Medicaid-ing Coverage Volatility: Evidence from the 2019 Virginia Medicaid Expansion

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We Know Little About How Job Loss Affects the Dynamics of Health Insurance Coverage

1. Coverage volatility compromises health and financial well-being.

2. Chronically low-income individuals are exposed to these risks by "churning" on and off of Medicaid eligibility.

3. Cyclical labor markets also expose the general population to this risk

   - Majority of adults under age 65 are covered by Employer Sponsored Insurance (ESI)

   - Job loss results in coverage loss

1. We leverage novel, administrative tax data to study coverage dynamics for policy holders who lose their ESI coverage

2. **What do coverage dynamics look like for this population following a job loss?**

   - We provide detailed summary statistics for those who separate from their policy in 2016.

   - We show that this population is also exposed to coverage volatility.

3. **Does Medicaid Expansion mitigate coverage volatility?**

   - We show that the 2019 Virginia Medicaid expansion reduced coverage volatility.

   - Results suggest the Medicaid safety net is wider than previously understood.

1. Pre ACA: Medicaid only available to some of the very-low income
   - Childless adults completely ineligible.
   - Parents earning more than 64% FPL ($12,499 for a family of 3) ineligible

2. ACA encouraged states to expand Medicaid thresholds to 138% FPL
   <u>for all adults</u>
   - 28 states and the District of Columbia expanded Medicaid in 2014
   - Uninsurance rate dropped by 35% from 2013 to 2015.

3. By expanding access, Medicaid has the potential to mitigate the risk of coverage volatility.

1. Using Form 1095, we identify policyholdrs who are:

   - covered by an ESI policy in month m of year y.

   - are not covered from this policy in month $m + 1$.

2. We focus on those who were well-attached prior to separation.

   - 12 prior months of coverage

3. We focus on **coverage loss associated with job loss**

   - Limit to individuals who also become unemployed in year y or $y + 1$

We Create a Panel Dataset of Monthly Post-Separation Coverage

1. We follow people who separate from their policy for up-to 24 months after separation.

2. In each month, we identify their source of coverage from among:
    - ESI
    - Medicaid
    - Exchange
    - Other
    - Uninsured

3. We characterize policy holders using lagged tax data:
    - Gender, Age, Joint Filing, Dependents
    - Geography: Address on Form 1095
    - Earnings: W2

1. **Many** factors drive re-insurance:
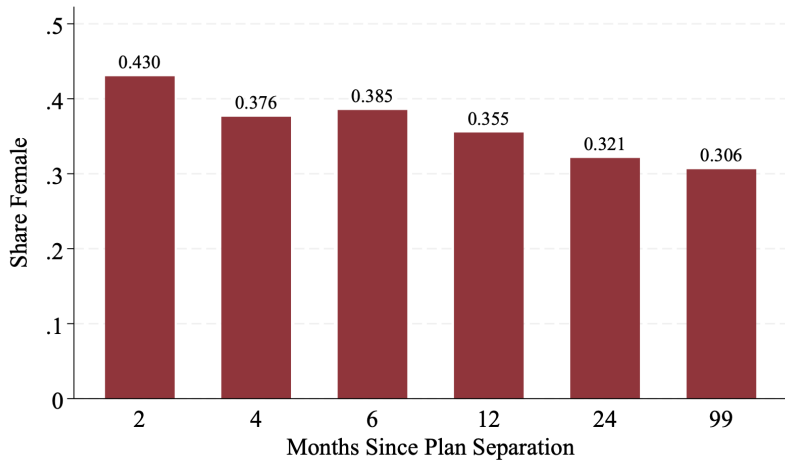
   - Risk aversion

   - COBRA

   - Labor Search

   - Access to Medicaid

   - Policy (ex. individual mandate)

