

Employer mandates and health insurance reform

Health Economics
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Current context

- Insurance tied to employment
- Some employers do not provide
- Should the government
 - Mandate firms provide health insurance
 - Should it tax current workers and provide the benefit directly to all (Medicare for all)
- Similar but distinct distortions in both cases

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Language

- Employer mandates -- popular reform proposal
- Legislation tends to suggest that firms are the ones paying for the mandate
 - Firms need to pay their “fair share”
- Ex: MA enacted “pay or play” in 2006. that portion of act was called “Fair Share Contribution.”
- Important question is one of incidence – who pays for the mandate?

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Important to note

- Government can tax, but they cannot legislate incidence
- Rules of economics apply to all situations

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Problem set up

- Suppose that the govt. will provide some benefit TO ALL – not just to workers
- Benefit is not contingent on employment
- The funds for this program must come from somewhere

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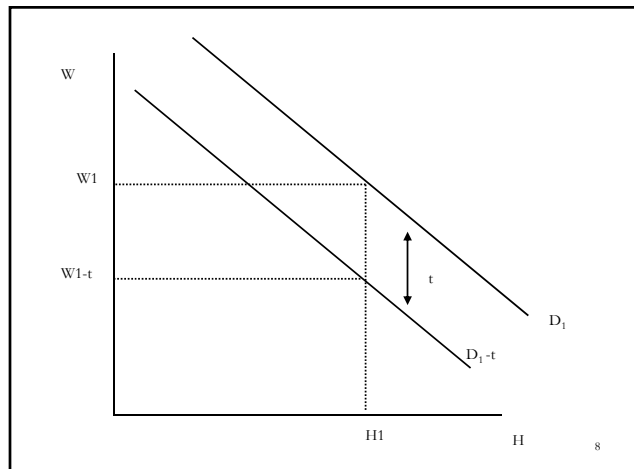
- For simplicity, let's assume it will come from a payroll tax collected from firms
 - Fixed costs per hour of employment
 - Increase in the hourly costs of labor
- Example: Medicare primarily financed by payroll tax, available to all aged 65 and above

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Alternative: Employer mandate

- Employers must provide health insurance to workers
- Suppose that the cost of the program is \$ t per hour to the firm
- The mandate has the same impact as a per unit payroll tax
 - To hire H_1 hours, firm is willing to pay W_1
 - With a tax, the only way they would hire H_1 is if wages fell to $W_1 - t$

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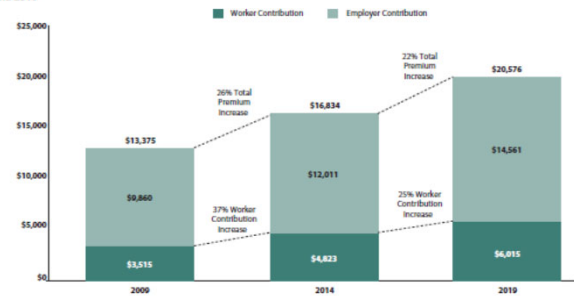
What might that tax be?

- Average workers works 2000 hours/year
– 50 weeks, 40 hours/week
- Assume health insurance costs \$7000/person per year and people work 2000 hours/year
- Roughly \$3.5/hour of work
- Median earnings for full-time workers are \$919/week or ~ \$48K
- 14.5% payroll tax

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FIGURE A

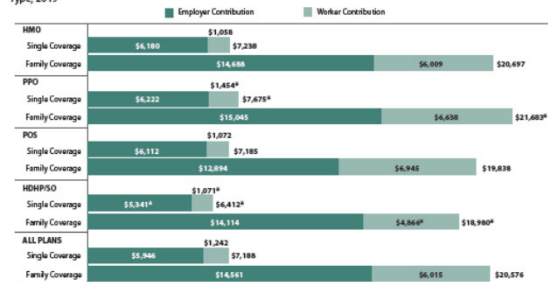
Figure A: Average Annual Worker and Employer Premium Contributions and Total Premiums for Family Coverage, 2009, 2014, and 2019



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FIGURE B

Average Annual Worker and Employer Premium Contributions and Total Premiums for Single and Family Coverage, by Plan Type, 2019



