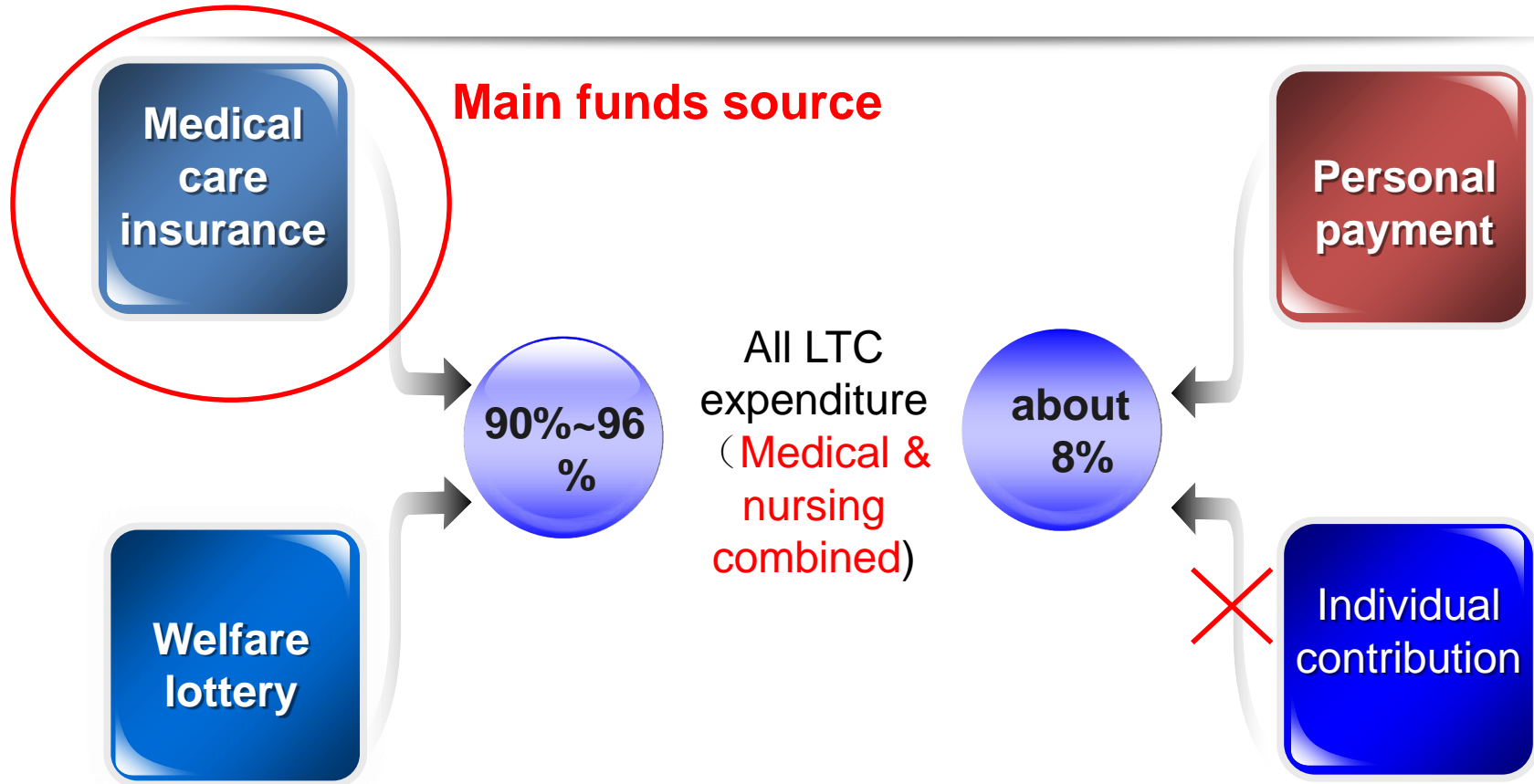
- **Home-based & community care services**
covered the vast majority old-age people
lack of medical care services & financial support for individuals
- **Nursing house**
public → good service, not expensive; seldom, hard to get in
private → services not convinced, limited medical care services
somewhat expensive ,about CNY 100~200 per day (Yuan, 2013)
- **Hospital** → medical care insurance covered
over-medication , very expensive, not humanism
about CNY 450~1800 per day (Yang,2014)

