Health Insurance and the Labor Supply Decisions of Older Workers: Evidence from the U.S. Department of Veterans Affairs

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Importance of Health Insurance and Labor Supply Link

- Formulation of retirement policy
  - Reforms encouraging work at later ages vs. earlier health coverage
- State policies regarding universal health care
  - e.g. Massachusetts universal coverage mandate
- Differences in work patterns in U.S. versus Western Europe or Canada

Theory

- Free health insurance as income transfer
  - Expanding Medicare

    => reduced hours, retirement, less self-employment
- De-linking job and insurance (e.g. COBRA) reduces stickiness in employment aka "Job lock" => Changed job choices, more self-employment, p/t work
- Health insurance improves health

  => increased hours, employment for the disadvantaged

Our Evidence:
VA Health Care Expansion

Background: Mid-1990s: Major expansion

- Shift from hospital-based to outpatient-based care

  – Large increase in menu of services

- Coverage offered to entire veteran population

  – Previously only veterans with service-connected disabilities or low incomes

Benefits of expansion
for identifying link:

- Provision of VA health care coverage exogenous to labor supply decisions
- Provides generous coverage (includes prescription drug benefit)
- Low out-of-pocket costs
- Indefinite duration for enrollees
- Good microcosm for expansion of public health program
  - Similar to expanding Medicare

Data:
Current Population Survey (CPS)

- Survey years
  - 1992-2002
  - excludes 1996-1997
- Sample
  - males
  - age 55-64
  - who worked at least one week last year

Empirical Strategy

$$y_{it} = \beta_0 + \beta_1 veteran_i + \beta_2 post_t * veteran_i + \beta_3 X_{it} + \delta_t + \mu_{it}$$

- y_{it} = labor supply outcomes
- $veteran_i$ = 1 if individual discharged vet
- $post_t$ = 1 after policy change, 0 otherwise
- X_{it} = vector of age, race, marital status, education, state, employer charac., pension, health insurance
- δ_t = year indicators
- μ_{it} = a random error term
- standard errors clustered on veteran*year

	Veterans		**Non-Veterans**	
	Pre (N=7684)	**Post** (N=8150)	**Pre** (N=6195)	**Post** (N=10692)
Age	59.364	58.849	58.474	58.652
Married	0.812	0.804	0.803	0.791
White	0.934	0.913	0.852	0.851
No HS	0.144	0.063	0.294	0.209
HS	0.352	0.352	0.309	0.299
Some College	0.238	0.295	0.151	0.178
College Grad	0.16	0.172	0.112	0.152
Grad School	0.107	0.118	0.134	0.163
Not Working	0.25	0.225	0.229	0.198
Retired**	0.163	0.148	0.12	0.106
Self-Employed	0.201	0.166	0.209	0.192
Part Time	0.106	0.104	0.093	0.09

Summary Statistics

- Vets and non-vets similar in pre-period
- Average veteran slightly older, more educated
  - Include age*veteran in some specifications
- Veterans more likely retired, not working in pre-period

    => Difference-in-difference approach important

Effect of Insurance Receipt on Labor Supply Outcomes

	Not Working	Retired	Part Time	Self Employed
veteran	0.0125	0.0123**	-0.0024	-0.0020
	(0.0164)	(0.0038)	(0.0121)	(0.0189)
veteran*post	**0.0243****	**0.0038****	**0.0125****	**-0.0102****
	(0.0042)	**(0.0012)**	**(0.0041)**	**(0.0035)**
Observations	32721	25666	23978	31250

Main Results

- Veterans more likely to be
  - Not Working
  - Retired
  - Part Time (=> bridge jobs)

  than non-veterans in post-period
- Veterans less likely to be self-employed than non-veterans (consistent with income transfer)

=> Health insurance hazards people out of full-time work

Improved outcomes for vulnerable veterans?

- Examine outcomes for disadvantaged veterans
  - Single older men (generally in worse health)
  - Older men below means test

Results by Marital Status

	Married		Single	
	Part-time	Retired	Part-time	Retired
veteran	-0.0201	0.0122*	0.0643**	0.0050
	(0.0139)	(0.0052)	(0.0232)	(0.0074)
veteran*post	0.0224**	0.0079**	**-0.0209***	**-0.0061***
	(0.0046)	(0.0015)	**(0.0087)**	**(0.0026)**
Sig. Different?			Yes	Yes
Observations	18704	26221	5274	5138

Not Working by Estimated Means Test Cutoff

	Above Means Test	Below Means Test
Veteran	0.0104	0.0242
	(0.0157)	(0.0568)
Veteran*post	0.0275**	**-0.0189**
	(0.0042)	**(0.0205)**
Sig. Different?		Yes
Observations	27677	5044

Results for vulnerable veterans

- Single older men (generally in worse health)
  - Less likely to claim retired
  - Less likely to be part-time
- Older men below means test
  - Less likely to be not working (not significant)

=>Suggestive of positive health outcomes for these groups

Falsification Checks

- Valid natural experiment? If so:
  - No evidence of a prior trend
  - Smaller magnitudes for:
    - Pre-eligibles
      - Some impact with expansion
    - Veterans whose wives do not have own health insurance coverage
      - VA does not cover spouses

Specification Checks: "Pre" = 1992-1993, "Post" = 1994-1995

	Not Working	Self Employed	Part Time
veteran	0.0169	-0.0145	0.0264**
	(0.0238)	(0.0299)	(0.0099)
veteran*post	**-0.0020**	**-0.0066**	**0.0027**
	(0.0085)	**(0.0070)**	**(0.0063)**
Observations	13879	13292	13750

Results by Wife's Health Insurance Status

	Wife Has Employer-Provided Health Insurance		Wife Without Employer-Provided Health Insurance	
	Not Working	Retired	Not Working	Retired
veteran	-0.0113	0.0249+	0.0215	0.0195**
	(0.0267)	(0.0130)	(0.0262)	(0.0071)
veteran*post	**0.0510**	0.0063	**0.0186***	-0.0012
	(0.0070)	(0.0054)	**(0.0087)**	(0.0025)
Sig. Different?			No	No
Observations	12603	12603	13197	13197

Further Robustness Checks

- Fully interacted veteran model: coefficients virtually unchanged, interactions insig.

- Propensity-score matching gives very similar results

- Results robust to different specifications (controls, clustering)

Results Summary

- VA health insurance
  - Decreases employment
  - Increases retirement
  - Increases part time work
  - Decreases self-employment

for men 55-64 working in the previous year

=> Consistent with health insurance as an income transfer to veterans.

Summary Continued

- Disadvantaged veterans see some positive outcomes
  - Increased employment
  - Decreased retirement
  - Decreased transitions from full-time to part-time work

  =>Program may increase health and productivity for these populations
- Results robust to many specification checks

Discussion

- How much does lack of availability of public health insurance to 55-64 yr olds help explain work rate differences in US?

- Back-of-envelope calculation:
  - Coeff of veteran*post in regression on full universe of 55-65 yr old men in US: .0086
  - Canada not working rate: .4333, US: .3450 => gap is .0883
  - Divide

Discussion Cont

- Difference in health insurance could explain 10% of the gap in not working among 55-64 yr olds between the US and Canada

  – 10% represents significant explanatory power

  – But implies that bulk of work rate difference would remain if public insurance were expanded in the US