* Estimates to statistically different from ALL PLANS estimate within coverage type (p < .05)
SOURCE: KFF Employer Health Benefits Survey 2019

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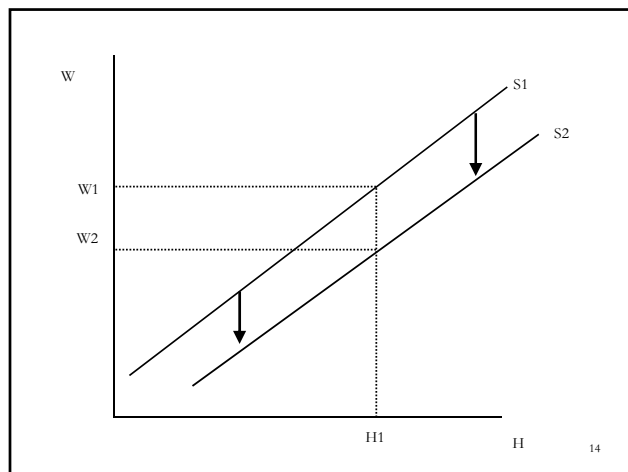
What about labor supply?

- Height of supply curve represents what people would supply to labor market at prevailing wage
- Position of labor supply curve is a function of job attributes
 - When the job ‘improves’, people willing to supply more at any prevailing wage
 - As quality of job declines, they supply less

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- Original supply curve is S_1
 - At wage W_1 , workers willing to supply H_1
- With employer mandate, firms now provide health insurance
- Workers value the insurance, so at any hours, they are willing to take less in wages for the same job
- supply curve shifts down by a distance equal to the benefit (S_1+V)

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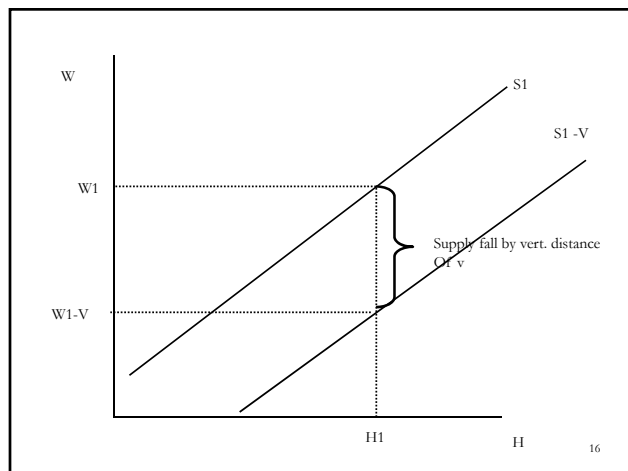


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Put some more structure

- Monetize the benefits that workers place on the new mandate
- Workers value at an amount equal to $\$V$ per hour
- Supply curve shifts down by an amount just equal to the value
 - Before mandate: willing to supply H_1 at W_1
 - After: willing to supply H_1 at W_1-V
 - Receive W_1-v from job
 - Receive V from new mandated benefit or W_1 in total

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Three cases

- Case 1: $V=0$
 - workers do not value mandate at all
- Case 2: $V < T$
 - Workers value the mandate less than they pay in taxes
- Case 3: $V = T$
 - Workers value the mandate at what it costs them in taxes

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What we are going to do

- Consider what is more efficient: govt mandate firms provide or govt tax and then provide
- E1 is initial equilibrium
- E2 is equilibrium under govt tax/provision
- E3 is equilibrium under employer mandate

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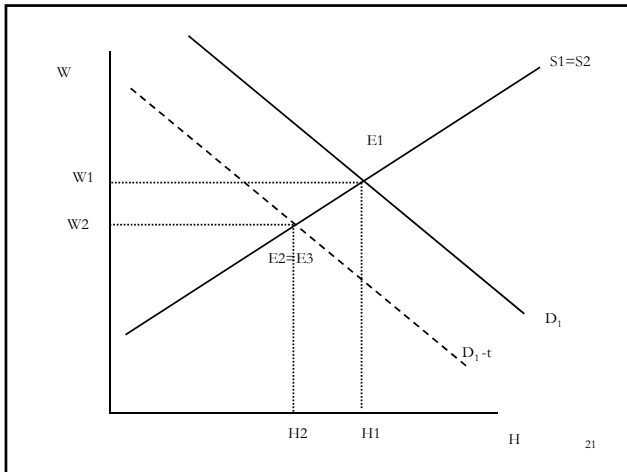
Case 1

