Reforming the US Long-Term Care Insurance Market*

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Risk of high long-term care expenses in old age is significant in the US

- 1 in 3 fifty-year-olds will spend over 100 days in a nursing home (average duration $\approx$ 3 years and annual cost $\approx$ $85,000)

- 1 in 10 will have out-of-pocket expenses above $200,000

- Yet only about 10% of 62+ have private LTCI

- LTCI takeup rates increase with permanent earnings (PE) but are low at all levels:
  - 2% for individuals in bottom PE quintile.
  - 20% for individuals in top PE quintile.

In addition to low takeup of policies, in the private LTCI market:

1. Denials are common:
   - 20% of applications are withdrawn or denied
   - We estimate at least 36% of 55–66 year olds in Health and Retirement Study (HRS) would be denied if they applied.

2. Coverage is incomplete:
   - Indemnities cover 34–66% of expected losses.

3. Loads are high relative to other insurance lines:
   - Longterm care insurance: 0.18 to 0.51.
   - Life annuity insurance: 0.15 to 0.25.
   - Group health insurance: 0.04 to 0.15.

4. America is aging
   - Aggregate long-term care expenditures will increase.

How can we reform the market? What are good public policies?

We assess policy reforms in a structural model featuring 3 market frictions:

1. Adverse selection Individuals have private information about nursing home entry risk.

2. High administrative costs on insurers
   - Fees paid to brokers exceed 100% of first year's premium and total commissions are about 12.6% of present-value premium.
   - Underwriting and claims processing expenses average 20% of present-value premium.

3. Public NH insurance Individuals can receive free means-tested benefits via Medicaid.

Model overview

- ▶ Individuals differ by frailty and PE
- ▶ Face risk of being old and needing formal LTC (private information)
- ▶ Three ways to insure:
  1. self-insure by saving
  2. purchase private LTCI at start of retirement
  3. rely on public insurance (Medicaid)
- ▶ Medicaid is means-tested and payer of last resort
- ▶ LTC insurer sorts applicants into risk groups based on frailty and PE then decides:
  1. which risk groups to insure.
  2. pricing and coverage of insured risk groups.
- ▶ Risk groups where adverse selection is severe are denied coverage.

Closing model and calibration

▶ Medicaid incurs same fixed admin costs as private insurer but no variable costs

▶ Medicaid outlays financed with income tax.

▶ Private insurer is owned by top 1% of earners

▶ Model matches cross-sectional variation in PE, frailty, LTCI takeup and lifetime NH entry risk estimated using HRS data
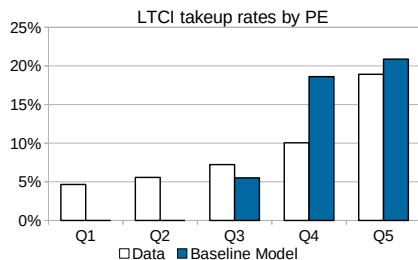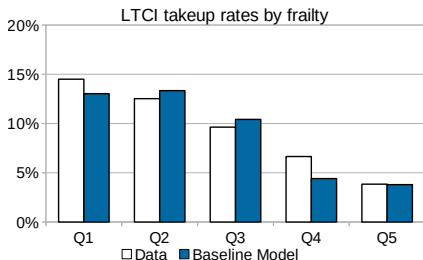
All three frictions matter for low LTCI takeup rates

	Baseline	No Medicaid	No Admin Costs	Full Information
LTCI takeup rate (%)	9.0	90.4	59.7	37.0

LTCI takeup rates by PE

Legend: Baseline, No Medicaid, No Admin Costs, Full Information
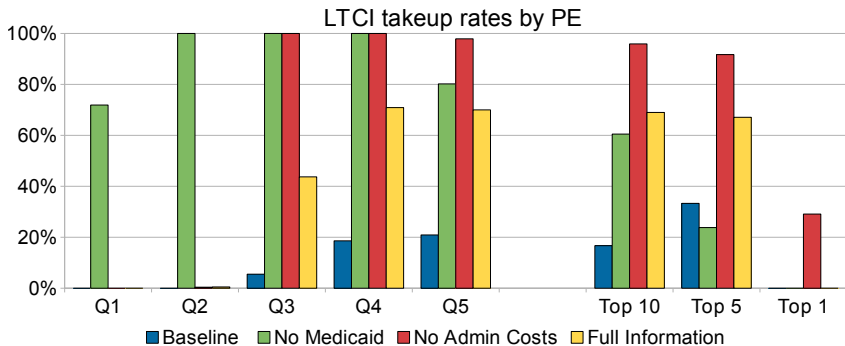
▶ Medicaid main driver of low takeup for those in PE Q1–2.

▶ Admin costs and private information more important for low takeup of more affluent individuals.