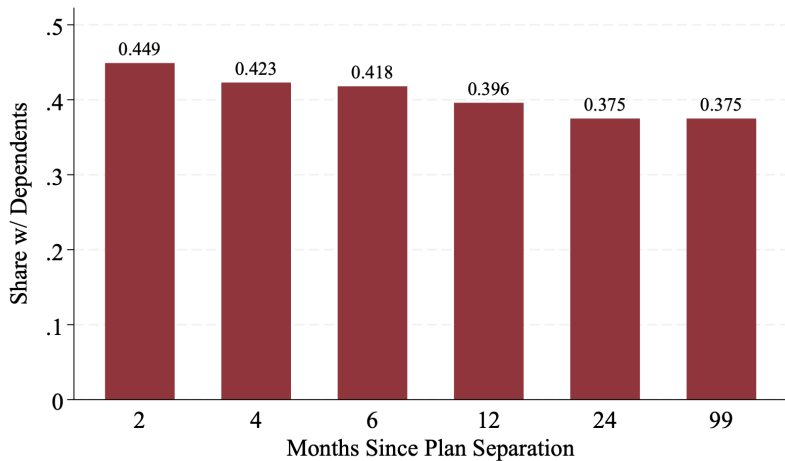2. **What does ex-post coverage look like for people who separate in 2016?**

   - *How long* does uninsurance last?

   - *How* do people re-insure?

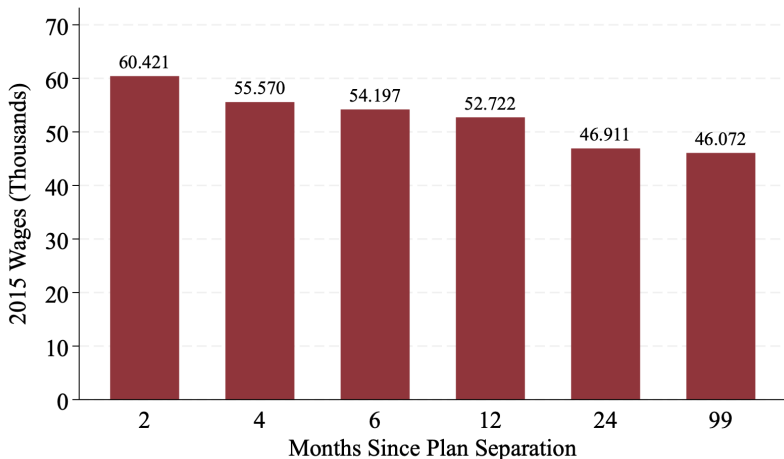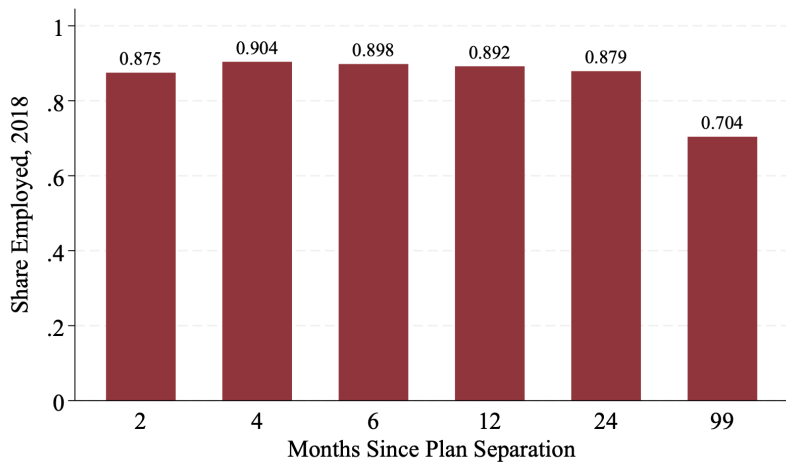   - What are the *correlates* of these choices?

People Without Kids Are More Likely to be Uninsured in the Long-Run

Lower Income People are More Likely to be Uninsured in the Long-Run – But, Still Earn A Lot!

Little Correlation Between Coverage and Employment

Medicaid is a Non-Trivial Source of Coverage

Some intuitive patterns emerge

- **Women** and **Parents** are more likely to end up on Medicaid as a first source of coverage
- 80% of Medicaid enrollees are employed by 2018.