Call for a new care mode to:



- 1、 reduce the individual payment burden
- 2、 improve medical care efficiency and reduce wastes of medical resources

LTCl mode in the city of Qingdao



Innovation:

- 1、LTC insurance
- 2、Combined aged care with medical care

Benefits:

- 1、Personal payment burden ↓
- 2、Efficiency of medical care insurance ↑
- 3、Promote the private capital to the nursing house

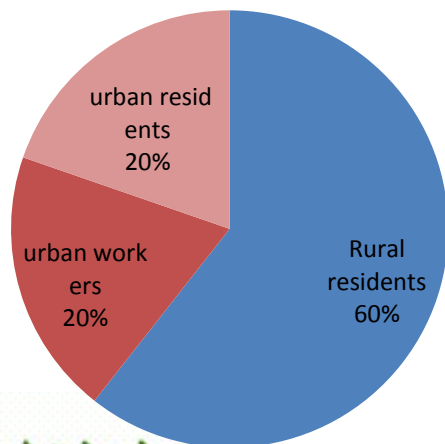
Public medical insurance in China: 3 types

Rural residents: Those who are living in the rural area and don't have steady jobs

Urban workers: Those who have steady jobs and have signed formal labor contracts

Urban residents: Those who are living in the urban area and don't have steady jobs

	Number of insured (billion)	Payment ratio of average income (%) (including the subsidies)	Government subsidies proportion (%)	Payment age until
New rural cooperative medical care system	0.8	about 3	about 80	dead
Medical insurance system for urban workers	0.26	about 8.5	0	retire
Medical insurance system for urban residents	0.26	about 1~3	about 80	dead



Income , Salary

	Average Wage or Income (CNY)
Rural residents	660
Urban workers	3897
Urban residents	2732

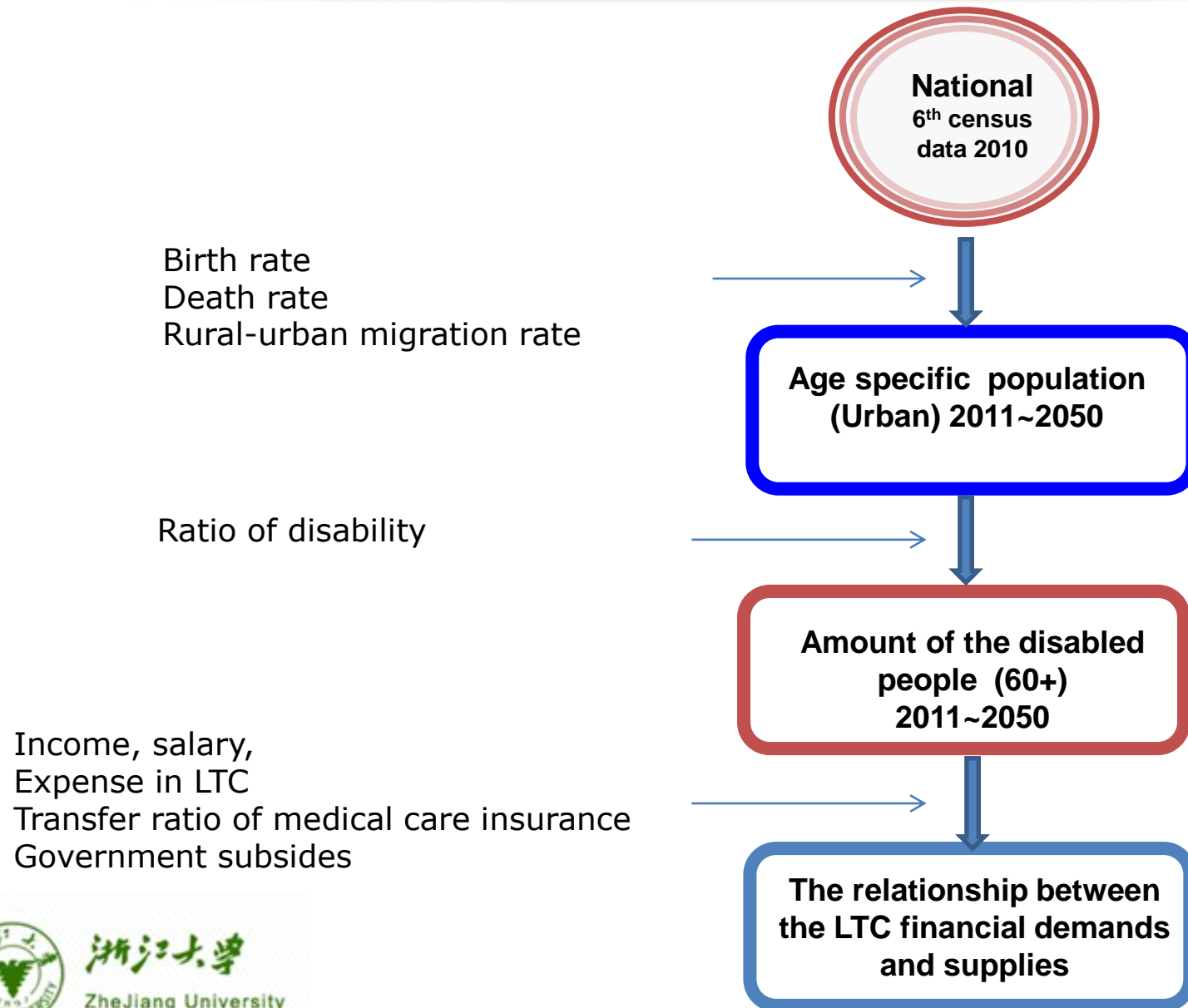
Date source: China civil affairs statistical yearbook 2013