- Labor demand
 - Under tax will shift down by the amount of the tax
 - Under mandate, will shift down by the amount of the implicit tax
- Labor supply:
 - Will not change in either situation because workers do not value

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- What would be the equilibrium if the govt taxed firms and directly provided the benefit?
- Would be the same – firm has an increased cost of employment, labor supply stays the same
- In this case, govt mandate and govt provision is the same

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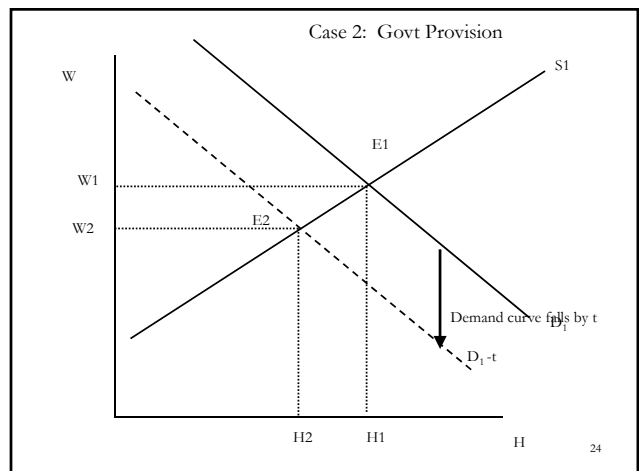
Case 2: $V < t$

- Demand curve falls by t
- Supply curve falls by v

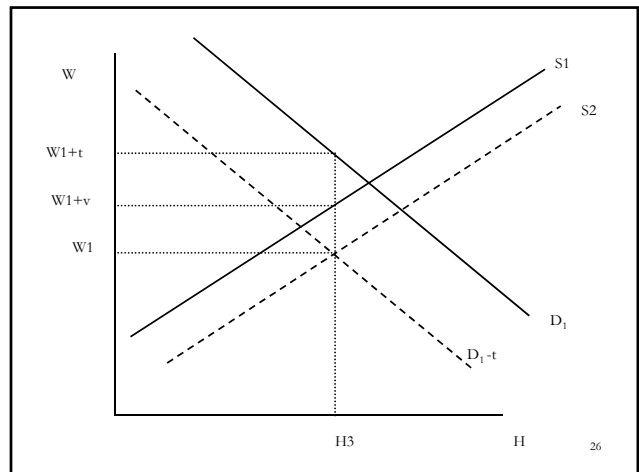
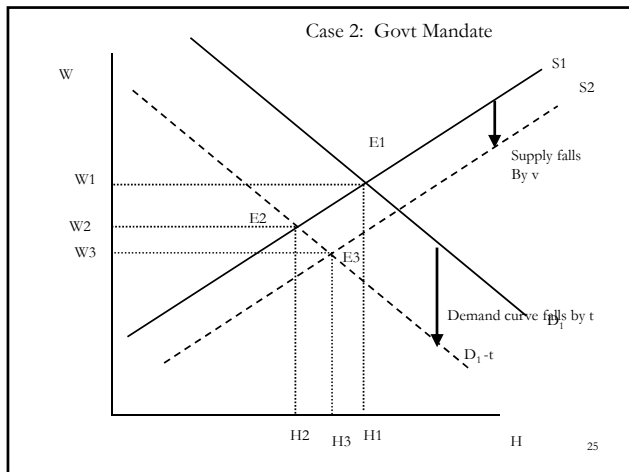
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- Without mandates, Equilibrium E_1 . H_1 hours, workers required W_1 in wage.
- With mandates, equilibrium E_3 . Quality of the job improves, so supply curve falls, new hours/wages are H_3/W_3
- What is the equilibrium if the govt taxes and provides the benefits directly? E_2
- Govt mandates look superior in this case