	ESI	**Medicaid**	Exchange	Other
Female	0.406	0.494	0.481	0.290
Married	0.431	0.278	0.413	0.407
Has Dependents	0.450	0.550	0.390	0.370
2015 Wages	64,278	43,194	61,756	64,439
Has Wages in 2018	0.895	**0.802**	0.794	0.804
2018 Wages	51,715	28,525	39,213	43,899
N	1,237,136	201,823	86,677	42,657

ESI and Medicaid are both important sources of re-insurance

Coverage Sources Following Plan Separation
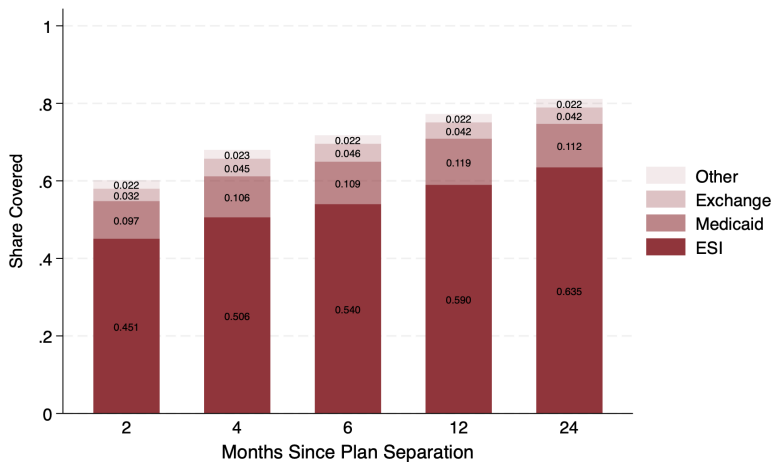
Does the ACA Medicaid expansion reduce uninsurance?

Coverage Sources Following Plan Separation
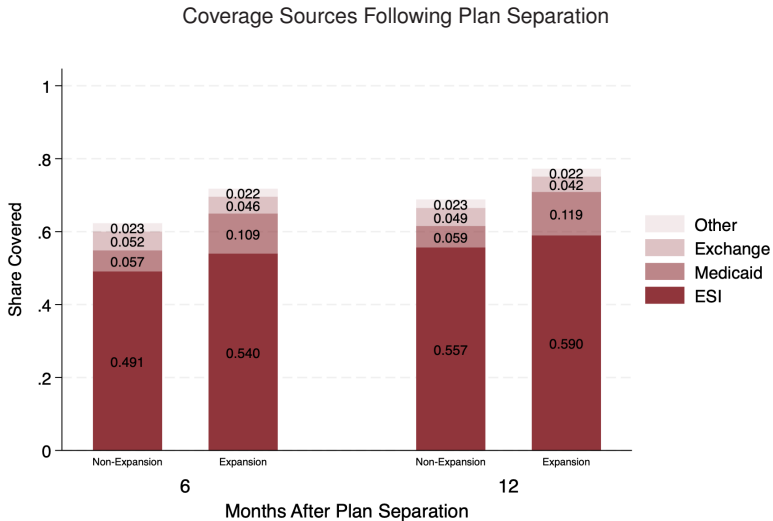
Medicaid coverage is nearly 2x bigger in Expansion states.

We Summarize These 2016 Dynamics in a Regression Framework

1. OLS Model
    - Likelihood of any coverage six months after plan separation
    - Duration of uninsurance (in months)

2. Cox Proportional Hazard Model of the instantaneous likelihood of re-insurance at month m, conditional on survival
    - Model explicitly allows for right-censored data
    - Model does not require normality of survival function

