Aging Out of Extended Dependent Coverage under the Affordable Care Act
Motivation

Affordable Care Act (ACA) dependent coverage mandate

- **What:**
  - Children can stay on their parents’ insurance up to age 26

- **When:**
  - Became effective in September 2010

- **Why:**
  - High uninsured rate prior to ACA (1 in 3 young adults were uninsured)
  - To help young adults stay insured while undergoing transitions in jobs and schools
Motivation...

When it comes to aging out, is regaining insurance still a challenge for them?

- A 26th birthday doesn’t guarantee a job with health benefits
- Even being temporarily uninsured can be harmful for health and put one at risk of catastrophic Health costs
- Health risks among young adults
  - Obesity, HIV infections, injuries, substance use, pregnancies
Research questions

How would young adults handle the transition when aging out of parents’ insurance?

◦ Any shift in healthcare consumption over time?
  ◦ Healthcare utilization in the last year before aging out
  ◦ “Use it before you lose it”?

◦ Did they regain insurance after aging out?
  ◦ How soon?
  ◦ Insurance status change after aging out
Background: Dependent coverage policies

Prior to ACA
- Children lost dependent coverage at age 19, or when they graduated from college
- 35 states extended dependent coverage and increased age limit with additional requirements (e.g. marital status, financial dependence)
- Self-funded group health plans were not subject to state requirements

After ACA
- All plans and issuers that offer dependent coverage must provide coverage until a child reaches the age of 26
Literature

Long et al. (1998)
- 18-64 years old: those about to lose insurance did not have more visits than the continuously insured.

65 years old pre/post Medicare:
- Significant increase in utilization upon reaching Medicare
- Inpatient care: no evidence of postponing hospitalization in the prior 2 years (Card et al., 2008)

19 years old aging out of the parents’ insurance:
- Anderson et al. (2012)
  - Causal effect of health insurance on utilization
- Gross (2010)
  - No “stock up” on healthcare before losing it
This paper

The first attempt to follow aging-out young adults after ACA

Provides evidence on their transition process
  ◦ Utilization
  ◦ Insurance status

Policy implications on helping young adults
  ◦ Maintain regular healthcare
  ◦ Plan ahead to regain coverage
  ◦ Make smooth transition
Preview of findings

- Reject the “use it before you lose it” hypothesis
- Uninsured rate among aged-out individuals declined, in a few months, to a level lower than that of young adults prior to ACA
- Some individuals were more likely to have longer uninsured spells
Data

For healthcare utilization before aging out:
◦ MarketScan Commercial Claims and Encounters Database: 2011-13
  ◦ Claims and enrollment data of large employer-sponsored health plans

For insurance status afterwards:
◦ Survey of Income and Program Participation (SIPP)
  ◦ 2008 Panel waves 10-16 (Sep 2011 – Dec 2013)
◦ Why this dataset:
  ◦ Individual leaving parents’ insurance would be trackable
  ◦ The source of insurance coverage is distinguishable
◦ Sample weights have been used in the analysis
Methods – utilization before aging out

Question 1: Healthcare utilization in the last year before aging out – “Use it before you lose it”?

Utilization measures:
- # hospitalizations
- # outpatient visits (including physician office visits, hospital outpatient services, etc.)
- # ER visits
- # prescription drug claims
Methods – utilization before aging out...

- In a 24-month window, comparing
  - Leaving individuals in their last year (year 2) versus one year before (year 1) (treatment group, T)
  - Staying individuals on parents’ plan in year 2 versus year 1 (comparison group, C)
Methods – utilization before aging out...

Sample selection criteria:

- Dependent child
- 24-month continuous enrollment
- Left or stayed: left before Sep 30 in 2013 (i.e. ≥3m no enrollment, T) or stayed in 2013 (C)
- Start age in year 1: 23-25 (T) or 22-24 (C)
- If the individual lost insurance, the primary beneficiary stayed enrolled in year 2.
- Not pregnant
Methods – utilization before aging out...

- Comparison across groups and over time:
  - Time invariant variables were cancelled out
  - Variable of interest: indicator of being in the last year of dependent coverage
  - Remaining differences in age and calendar year in which the consumption was incurred were adjusted

Sample size:
- T: 93,797   C: 180,266
Methods – insurance afterwards

Question 2: how did their insurance status change after aging out?

SIPP Wave 10-16 Sample (over 52,000 households)

Young adults (aged 19-31) under parents’ coverage (4,417 people)

Aged out (2,247 people)

Not aged out

Became uninsured (over 600 people)

Regained insurance

Others
Methods – insurance afterwards...

Aging out sample (those aged out individuals)
  ◦ Depict their insurance status month by month
    ◦ Public insurance
    ◦ Private insurance
    ◦ Uninsured
Methods – insurance afterwards...