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Case 2: Govt mandate

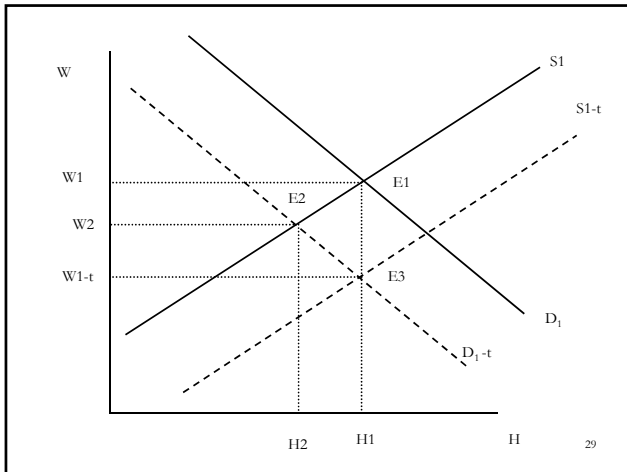
- Workers
 - Get hourly wage of $W1$
 - Receive benefit of v
 - Get job worth $W1+v$ per hour
- Firms
 - Pay hourly wage of $W1$
 - Pay tax of t per hour
 - Have hourly costs of $W1+t$

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Case 3: $V=t$

- Demand curve shifts down by t
- Supply curve shifts down by v

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- **Workers**
 - Receive $W1-t$ in an hourly wage
 - Receive t in benefits
 - Receive $W1-t+t = W1$ in hourly benefits
- **Firms**
 - Pay $W1-t$ in hourly wage
 - Pay t in benefits
 - Pay $W1$ in total compensation per hour

When workers value the benefit

- Mandates are superior to govt tax/provision
- Why: tie benefits to the job, the labor market distortions of govt tax/provision are reduced/eliminated because of a supply response
- Key result: if workers value benefits – they pay for the mandated benefits in the form of lower wages –
- Is there any evidence of this?

Gruber

- Prior to 78, few plans covered childbirth
- 1975-79, 23 states passed laws mandating coverage for childbirth
- 1978 Pregnancy Discrim Act, prohibited any differential treatment of pregnancy in employment relationship
- State/Fed law increased cost of health insurance by expanding benefits

- Research question: who pays for the additional benefit?
- Readily-identifiable beneficiaries:
 - Families w/ worker/spouse in childbearing age
- Easily identifiable group who receive no benefit
 - Single men
 - Older couples past childbearing age

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- Efficiency of group mandates assumes cost shifting via wage
- Some limits
 - Anti-discrim laws
 - Min wage
 - Work practices (unions) that make pay uniform
- If you cannot shift costs, may change incentive to hire the group receiving the benefit

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Experimental Design

- Difference-in-difference-in-difference
- 1st difference in difference
 - Treatment states before and after intervention
 - Sample includes people likely impacted by the law (married women)
- 2nd difference in difference
 - Treatment states before and after intervention
 - Samples include people not likely impacted (single males and older women)

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Two potential experiments

- Experiment 1
 - Treatment: states that adopted laws
 - Control: those that did nothing
- Experiment 2:
 - Treatment: Federal law
 - Control: states that had a statute in place

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- Data: May CPS – used to identify insurance status (Now is done in March)
- Problem: Prior to 1978, not all states identified – some in state groups
- Three large states with laws: IL, NJ, NY
- All other states from same region that can be identified prior to 1978 are in control

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- Controls:
 - IL (OH and IN)
 - NY and NJ (MA, CT and NC)

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TABLE 1—THE COST OF ADDING MATERNITY BENEFITS TO A HEALTH INSURANCE PACKAGE

Coverage	Demographic group	Annual cost (1990 dollars)	Annual cost (1978 dollars)	Cost as percentage of 1978 weekly earnings
Family	20–29-year-old females	\$984	\$360	4.6
Family	30–39-year-old females	\$756	\$277	3.5
Individual	20–29-year-old females	\$324	\$119	1.5
Individual	30–39-year-old females	\$252	\$92	0.9
Family	20–29-year-old males	\$984	\$360	2.9
Family	30–39-year-old males	\$756	\$277	1.7