2016: Correlates of Re-Insurance

	Covered at $t = 6$ (1)	Uninsurance Duration (2)	Hazard of New Insurance (3)
Female	0.0769***	-1.055***	1.143***
	(0.00362)	(0.0487)	(0.00188)
Married	0.143***	-1.551***	1.234***
	(0.00479)	(0.0625)	(0.00223)
Has Dependents	0.00243	-0.0705	1.014***
	(0.00711)	(0.0789)	(0.00175)
Non-Filer	-0.0993***	1.342***	0.854***
	(0.00464)	(0.0590)	(0.00319)
Age	-0.000668**	0.0111***	0.999***
	(0.000239)	(0.00211)	(0.0000755)
2015 Wages	0.000000373***	-0.00000502***	1.000***
	(4.88e-08)	(0.000000746)	(5.82e-09)
Expansion State	0.138***	-1.540***	1.224***
	(0.0215)	(0.286)	(0.00209)
Control Mean	0.718	3.936	
N	1,645,936	1,645,936	1,645,936

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We Want to Study the Causal Effect of Medicaid Expansion on Re-Insurance

1. 25 states and D.C. expanded Medicaid in 2014
    - *Data availability does not allow for analysis*

2. Post 2014: 15 more states have expanded Medicaid
    - Unique **quasi-experimental policy variation**
    - Holds other provisions of the ACA fixed
    - Aligns with 1095 data availability

3. Need to be careful to avoid the onset of the pandemic
    - Wreaked a different havoc on insurance coverage

4. **We focus on the 2019 Virginia Medicaid Expansion**
    - Three other states expanded Medicaid between 2015 and 2019 (MT, LA, ME)
    - Timing of expansions and data issues make these less suitable.

1. Pre-Expansion: Medicaid access was highly constrained
   - Childless adults ineligible
   - Parents earning more than 38% FPL ineligible ($7,896 for family of three)
   - Monthly enrollment: 1.2 million

2. Medicaid expansion became effective January, 2019.
   - Medicaid expansion included in budget bill.
   - Passed June 7, 2018

3. Effect on enrollment was immediate
   - Enrollment increased by 16% in first month of expansion
   - Enrollment increased by 28% by the end of 2019

We compare policy holders who separate from a policy

1. VA vs Non-Expansion States

2. 2019 vs 2018, 2017, and 2016

Additional details

- Separations between January and June

- Limit post-separation coverage observations to same calendar year.

- Include 3-digit zipcode and separation month fixed effects.

- Controls: age, marital status, filing behavior, dependents, gender.

The Characteristics of People who Separate in 2018 and 2019 in Non-Expansion States are Similar

Summary Statistics: DD Analysis Sample

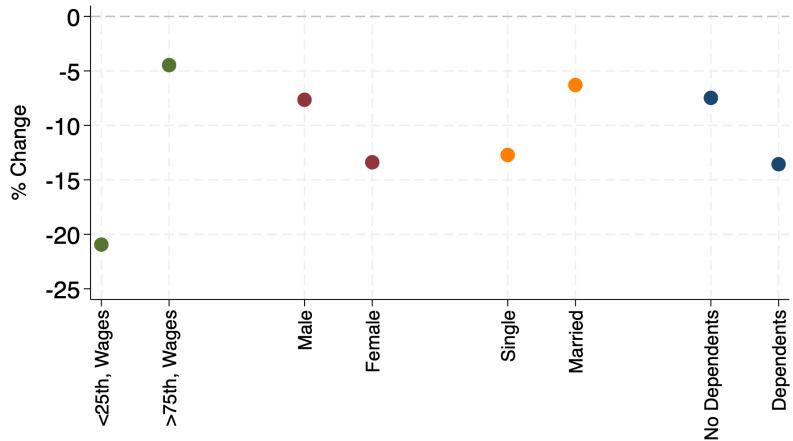|	Untreated Cohort 2018 Separations		Post-Treated Cohort 2019 Separations	
	Non-Exp (1)	VA (2)	Non-Exp (3)	VA (4)
Female	0.47	0.473	0.46	0.489
Married	0.361	0.364	0.356	0.352
Has Dependents	0.466	0.439	0.459	0.436
Non-Filer	0.0787	0.075	0.0819	0.0808
Age	43.37	43.8	43.53	43.73
Wages $(t-1)$	57010.6	63150.9	59543.7	63194.6
N	169,638	12,292	161,760	10,841

