Discussion of "Patient cost-sharing and risk solidarity in health insurance"

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Summary: approach

- ▶ paper analyzes whether higher levels of cost sharing increase risk solidarity and welfare for people with high health risks
- ▶ risk classes defined on the basis of last year's expenditure
- ▶ model follows each insured per month over a year
- ▶ state variable: remaining deductible
- ▶ with some probability patient needs care (conditional on last month's care)
- ▶ there is a "true" need λ and optional need ω if care is free
- ▶ insured take into account that spending now makes care "cheaper" in the future
- ▶ estimated model is used to simulate/predict outcomes for different cost sharing schemes

Summary: findings

- higher cost sharing than we currently have in the Netherlands reduces expenditure, premium and increases welfare, also for the high risks
- main effect is consumption reduction among low risk types

Summary: disclaimer

- ▶ I am biased: we tend to find smaller effects
- ▶ read the paper with the view: what explains the different outcomes in the approaches

what I like about the paper

- ▶ focus on risk solidarity
- ▶ explicitly distinguish different risk classes
- ▶ dynamic optimization problem taking remaining deductible into account
  - ▶ solution by backward induction
- ▶ model choices based on 2 principles
- ▶ intuitive figures to illustrate model fit
- ▶ model can be used to simulate outcomes for cost sharing schemes that were never implemented before

things I do not quite get: analysis

- ▶ paper suggests 0-1 decision on ω, but there is a margin here as well:
  - ▶ e.g. $\omega = 80$ remaining deductible equals 79 vs 1 euro remaining
- ▶ expenditure is defined as "aggregate payments for claims in each month, based on the date claims were initiated."
  - ▶ does this over-estimate p^1?
  - ▶ if I get, drugs, in one month and physiotherapy in the next as part of the same treatment for tennis elbow?
- ▶ moral hazard is modeled as additive
  - ▶ seems counterintuitive: the more you (really) need, the more you can add
  - ▶ multiplicative seems sensible?

things I do not quite get: effect size

- table 5: Q1 halves expenditure from D=0 to D =350
  - halves it again to D=500
  - for higher quartiles effects are smaller
  - our findings suggest: Q1 hardly goes to the doctor and if they go it is something serious
  - oop expenditure falls as D increases from 350 to 500 euro:
    - huge behavioral effect
    - for many people necessary expenditure is already above 500 euro?
- 75% coinsurance with 350 max. leads to higher oop than $D = 350$?
  - in each state of the world you pay less

things I do not quite get: interpretation

risk class	Q1	Q2	Q3	Q4
$E(c \mid c > 0)$	177	164	184	259
ω		87	71	73	17

- once I fill my deductible, every following month (with probability $p^{0,1}$) I will spend ω
- small increase in D that prevents healthy people from outspending D early in the year has very big effect
- δ is higher for higher risk scores
  - but higher probability of dying?

things I do not quite get: robustness

- ▶ risk solidarity is more important than risk aversion
  - ▶ absurd level of risk aversion is needed to overturn results
  - ▶ but the Dutch. . .
- ▶ liquidity constraints/behavioral hazard
  - ▶ model does not allow for $c < \lambda$
    - ▶ hard to interpret arguments about unmet needs
    - ▶ model only captures not visiting a doctor when one has needs
    - ▶ not the fact that visit was made but under-spending $c < \lambda$.

things I do not quite get: more broadly

- ▶ paper basically argues that everybody gains if we increase the deductible level; even high risks:
  - ▶ so why do we have this discussion in the Netherlands?
  - ▶ which part of the analysis do people overlook?
- ▶ paper argues that risk aversion or liquidity constraints cannot overturn these results
  - ▶ but these arguments come back in the policy debate?