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DDD, Mean Log Hourly Wage

		Before	After	Δ
Treatment: Mar.	Reform	1.547	1.513	-0.034
Women 20–40	No ref.	1.369	1,397	0.028
			$\Delta\Delta$	-0.062
Control: older	Reform	1.759	1.748	-0.011
women and single	No ref.	1.630	1.627	-0.003
males			$\Delta\Delta$	-0.008
			$\Delta\Delta\Delta$	-0.054

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- Previous two slides
 - Maternity benefits are 4-5% of weekly wages for married women < 40
 - Wages of this group fell by 5-6%
- What does this imply about efficiency of labor market?

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Medicaid

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Basics of Medicaid

- Federally mandated but programs run by states
 - 51 different Medicaid programs
- Primarily for low income/high medical needs
- Federal government determines minimum eligibility requirements/benefits
- States can expand eligibility, scope of services, payments rates for services

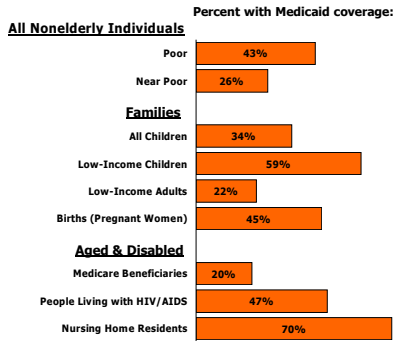
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Two paths to eligibility

- Categorical eligibility – if participate in TANF (welfare) or Supplemental Security Income (Disability insurance)
 - Single parents and their children & disabled
- Income/asset tests
 - Children with low income
 - Pregnant women with low income
 - Elderly w/ high expenses or low income
 - Poor in long term care

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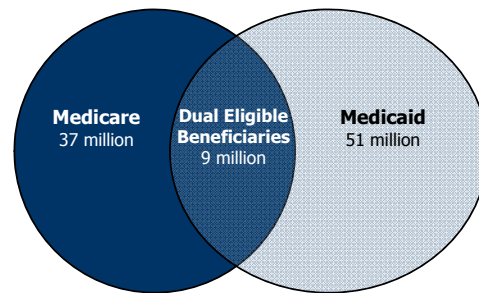
Medicaid plays a critical role for selected populations



SOURCE: Kaiser Commission on Medicaid and the Uninsured and Urban Institute analysis of ASEC Supplement to the CPS; Birth data from *Maternal and Child Health Update: States Increase Eligibility for Children's Health* in 2007; National Governors Association, 2008; Medicare data from USHHS.



Dual eligible beneficiaries comprise 20% of the Medicare population and 15% of the Medicaid population in 2008

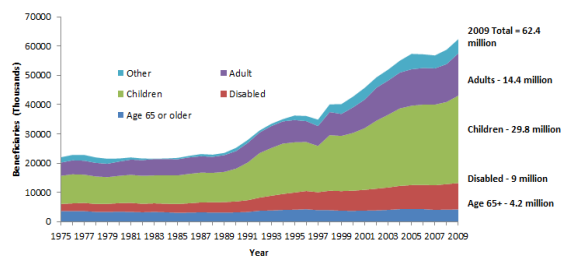


Total Medicare beneficiaries: 46 million Total Medicaid beneficiaries: 60 million

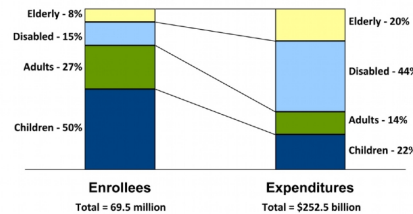
SOURCE: Kaiser Family Foundation analysis of the Medicare Current Beneficiary Survey 2008, and Kaiser Commission on Medicaid and the Uninsured and Urban Institute estimates based on data from FY2008 MSIS and CMS Form-64.



Medicaid Beneficiaries by Eligibility Group: FY 1975 - 2009



Medicaid Enrollees and Expenditures by Enrollment Group, 2011



Source: Georgetown Center for Children and Families analysis of March 2011 CBO Medicaid Baseline. Numbers may not add to 100% due to rounding.