Expansion Reduces the Time to Medicaid Coverage by 11%

Effect of Expansion: Time to Medicaid Coverage
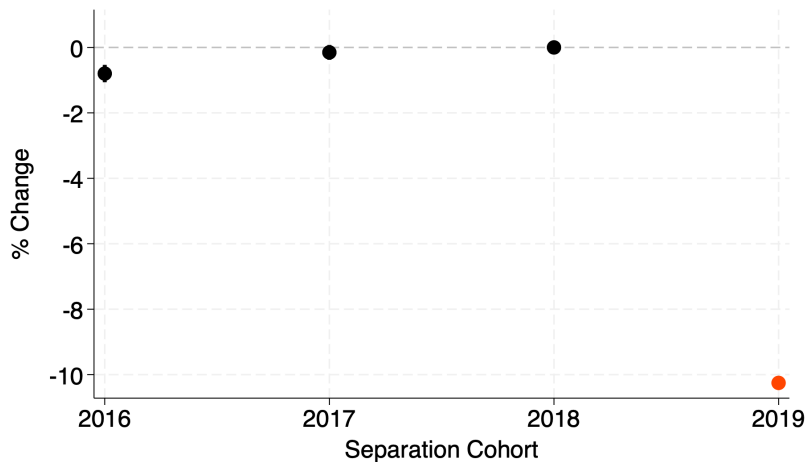
Variation in Effect Consistent with Medicaid Correlates

Effect of Expansion on Time to Medicaid Coverage: Heterogeneity

Expansion Doubles Medicaid as a First Source of Coverage

Effect of Expansion: Likelihood of Medicaid as First Source of Coverage

Effect of Expansion on Medicaid as First Coverage Source: Heterogeneity

Placebo Test: We Do Not See Other Changes in Medicaid in Non-Expansion States in 2019

Time to Medicaid
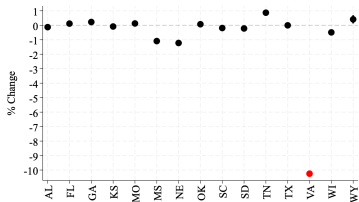
Medicaid as First Coverage Source
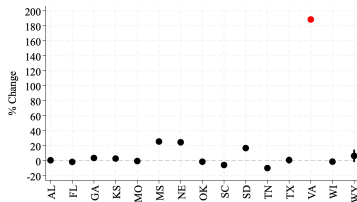
Changes in other states were negligible.

$$y_{it} = \beta_0 + \beta_1 \text{Medicaid} + X_{it} + \varepsilon_{it}$$

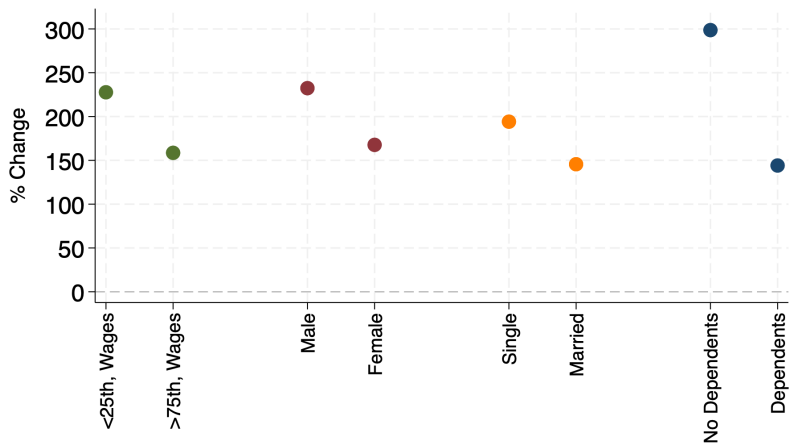1. How does Medicaid as a first source of coverage affect **coverage dynamics** in Virginia?

