

The effects of the Long-Term Care Benefits on Mortality

By Helena Hernandez

Short discussion

Introduction

- LTC benefit do not prevent death
- But, **Do they delay death?**
- Approach: RDD on the basis of the NEEDS score (plus other information)
- Assessment:
 - Nobel data
 - Very promising approach with some methodological problems (options)

Methodology

Model:

$$y_i = \beta A_i + \alpha_j X_i + u_i$$

where y_i is the outcome (mortality), A_i represents the eligibility for greater benefit and X_i is a vector of (individual) control variables.

The **model should be better described** (as described in the slides):

- Clearly stating the approach is conditional for each threshold.
- Mentioning the role of channels

Then, IV approach for A_i using examiner leniency (not well explained in the paper)

- First Stage:
$$A_i = \sigma z_i + \alpha X_i + e_i$$
- Second Stage:
$$y_i = \beta \hat{A}_i + \alpha X_i + u_i$$

Good description of the instrument but unable to check validity

Methodology

Suggestions and questions:

-Focus on the first benefit (only 75% of dependants stick to this initial benefit):

Maybe you should consider to extend the model to account for reevaluations

-Describe better the timing of events (for instance, mortality within 3 months after the benefit)

-Role of individual/family choices (services vs benefits)

-Other potential estimation approaches (conditional duration model)

-Other (direct or indirect) outcomes –bed blocking, medicine consumption, etcetera-

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Results

THRESHOLD 3					
	OLS	First Stage		2SLS	Reduced Form
	(1)	(2)	(3)	(4)	(5)
Above	-0.022* (0.01)			-0.114** (0.05)	
Z: examiner leniency		0.847*** (23.53)	0.845*** (18.12)		-0.096** (0.05)
Observations	6,212	8,005	6,212	6,212	6,212
R-Squared	0.210	0.065	0.103	0.202	0.210
Covariates	Yes	No	Yes	Yes	Yes

Dependent variable: Mortality, with a mean of 35.4%. Standard error each second row, except for Columns 2 and 3 that shows t-statistic. Covariates include: gender, age, region fixed effect, civil status, labour disability, financial capabilities and a set of main diseases dummies. Significance levels: (*) if $p < 0.05$, (**) if $p < 0.01$, (***) if $p < 0.001$.

-Comments:

Above is exogenous

Above is non-significant for threshold 5

So, why you focus on channels for threshold 5?

THRESHOLD 5: channels						
	# benefits	Nursing Home	Re-assessment	Informal Care	Nursing Home	Survival
	(1)	(2)	(3)	(4)	(5)	(6)
Above	0.144 (0.14)	-0.061 (0.09)	-0.213** (0.09)	-0.027 (0.10)	-0.167** (0.08)	-5.173 (4.28)
Mean Dep. Variable	1.42	0.28	0.22	0.61	0.22	48.38
Observations	3,601	4,251	4,251	3,600	3,600	4,251
R-Squared	0.047	0.081	0.094	0.082	0.055	0.187
Covariates	Yes	Yes	Yes	Yes	Yes	Yes

2 state least square estimation method, examiner leniency instrumenting "above the threshold". Standard error each second row, except for Columns 2 and 3 that shows t-statistic. Covariates include: gender, age, region fixed effect, civil status, labour disability, financial capabilities and a set of main diseases dummies. Significance levels: (*) if $p < 0.05$, (**) if $p < 0.01$, (***) if $p < 0.001$.

Remarks

- Very nice and interesting paper providing new evidence on the effectiveness of LTC
- Apart from the effect of LTC on mortality, the effect on other (medical) outcomes could be analyzed (using the enhanced data).
- Should investigate the role of reassessment as well as services
- Alternatives modelling strategies