Research purpose

If the LTC insurance mode in Qingdao be extended to the whole urban China:

- How the total LTC costs change as the increasingly rapid aging process?
- Whether the LTCI funds raised from the medical care insurance ,by current transfer ratio , is enough for the LTC costs ?

Research route



Parameters in population projection 2011~2050

Birth: TFR **1.5**

(Guo,2012) Sex ratio at birth **112**

Life expectancy: Male **74~92**

(Li,2009) Female **79~95**

Urbanization ratio: (United Nation,2012)

	2011	2020	2030	2040	2050
Urbanization rate(%)	49.2	61	68.7	73.4	77.3

Parameter: ratio of disability & descend rate of disability

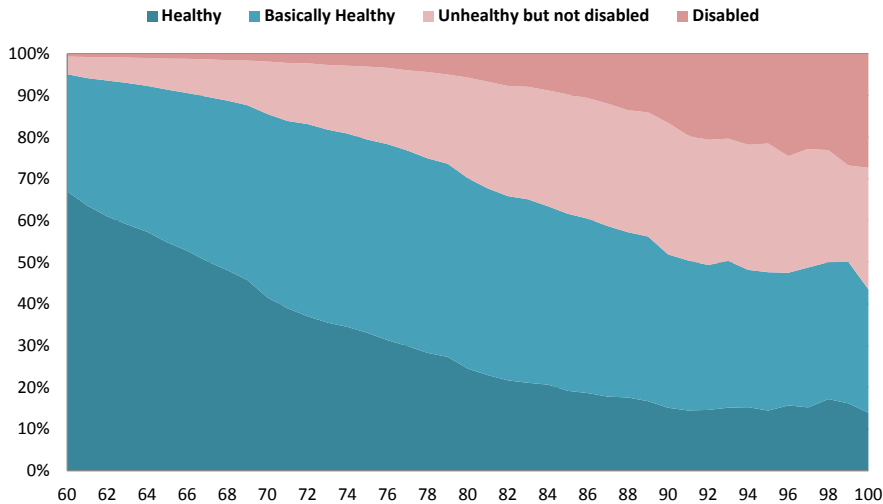
60+:

80+:

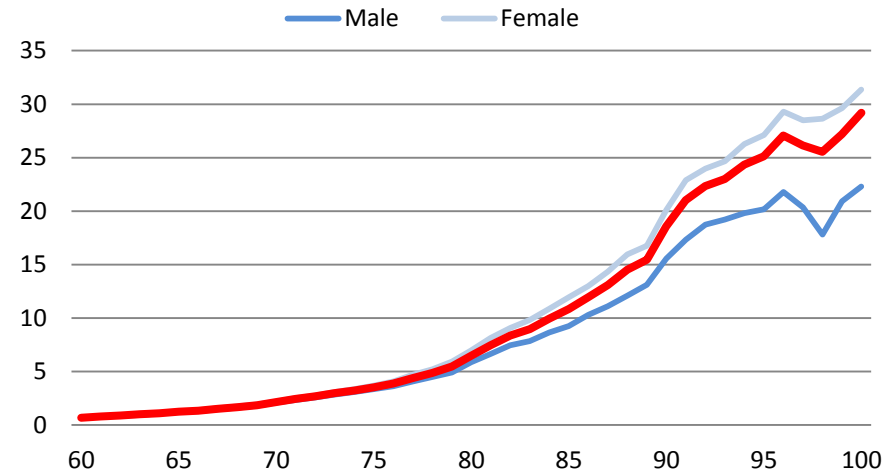
Disabled: 2.95%

Disabled: 10.45%

Health state of 60+



Age specific ratio of disability(%)

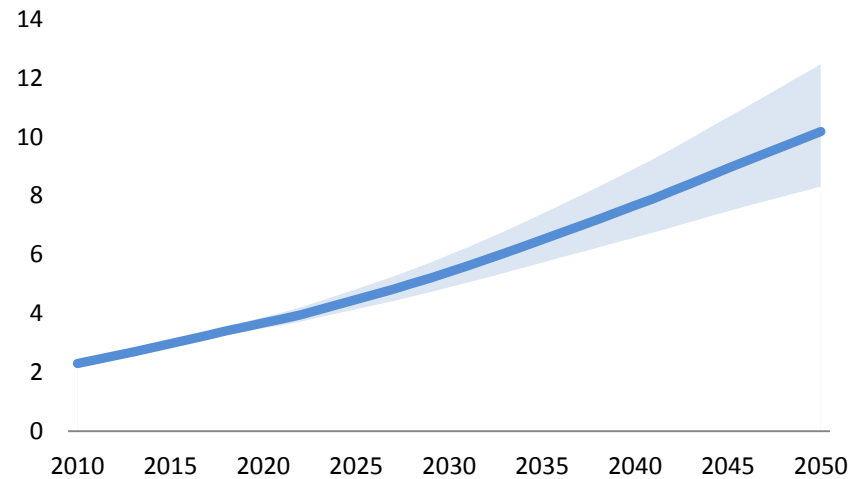


Descend rate of disability: 1.5% (Zeng yi ,2006,Manton, 2006, AWON,2011)

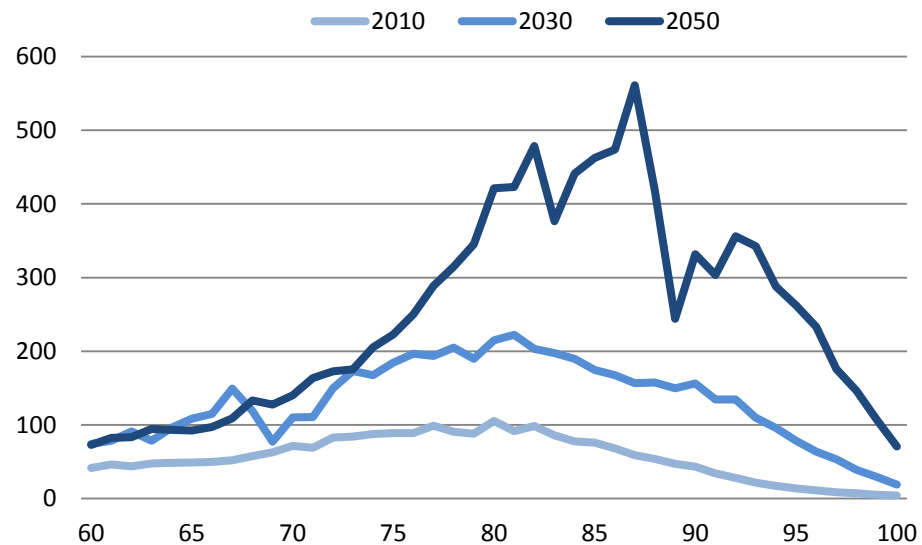
Data source: National 6th census 2010

Population projection result

Disabled people (million)



Age-specific disabled (thousand)