2. How does Medicaid as a first source of coverage affect the **labor market** in Virginia?

3. 2019 expansion acts as an instrument

   First Stage:

   $$\text{Medicaid} = \alpha + \sum_{t=2016}^{2019} \mathbb{1}(\text{cohort} = t) + X_{it} + u_{it}$$

We Focus Our Compliers Analysis on Virginia

Estimated effect of expansion on the likelihood of Medicaid as a first source of coverage is similar in the DD and in a VA event study.

Likelihood of Medicaid as First Source of Coverage

	DD (1)	IV First Stage (2)
2019	0.0929*** (0.000607)	0.0878*** (0.00374)
Female	0.0285*** (0.00452)	0.0367*** (0.00214)
Married	-0.0193* (0.00778)	-0.0299*** (0.00241)
Has Kids	0.0564*** (0.0126)	0.0685*** (0.00244)
Nonfiler	0.00840* (0.00323)	0.00746 (0.00413)
N	795,393	53,215

Medicaid Expansion Increases the Likelihood of Coverage Immediately

	Covered $t=2$ (1)	Covered $t=4$ (2)	Covered $t=6$ (3)	Uninsurance Duration (4)
First Coverage Medicaid	0.665*** (0.0728)	0.735*** (0.0731)	0.724*** (0.0714)	-3.912*** (0.464)
Female	0.0551*** (0.00513)	0.0401*** (0.00513)	0.0305*** (0.00505)	-0.236*** (0.0328)
Married	0.216*** (0.00539)	0.205*** (0.00536)	0.194*** (0.00526)	-1.032*** (0.0338)
Has Kids	-0.0389*** (0.00682)	-0.0476*** (0.00687)	-0.0478*** (0.00673)	0.188*** (0.0436)
Nonfiler	-0.106*** (0.00830)	-0.118*** (0.00865)	-0.123*** (0.00871)	0.633*** (0.0620)
N	53,215	53,215	53,215	53,215

Women, Singles, and Parents More Likely to be Covered After 6 Months

Likelihood of Any Coverage, $t = 6$
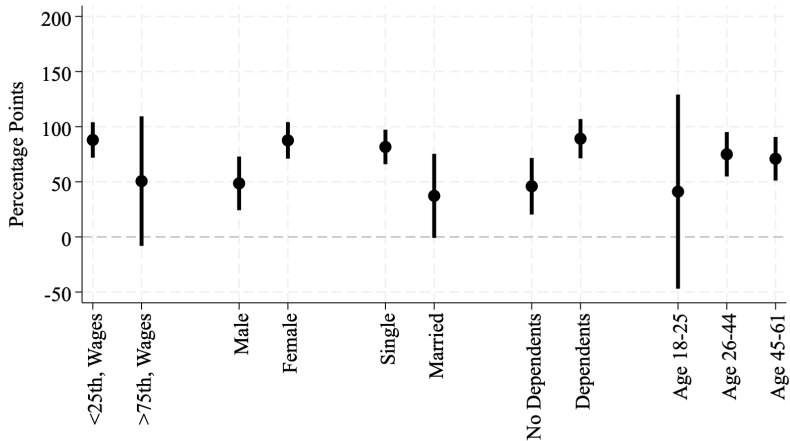
Medicaid Expansion Causes Some Crowd-Out from ESI and Exchange Plans

	First Cov ESI (1)	First Cov Exchange (2)	Months to ESI (3)	Months to ESI (self) (4)	Months to Exchange (5)
First Coverage Medicaid	-0.270***	-0.208***	0.297	0.133	1.734***
	(0.0640)	(0.0276)	(0.496)	(0.521)	(0.225)
Female	0.0127**	0.0258***	-0.162***	0.115**	-0.213***
	(0.00461)	(0.00227)	(0.0353)	(0.0371)	(0.0188)
Married	0.109***	-0.00311	-1.084***	0.160***	0.0204
	(0.00478)	(0.00237)	(0.0367)	(0.0390)	(0.0198)
Has Kids	-0.0221***	-0.00137	0.175***	0.0739	0.0215
	(0.00604)	(0.00281)	(0.0465)	(0.0488)	(0.0231)
Nonfiler	-0.0377***	-0.0343***	0.375***	0.430***	0.348***
	(0.00829)	(0.00285)	(0.0631)	(0.0630)	(0.0237)
N	53,215	53,215	53,215	53,215	53,215