All three reduce coverage rates

	Baseline	No Medicaid	No Admin Costs	Full Information
Coverage rate (%)	60.3	66.1	62.1	83.2

Coverage rates by PE
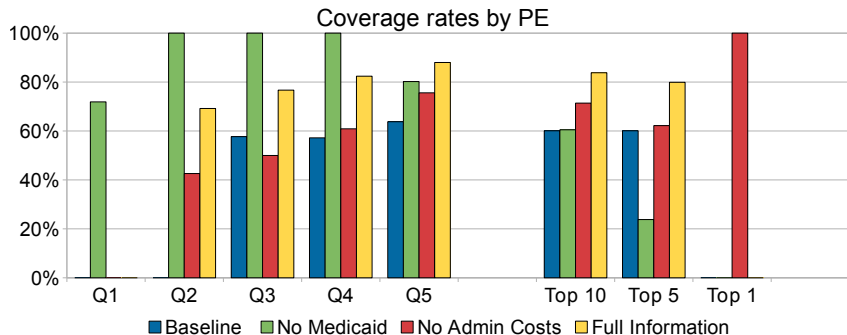
▶ Private information has largest impact on coverage.
▶ Medicaid most important for low coverage at lower PE.

What are good public policies for the US LTCI market?

Consider three policy reforms:

1. No Medicaid

2. Universal Medicaid

3. LTC Partnership Program (PP) asset exemption
   - ▶ Each dollar of coverage paid for by private LTCI exempts $1 from the asset test for Medicaid LTC benefits.
   - ▶ PP is a partnership between states and private insurers introduced in 2006 to promote LTCI takeup

Measure welfare effect as a compensating % variation in lifetime consumption:

- ▶ % must increase consumption after reform to make person indifferent between pre and post reform economy

No Medicaid leads to large welfare loss on average

▶ Private LTCI takeup goes up from 9% to 90%

▶ Loads go up from 0.41 to 0.56

▶ Profits increase by 31.4% due to higher profits from low/middle class whose demand for LTCI is inelastic.

Compensating Variations (%)

	Ave	PE Quintile					Top PE		
		1	2	3	4	5	1	2	3
No Medicaid	22.23	44.18	11.76	2.04	-0.43	-1.91	-2.78	-4.27	-15.85

▶ Average welfare declines driven by poor

▶ Affluent prefer no Medicaid due to lower taxes and higher LTCI profit income

Universal Medicaid is controversial

- ▶ LTCI takeup rates and profits drop to zero
- ▶ Medicaid outlays increase by 174% to 1.1 percent of GDP

Compensating Variations (%)

	Ave	PE Quintile					Top PE		
		1	2	3	4	5	1	2	3
Universal Medicaid	-0.07	3.28	-2.3	-4.16	-2.55	-0.27	0.42	1.02	2.03

- ▶ Small increase in average welfare
    - ▶ Significant welfare gains for middle class
    - ▶ But, welfare loses for poor (higher taxes)
    - ▶ Most affluent also lose out (higher taxes and loss of LTCI profits)

PP asset exemption increases both size of private LTCI market and Medicaid outlays

Effect on private market is large:

- ▶ LTCI take up rate increases from 9% to 62%
- ▶ Coverage ratios fall from 60% to 28%
- ▶ And loads and profits increase

One objective of PP is to reduce Medicaid outlays

We find public expenditures increase by 8.8%:

- ▶ outlays per recipicient decrease by 3%
- ▶ fraction NH entrants qualifying for Medicaid benefits increases from 40% to 56% ← dominant effect

Still, PP asset exemption has broad appeal and is the most attractive policy option

Compensating Variations (%)

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No Medicaid	22.23	44.18	11.76	2.04	-0.43	-1.91	-2.78	-4.27	-15.85
Universal Medicaid	-0.07	3.28	-2.3	-4.16	-2.55	-0.27	0.42	1.02	2.03
PP asset exemption	-0.13	0.08	0.09	-0.68	-0.56	-0.24	-0.43	-0.96	-5.93

▶ PE 1–2 incur small welfare losses (slightly higher taxes)
▶ But, middle/upper class benefit from loosening of Medicaid means-test
▶ And top 1% enjoy higher LTCI profit income

To summarize policy analysis:

- Find PP asset exemption is an attractive policy option
  - it produces a vibrant private LTCI market
  - while maintaining the safety-net provided by Medicaid

- Impact of LTC partnerships has been small in practice
  (Bergquist et al., 2018; Goda, 2011; Lin and Prince, 2013)

- How to reconcile? Our model abstracts from
  - cap on home equity exempt from Medicaid asset test
  - minimum coverage level requirements for PP qualifying LTCI policies
  - additional income restrictions and spend-down rules for Medicaid eligibility

- Relaxing these restrictions would make PP more effective

Conclusions

- As America ages aggregate expenditures on long-term care will rise
    - increasing the burden on households and government

- Key to successful reforms is to recognize
    - large variation in exposure to LTC risk and coping mechanisms
    - significant supply side frictions in private LTCI market

- Our model is a useful tool for identifying which policy reforms are most likely to be successful and why

Thank You!