Uninsured spell sample (those with uninsured spells after aging out)

- Factors affecting regaining coverage and uninsured spells
  - Demographic, socioeconomic and health characteristics
- One issue:
  - Uninsured spell is bounded by observed months
- Cox proportional hazards model
  - Hazard ratio of regaining insurance
  - Right-censored observations
## Results – Utilization before aging out

Regression results on differences in healthcare utilizations among treatment and comparison groups

<table>
<thead>
<tr>
<th></th>
<th>Hospital admissions</th>
<th>Outpatient visits</th>
<th>ER visits</th>
<th>Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: baseline regressions using the whole sample^a</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment group</td>
<td>-0.008***</td>
<td>-0.306***</td>
<td>0.002</td>
<td>-0.234***</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.070)</td>
<td>(0.007)</td>
<td>(0.081)</td>
</tr>
<tr>
<td>N</td>
<td>274,063</td>
<td>274,063</td>
<td>274,063</td>
<td>228,097</td>
</tr>
<tr>
<td></td>
<td>Hospital admissions</td>
<td>Outpatient visits</td>
<td>ER visits</td>
<td>Prescriptions</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------</td>
<td>-------------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>Panel A: baseline regressions using the whole sample</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment group</td>
<td>-0.008***</td>
<td>-0.306***</td>
<td>0.002</td>
<td>-0.234***</td>
</tr>
<tr>
<td>(0.003)</td>
<td>(0.070)</td>
<td>(0.007)</td>
<td>(0.081)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>274,063</td>
<td>274,063</td>
<td>274,063</td>
<td>228,097</td>
</tr>
<tr>
<td><strong>Panel B: Stratified regressions by age group</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-year old (2013 age)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment group</td>
<td>-0.006**</td>
<td>-0.253***</td>
<td>-0.003</td>
<td>-0.175**</td>
</tr>
<tr>
<td>(0.002)</td>
<td>(0.084)</td>
<td>(0.009)</td>
<td>(0.080)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>100,101</td>
<td>100,101</td>
<td>100,101</td>
<td>82,516</td>
</tr>
<tr>
<td>26-year old (2013 age)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment group</td>
<td>-0.020*</td>
<td>-0.652*</td>
<td>0.028</td>
<td>-0.618***</td>
</tr>
<tr>
<td>(0.012)</td>
<td>(0.327)</td>
<td>(0.023)</td>
<td>(0.172)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>18,895</td>
<td>18,895</td>
<td>18,895</td>
<td>15,481</td>
</tr>
<tr>
<td><strong>Panel C: Restricted sample with 2012 as last year</strong>&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment group</td>
<td>-0.008***</td>
<td>-0.316***</td>
<td>-0.002</td>
<td>-0.244***</td>
</tr>
<tr>
<td>(0.003)</td>
<td>(0.069)</td>
<td>(0.007)</td>
<td>(0.079)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>233,426</td>
<td>233,426</td>
<td>233,426</td>
<td>195,031</td>
</tr>
</tbody>
</table>
Results – Insurance afterwards

**Fig 2.** Insurance type changes in 12 observed months after leaving parents’ insurance
Hazard ratios of regaining insurance coverage among aged-out individuals with uninsured spells

<table>
<thead>
<tr>
<th>Hazard Ratio of Regaining Coverage</th>
<th>Hazard Ratio</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1.170</td>
<td>0.157</td>
</tr>
<tr>
<td>Black</td>
<td>0.816</td>
<td>0.150</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.776</td>
<td>0.137</td>
</tr>
<tr>
<td>Asian</td>
<td>0.848</td>
<td>0.362</td>
</tr>
<tr>
<td>Other Races</td>
<td>0.939</td>
<td>0.345</td>
</tr>
<tr>
<td>Married</td>
<td>1.055</td>
<td>0.285</td>
</tr>
<tr>
<td>Age</td>
<td>0.896**</td>
<td>0.046</td>
</tr>
<tr>
<td>Bad health</td>
<td>1.231</td>
<td>0.187</td>
</tr>
<tr>
<td>High school graduates</td>
<td>1.040</td>
<td>0.388</td>
</tr>
<tr>
<td>Some college</td>
<td>1.477</td>
<td>0.490</td>
</tr>
<tr>
<td>College graduates</td>
<td>2.169**</td>
<td>0.777</td>
</tr>
<tr>
<td>Student</td>
<td>1.138</td>
<td>0.169</td>
</tr>
<tr>
<td>Full-time job</td>
<td>1.158</td>
<td>0.124</td>
</tr>
<tr>
<td>Part-time job</td>
<td>0.498</td>
<td>0.278</td>
</tr>
<tr>
<td>Income/FPL</td>
<td>0.997</td>
<td>0.063</td>
</tr>
<tr>
<td>(Income/FPL) squared</td>
<td>1.001</td>
<td>0.004</td>
</tr>
<tr>
<td>N</td>
<td>632</td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

No evidence of “use it before you lose it” behavior during aging out

- Consistent with previous literature
- Relative reduction in health services use, except ER visits, compared to individuals who stayed under parents’ coverage

Why decreased usage in the last year?

- Gradually “fade out”
- Uncertainty on how and when exactly the coverage would end

4-5 months to “get settled” in insurance coverage afterwards

The uninsured rate among aging-out individuals

- < that among young adults prior to ACA
- <= that among the overall young adults population

Older individuals and individuals without college degrees were less likely to regain insurance and thus have longer uninsured spells
Implications

More efforts can be made on guiding young adults making a smooth transition

- Providing more information on how and when exactly aging out process would happen
- Pay more attention to individuals with higher risk of longer uninsured spells
- Guidance on planning ahead and knowing the options for new coverages