Substitution between informal and formal social care among the older population in England

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The demand for care - both in and out of the home - will increase as the older population grows.

A crucial policy issue is therefore to think about how long-term care expenditures can be reduced.

We examine whether the receipt of informal care at a given point in time reduces the use of future formal care.

Use ELSA waves 1-5 given consistency of questions relating to receipt of assistance.

Focus on the non-institutionalised population aged 65 and above.

Contributes to an existing economics literature on substitution:
- Examines substitution over time (existing studies look at cross-section).
- First study to focus on England.
Empirical specification

We estimate the following specification:

\[ \Delta y_{t,t+1} = \beta X_t + \gamma \Delta Z_t + \theta I_t + \nu_t \]  

where \( y_{t,t+1} \) takes the value of 1 if individual begins receiving assistance between waves \( t \) and \( t+1 \) (no individuals receive assistance in \( t \)).

\( X_{it} \) captures baseline demographic, socioeconomic and medical characteristics (e.g. age, gender, family structure, wealth, ADLs etc).

\( \Delta Z_{it} \) captures changes in certain characteristics:
- Change in partner status, new health diagnoses

\( I_{it} \) is a dummy variable for the receipt of informal care in wave \( t \)
- We are interested in \( \theta \), the impact of informal care receipt on the probability of receiving formal assistance in the next interview.
Instrumenting for informal care receipt

- We might be concerned that individuals who receive both formal and informal care have higher unobservable need for care than individuals who receive only informal care
  - This would cause upward bias in the estimate of $\theta$
  - Motivates using an instrument for receipt of informal care, using data on the availability of informal carers in the family

- For a valid instrument, we need to find a factor which:
  - Changes the likelihood of receiving informal care
  - Has no direct impact on the likelihood of receiving formal care

- We use whether the respondent has a daughter(s) as an instrument
  - In line with existing work (Charles and Sevak, 2005; Bonsang, 2009)

- Presence of children may be directly related to receipt of formal care (e.g. someone pays for care or navigates the system), but gender should be independent of this
Summary of results

- The results indicate that individuals who receive informal care in wave $t$ are less likely to report receiving assistance in wave $t+1$
  - Small positive coefficient (not statistically significant) in OLS results
  - This becomes negative and statistically significant in IV results
- Results differ by the type of formal care examined:
  - The effect is strongest for privately-funded care (coefficient near 1)
  - Substitution between informal and publicly-funded assistance is weaker (but still statistically significant)
- Suggests there is some scope for reducing public expenditures on formal care, but types of care are not perfect substitutes
- Current results only examine whether individuals receive any formal care
  - Next step is to use info in waves 6 and 7 to examine substitution in the intensity (hours) of different types of care
Thank you

Comments and suggestions welcome