Medicaid expansions

- Before late 1980s, Medicaid was available for non-elderly in cash assistance, e.g. AFDC
- AFDC eligibility was determined by income/asset/expenses test and lack of spouse
- Could also become eligible if 'medically needy' e.g., high medical bills 'spend down' income past income limit
- Income line was well below poverty level (average across states was 60% of PL)
- States have always had the option to expand Medicaid past federal mandates

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- Starting in 1985, Medicaid was expanded to include pregnant women and children not eligible for welfare, but still poor
- Severed the link with welfare
- Hoped to provide insurance without the disincentive associated with welfare participation
- Example, by 1990, Medicaid covered all kids < 9 born after 9/30/83 and <100% FPL
 - Some states expanded above this limit

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MEDICAID ELIGIBILITY

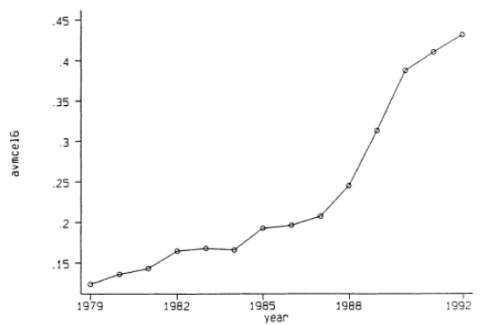
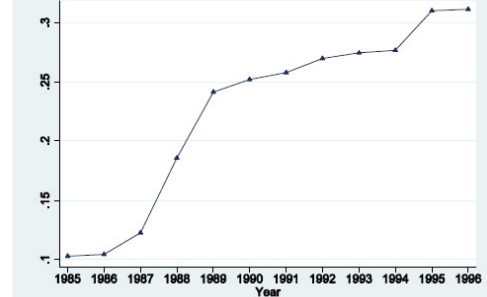


FIG. 2.—Medicaid eligibility trends

Fraction of women, 14-44, eligible for Medicaid if they became pregnant

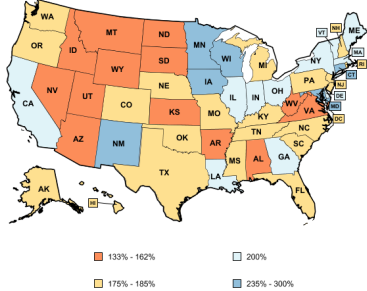
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Deliveries Eligible for Medicaid in the NHDS



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Coverage Levels for Pregnant Women (% FPL)

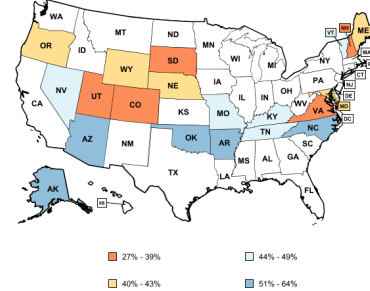


Income Eligibility Levels for Pregnant Women by Annual Income and as a Percent of Federal Poverty Level (FPL), January 2013; Medicaid

statehealthfacts.org
Your source for state health data

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% Births Covered by Medicaid



Births Financed by Medicaid as a Percent of Total Births, 2009

statehealthfacts.org
Your source for state health data

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TABLE I
MEDICAID ELIGIBILITY AND COVERAGE

Year	% of children eligible	% of children eligible—fixed population	% of children covered
1984	16.1	16.1	13.2
1985	18.2	18.4	13.5
1986	19.0	18.9	13.8
1987	19.3	19.7	13.5
1988	18.8	20.3	12.8
1989	20.4	21.6	13.9
1990	25.7	26.2	16.5
1991	28.7	28.1	19.3
1992	31.2	30.3	20.6

Based on data from March 1985–March 1993 CPS. Column 1 shows the percent of children eligible for Medicaid in each year. Column 2 shows the percentage of the 1984 sample that would have been eligible for Medicaid in each subsequent year (holding their characteristics constant and inflating income appropriately). Column 3 gives the percentage of children actually covered in each year. Figures are from the authors' calculations as described in the text and in Appendix 1.