Costs & funds of LTC in urban china

- According to analysis of the actual data of 2013 in Qingdao:
Cost per bed is CNY 65 per day(Yang, 2014) → CNY 1965 per month
- AWW is CNY 3557(2013 Qingdao, per month)
→: **LTC cost to AWW is 55.7%**
- **LTC funds sources** in Qingdao: Urban workers → **0.4%** of ASS
(Medical insurance transfer ratio) Urban residents → **0.2%** of PCDI
Welfare lottery subsidies → **CNY 20 million** per year

$$Costs = PCDI \times exratio \times \sum_{i=60}^{100} P_i$$

$$RaisedFunds = PCDI \times Rpayratio \times \sum_{i=22}^{100} Pr_i + AWW \times Wpayratio \times \sum_{i=22}^{60} Pw_i$$

Per capita disposable income (PCDI)
Average worker's wage (AWW)

Simulation ~ 2050

Assumptions:

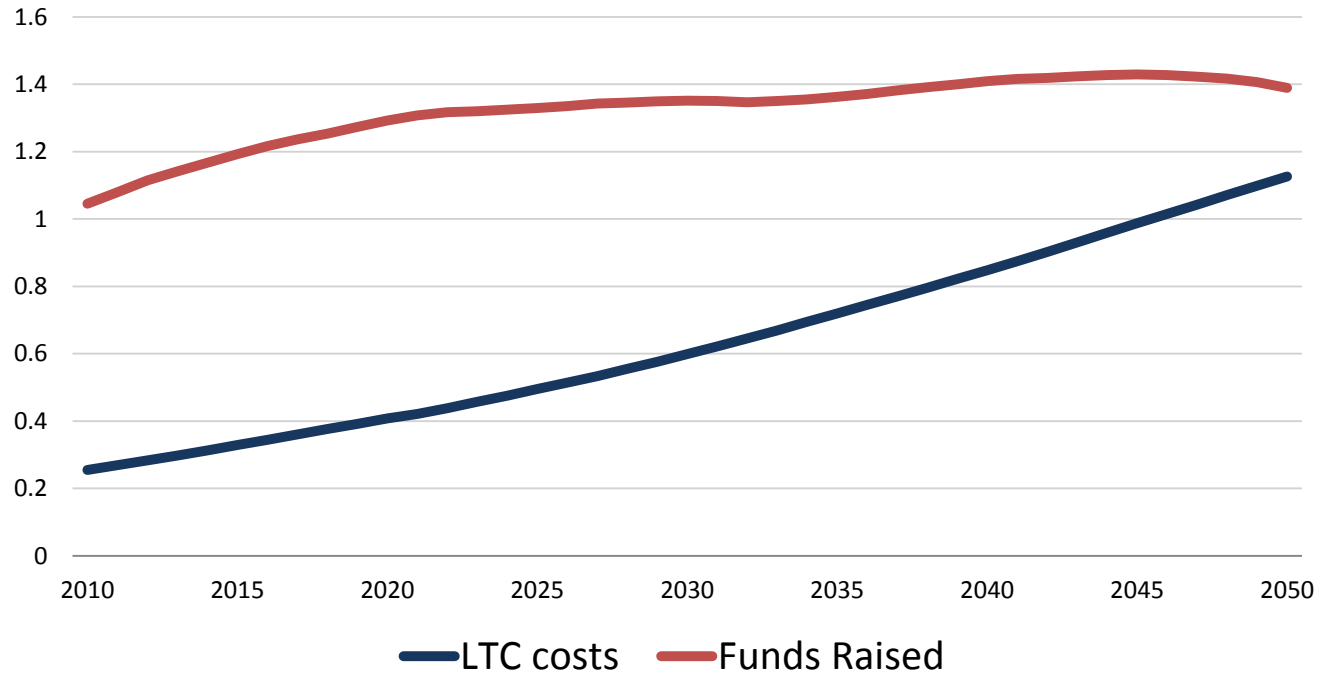
- 1、 Cost per bed to AWW → 55.7% (as the some as Qingdao)
- 2、 Urban workers payment ratio for medical care insurance → 8.5% (by rules)
Urban residents payment ratio for medical care insurance → 3%
- 3、 Population of urban workers to residents → 3:4 (We estimate)
- 4、 AWW to PCDI → 5:3 (China civil affairs statistical yearbook 2013)

