The Dynamics of Disability: Evidence from a Cohort of Back Pain Patients

Ellen Meara and Jonathan Skinner

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8/4/2011

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- 1. Autor & Duggan (2003, 2006) emphasize the incentives on the work decision taking health as given.
- 2. Meara & Skinner (2011): SSDI has important implications for the incentives to maintain health.

Is health endogenous or exogenous?

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Disability Insurance Awards by Diagnostic Group (per 1,000)

	1983	2003		
Musculosk. Disorder	0.48	1.33		
Mental Disorder	0.39	1.38		
All Others	2.07	2.54		

- 1. 1984 reforms altered eligibility criteria away from verifiable diagnostic criteria towards "ability to function".
- Subsequent to 1984, backpain and mental disorders drive growth in SSDI
 - 2.1 Affect young workers
 - 2.2 Low exit rates: chronic disease with low associated mortality rates.
- 3. Autor and Duggan (2006) emphasize increasing generosity of SSDI for low wage earners.
- 4. Health in the population itself is seen as exogenous.

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- 1. (Motive) Increased availability of SSDI lowers the incentives to maintain good health.
 - 1.1 Over time: expect decline in health of SSDI applicants.
- 2. (Means) Behavioral Response to SSDI:
 - 2.1 Occupational choice
 - 2.2 Risky behaviors.

- 1. Present value of DI award for average 50 year old DI awardee is \$150K. Including value of health insurance this rises to \$245K. (Autor and Duggan, 2006).
- 2. Replacement rates of up to 90% for lowest wage workers.
 - 2.1 Benefits are partially indexed to average wages.
 - 2.2 Slow wage growth for low wage earners means that replacement rates have increased for low wage workers.

Meara and Skinner (2011) emphasize the choice of occupation and industry:

- Synthetic Cohort evidence using NHIS (Case & Deaton, 2005): Individuals in manual occupations experience faster decline in health.
- Fletcher and Sindelar (2009) use PSID to show that health declines faster among those whose first profession is in the blue collar sector
 - 2.1 In OLS, even after controlling for initial health differences
 - 2.2 Similar results when occupation choice is instrumented for using parental education and local occupation mix.
- 3. Risky behaviors smoking, drinking, fatty foods.

- 1. Has health of SSDI recipients improved since 1984?
 - 1.1 No: neither in absolute terms or relative terms.
 - 1.2 Also not among least educated amongst whom SSDI receipt most prevalent.
- Other evidence in the paper is more directly concerned with the dynamics of the health process.
 - 2.1 Grossman (1972) vs. Case and Deaton (2005).
- 3. Hard to directly link any type of reform to observed changes in measured health:
 - 3.1 Long lags between health investment and measured health.
 - 3.2 Forward looking behavior.
- 4. Health behaviors directly:
 - 4.1 Switching into manual / blue collar occupations since 1984? No.
 - 4.2 Are less educated quitting smoking less rapidly or gaining weight more rapidly than the more educated? No. (Cutler, Lange, Meara, Richards, Ruhm, 2011).

- 1. The question is much larger than SSDI and cuts across all large social programs:
 - 1.1 SSDI subsidizes bad health.
 - 1.2 Medicare/Medicaid subsidizes goods consumed when in bad health.
 - 1.3 On the other hand, Social Security subsidizes good health / longevity.
- Dynamic, long-run effects of 1984 reform on enrolment exceed short run / static response.

- 1. Should we introduce experience rating analogous to UI?
 - 1.1 probably not at the firm level.
 - 1.2 maybe at the occupation or industry level?
- 2. Almost surely regressive.
- Netherlands have introduced experience rating for disability insurance.

- 1. Endogenous health responses?
 - 1.1 There are means and motive, so I would be inclined to suspect the crime.
 - 1.2 Little in the form of direct evidence.
 - 1.3 So the jury is still out.
- If the endogenous responses are large, then the consequences cut across all social programs.
- The contribution of this paper is to put this question back into play in the context of SSDI.