Eligibility rates double (94%) but fraction insured increases by 56%
Big increase in eligibility after 1989

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Crowd out

- Some with employer provided health insurance (EPHI) may pay large chunk of premiums OOP.
- They may also be eligible for Medicaid under the new expanded coverage
- Could respond to expansions by dropping EPHI coverage, pick up Medicaid
- Expansions could increase eligibility, increase Medicaid use, but not increase coverage
- Empirical question: how much crowd out

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Why Important Now: ACA

- Anyone with income <133% FPL would be eligible for Medicaid
 - 5% income set-aside to real level is 138% FPL
- Expansions started in 2014
- Feds guaranteed to pay
 - 100% expansion until 2016, dropping to 90% in 2020

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TABLE II
SOURCES OF INSURANCE COVERAGE FOR THE NONELDERLY POPULATION, 1987

Group	Insurance status		
	Private	Public	Uninsured
All	76%	14%	14%
Children	74%	19%	13%
Women of child-bearing age	76%	13%	15%
Men with no children or women of child-bearing age in family	84%	8%	11%
Other adults	75%	12%	18%
<u>Children and women of child-bearing age</u>			
Eligible in 1987	31%	50%	25%
Made eligible between 1987 and 1992	65	15	25
Not eligible by 1992	89	6	8

65% of those who were made eligible for Medicaid had Private insurance in 1987

Ability to crowd out is therefore very high

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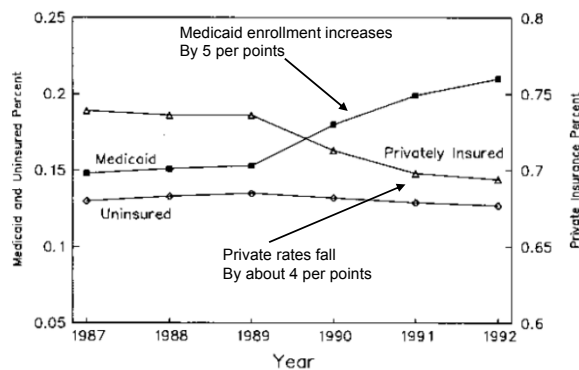


FIGURE IIa
Percent of Children with Different Types of Insurance

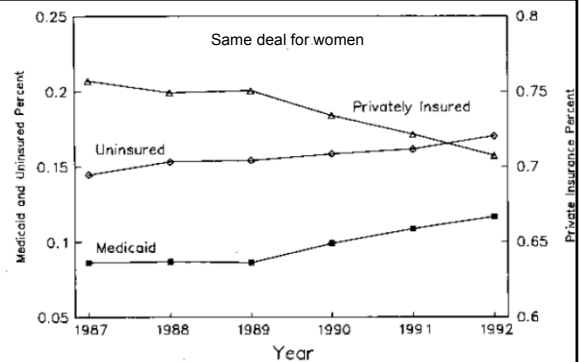


FIGURE IIb
Percent of Women 15-44 with Different Types of Insurance

Basic regression

- $Covered_{ist} = X_{ist}\beta + Eligible_{ist}\alpha + \mu_s + \lambda_t + \varepsilon_{ist}$
- Person i , state s , year t
- *Covered* is a dummy variable that equals 1 if you are covered by source (Medicaid, private, any insurance, etc)
- *Eligible* is a dummy that equals 1 if you are eligible for Medicaid

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- Question: why would OLS estimates generate a biased estimate for the parameter on α ?
- Solution: 2SLS
 - Construct synthetic population with data
 - Generate fraction eligible in state s , year t
 - Use this as an instrument for *Eligible*
- Under what conditions does this instrument produced unbiased estimates?