Scenario:

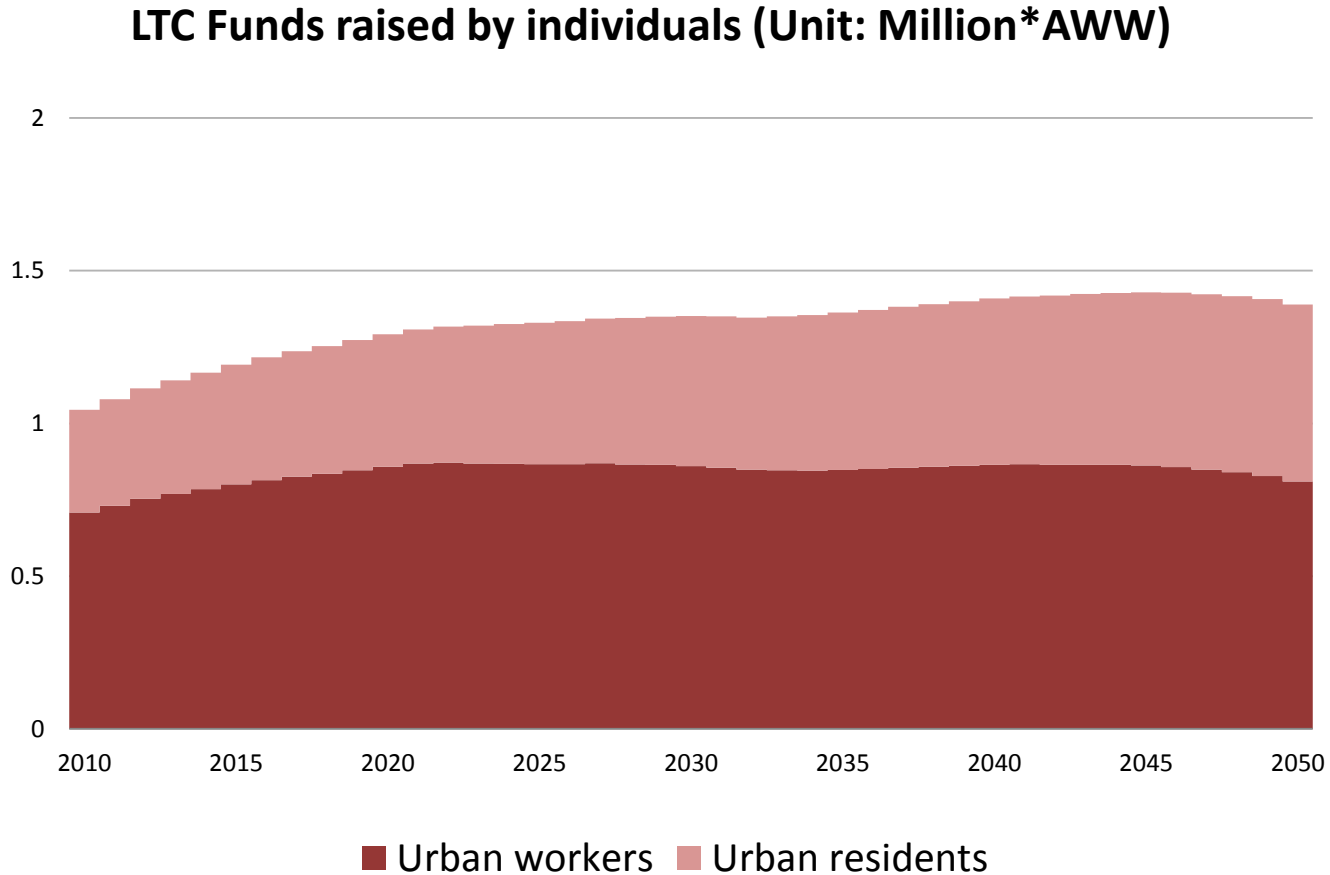
20% disabled people covered (20% is the current coverage ratio of Qingdao 2013)