ESI Crowd-Out Strongest for Men and Young Adults

Likelihood of ESI as First Source of Coverage
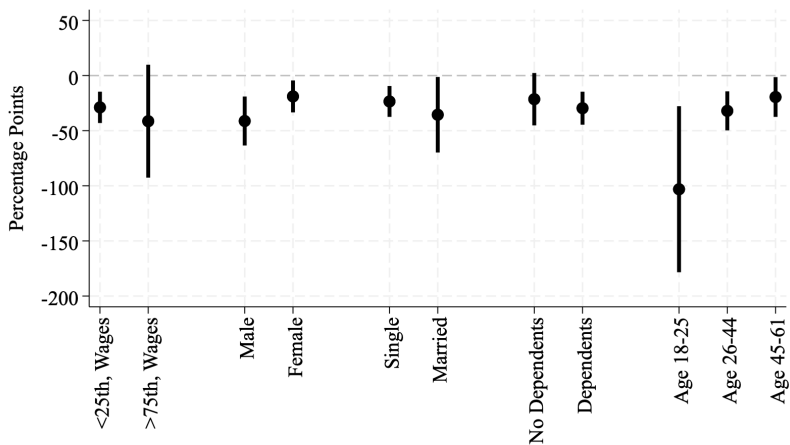
Medicaid Expansion Improves Labor Market Outcomes

	New W2 (1)	New Wages (2)
First Coverage Medicaid	0.137*	10660.4**
	(0.0623)	(3972.8)
Female	0.0132**	-2490.0***
	(0.00446)	(289.6)
Married	0.00484	2703.9***
	(0.00477)	(317.1)
Has Kids	0.00222	465.2
	(0.00588)	(376.1)
Nonfiler	-0.0258***	-2397.1***
	(0.00776)	(338.5)
N	53,215	53,215

Men and Mid-Career Adults See Strongest Wage Effects

New W2 Earnings

Who are the compliers?

$$X_i\text{Medicaid} = \beta\text{Medicaid} + \Gamma X + \varepsilon$$

- Instrument for Medicaid using 2019 expansion
- For each $X_i, \hat{\beta}$ describes the share of compliers
- (Frandsen, Lefgren, and Leslie, 2023)

	Female (1)	Wages < 25th (2)	Wages > 75th (3)	Married (4)	Kids (5)	Non-Filer (6)	Age 18–25 (7)	Age 26–44 (8)	Age 46–61 (9)
First Coverage Medicaid	0.597***	0.426***	0.113***	0.190***	0.523***	0.102***	0.0240**	0.480***	0.496***
	(0.0213)	(0.0227)	(0.0148)	(0.0189)	(0.0217)	(0.0120)	(0.00862)	(0.0227)	(0.0222)
N	53,215	53,215	53,215	53,215	53,215	53,215	53,215	53,215	53,215

We Show that Compliers are Dominated by Single Adults

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1. We find that the expansion

    - increased the likelihood of Medicaid as a first source of coverage by 200%

    - reduced the time to find Medicaid by 11%

2. We show that those who move to Medicaid because of the expansion

    - are 60-70 percentage points more likely to be covered six months after they lose their policy.

    - are re-insured 4 month sooner.

    - are more likely to find a new job by the end of the year and earn more at their new job.

The Medicaid Safety Net is Wide

1. Cyclical labor markets expose the general population to spells of uninsurance

2. We know that spells of uninsurance cause health and financial hardships

3. We show that Medicaid provides meaningful stop-gap coverage to a broader population than is typically considered.

Thank You!

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