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TABLE IV
REGRESSIONS EXPLAINING COVERAGE FOR WOMEN AND CHILDREN

Independent variable	Children		
	Medicaid	Private	Uninsured
Eligible for Medicaid	0.235 (0.017)	-0.074 (0.021)	-0.119 (0.018)

Kids: Medicaid increases by 23 per points, but 1/3 of that is wiped out by a reduction in private insurance rates

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Article	Data source	Methodology	Crowd-out definition	Results
Cutler and Gribler (1996)	1987-1992 CPS	Instrument eligibility with simulated eligibility based on entire nation; control for state, year, age; consider family level spillovers	(Private insurance/public insurance) or (1 - (uninsured/public insurance))	Children 31%, or children: 40%, family level: 50%
Dubay and Kenney (1996)	1988 and 1993 CPS	Change in insurance coverage of children relative to change for adult men	(Private insurance/public insurance)	Below poverty: 15%, 100-135%: 22%
Dubay and Kenney (1997)	1988 and 1992 CPS	Change in insurance coverage of pregnant women relative to change for men	(Private insurance/public insurance)	Below poverty: 0%, 100-135%: 27%, 135-185%: 59%
Thorpe and Florence (1998)	1989-1994 NLSY	Measure movement from private insurance onto Medicaid among children with privately insured parents	% of those entering Medicaid with privately insured parents	16%
Blumberg et al. (2000)	1990 SIPP Panel	Compare change in insurance coverage of children made eligible by expansions to those not made eligible	% of children made eligible losing private relative to gaining public	4%
Yavuzi and Knaemler (2000)	1988 and 1992 NLSY	Compare change in insurance coverage of children becoming eligible to those not becoming eligible	(1 - (uninsured/public insurance)) or (private insurance/public insurance)	55-59%, 5-24%
Aizer and Grogger (2003)	1995-2002 CPS	Compare change in insurance, for those above AFDC eligibility vs. below, in states with adult expansion, before vs. after expansion	Coefficient on private coverage equation (no crowd-out calculations)	Statistically insignificant effect on private coverage for mothers and for children
Card and Shore Sheppard (2004)	1990-1993 SIPP panel	Compare changes in insurance coverage of children around income and age limits for eligibility	(Private insurance/public insurance)	Below poverty, eligible for <100: 0; below poverty, eligible for 100-133: 50%; 100-133: 0
LoSano and Buchtmeller (2004)	1996-2000 CPS	Instrument eligibility with simulated eligibility based on entire nation; control for state, year, age, state > year: interact with state waiting periods	(Private insurance/public insurance)	Average: 50% varies with state waiting periods
Shore Sheppard (2005)	1987-1995 CPS	Same as Cutler-Gribler, but add additional controls - children only	(1 - (uninsured/public insurance)) or (private insurance/public insurance)	33% (age/year controls) to 59% (all controls), 0
Han and Shore Sheppard (2005)	1985-1995 SIPP	Instrument eligibility with simulated eligibility based on all other states; control for state, year, age	(Private insurance/public insurance)	No crowd-out
Haden et al. (2005)	1996-2002 MEPS	Compare changes in children made eligible and remaining ineligible; instrument with simulated eligibility	(Private insurance/public insurance)	Comparison: 25-55%, IV: 39-70%

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Table 5
Effect of eligibility for any public insurance on insurance status

	Public only	Private only	Both public and private	Crowd1
Own eligibility				
Baseline	0.072*** (0.02)	-0.017 (0.02)	0.015** (0.01)	0.37
All interactions	0.055*** (0.02)	-0.011 (0.02)	0.008 (0.01)	0.30
Family eligibility				
Baseline	0.109*** (0.03)	-0.066** (0.03)	0.027** (0.01)	0.68
All interactions	0.156*** (0.05)	-0.122*** (0.04)	0.027* (0.01)	0.81

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	Children, 0-19 < 200% of FPL			Children, 0-19 200-300% of FPL		
	Un- ins.	Other Ins.	Pvt. Ins.	Un- ins.	Other Ins.	Pvt. Ins.
1997	25.4	36.0	38.6	11.5	6.2	81.8
2009	17.5	49.6	32.8	10.7	14.2	75.0
Diff.	-7.9	13.6	-5.8	-0.8	8.0	-6.0

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Is crowd out a concern for the ACA?

- Data for 2011
- Adults 18-64 Income < 138% of FPL
 - 41.3 million adults
 - 58.2% are insured (24.1 million)
 - 26.3% have private insurance (10.9 million)
- Adults 18-64 with income 100-138% FPL
 - 12.7 million adults
 - 59.4% have insurance (7.6 million)
 - 33.1% have private insurance (4.2 million)

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