Total LTC costs and funds raised

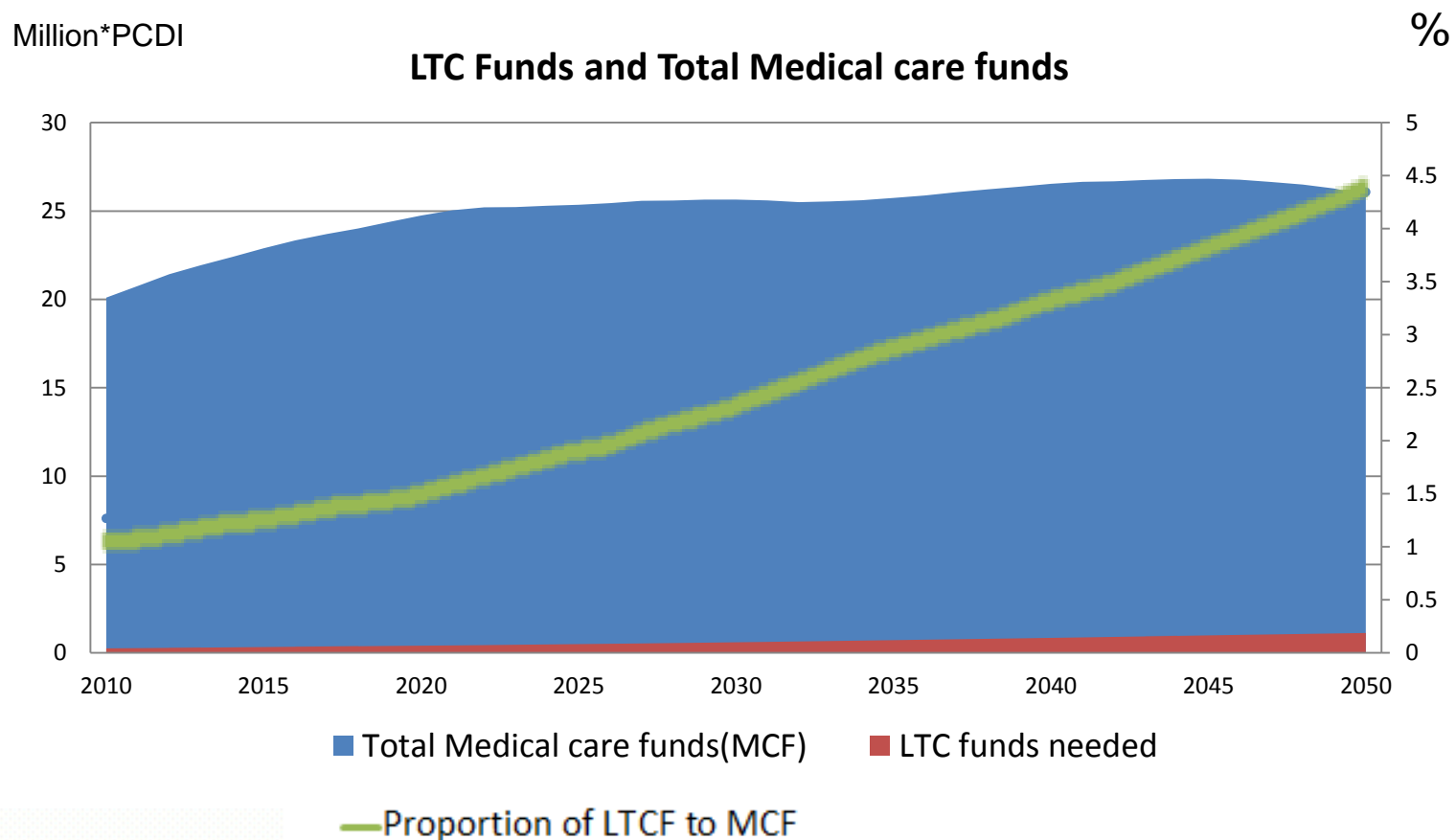
The costs and the funds raised (Unit: Million*AWW)



Raised LTC funds from workers & residents



LTC costs and total medical care funds



Conclusion

- Between now to 2050, disabled people will increase by **0.2 million** a year
- As the current transfer ratio, the funds from the medical care insurance is enough to cover **20%** disabled and the burden of the MCF is less than 5%.

- **Acknowledgement:**

The coverage ratio 20% may be a little bit small, actually , if the ratio to 50% , the LTC funds will be not enough 20years later.

Parameters here are fixed , just a basically measurement.



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Thank you!

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