

Problem Set 2: Did Medicaid Expansions Affect Childbearing?

Background

The main provisions of the Affordable Care Act (ACA) took effect in 2014. In all states, the ACA provided incentives for uninsured individuals to obtain insurance, through penalties on workers and firms who did not have insurance along with subsidized insurance available through health insurance exchanges. In addition, many states chose to expand Medicaid coverage to all low-income adults (previously Medicaid limited eligibility primarily to families with children). This expansion was nearly fully funded by the federal government, at least in the initial years, but many states did not take it up for political reasons. Most states expanded Medicaid in 2014, but some did so in later years.

States that enacted Medicaid expansions under the Affordable Care Act (ACA) had significant increases in health insurance coverage and declines in mortality among less educated residents ages 55-64 (Miller et al., 2019). Among less educated young adults, Medicaid expansions could have affected child-bearing decisions for a variety of reasons: (1) Medicaid expansions reduced incentives to work for this population because individuals no longer had to work to obtain employer-provided health insurance (e.g., Chou & Staiger, 2002), (2) Medicaid expansions reduced incentives to have a child because individuals no longer needed children to qualify for Medicaid, and (3) Medicaid expansions increased access to family planning services. Some have argued that these impacts could be large, particularly for subgroups of individuals with the greatest need of insurance and the lowest earnings potential, and in those states with low barriers to enrollment and generous Medicaid programs.

Your Mission

Your job is to use the dataset “ps2_acs_2008to2019.dta” (available on canvas and described below) to investigate whether the ACA Medicaid expansions affected childbearing among less educated residents ages 26-30 (I exclude individuals under age 26 because other provisions of the ACA affected them differently). As in the first problem set, report and interpret your findings in a brief report (3-5 pages of text, 5 tables/figs max). So, you should (1) succinctly summarize the issues, (2) outline how you address them empirically (e.g. data, empirical design, and basic models), (3) discuss your empirical results, and (4) conclude with what it all means. I leave it up to you exactly what to focus on and report. As with other problem sets, I strongly suggest you work in small groups (2-3) on this problem set.

The Data

The data comes from 12 years (2008-2019) of the American Community Survey, downloaded from the ipums.org website. It includes data for 173,554 individuals aged 26-30 who are not SSI recipients and have less than a high school degree. This sample is like that used by Miller et al. (2019) except that it does not also include higher education individuals with household income below 138% FPL (never select your sample based on income if income is a potential outcome variable!).

Variables

In addition to state identifiers (fips code and state name) and year, the data includes the following variables (they are well labeled, including value labels):

1. perwt: sampling weight for each individual
 2. nchild: number of own children in the household
 3. yngch: age of youngest own child in the household
 4. sex: 1=male, 2=female
 5. age: age in years at time of survey (26-30)
 6. marst: marital status (1=married spouse present, 2=married spouse absent, 3=separated, 4=divorced, 5=widowed, 6=never married/single)
 7. race: 1=white, 2=black, 3=native amer/alask nat, 4=Chinese, 5=Japanese, 6=other Asian or pac isl, 7=other, 8=2 races, 9=3+ races
 8. hispan: hispanic origin (0=not Hispanic, 1=Mexican, 2=Puerto Rican, 3=Cuban, 4=other)
 9. hcovany: any health insurance coverage (1=no, 2=yes)
 10. hinsemp: health insurance through employer/union (1=no, 2=yes)
 11. hcovpub: public health ins coverage (Medicaid/Medicare/VA) (1=no, 2=yes)
 12. hinscaid: health insurance through Medicaid (1=no, 2=yes)
 13. educ: educational attainment (0=none, 1=grade K-4, 2=5-8, 3=9, 4=10, 5=11)
 14. empstat: employment status (1=employed, 2=unemployed, 3=not in labor force)
 15. uhrrwork: usual hours worked per week (0-99)
 16. inearn: total personal earned income (wages/salary/tips/bonus+business income)
 17. educ_sp: educational attainment of spouse (same coding as educ plus 6-11 for high school grad through college, =. if no spouse)
 18. medicaid_exp: state passed ACA Medicaid expansion (1=yes, 0=no)
 19. medicaid_exp_year = year Medicaid expansion takes effect (=0 if no expansion)
- (Medicaid expansion data from Kaiser Family Foundation, kff.org)

Stata Tips

You can run models with state fixed effects and using sampling weights (e.g. [pw=perwt]) using areg or just including i.state in the regular reg command.

“gen post_mcaid = (year>=medicaid_exp_year)* medicaid_exp” creates a dummy=1 for years in which Medicaid expansion is in effect in a state, e.g. treated*post.

“gen mcaid_plus1 = (year==medicaid_exp_year+1)* medicaid_exp”

“gen mcaid_minus2 = (year==medicaid_exp_year-2)* medicaid_exp”, etc.

create dummies for one year after the expansion, 2 years before the expansion, etc for doing event-study estimates (or use eventdd – see below).

“net install eventdd” installs an automated stata command for estimating event studies in panel data and graphing the output (like the graphs in Miller et al.). The syntax is a little awkward. See <https://ftp.iza.org/dp13524.pdf> for a full description of the command and references to the recent lit on issues with dif-in-dif. It works best in this data if you use “method(ols)” and just include i.statefip and i.year directly as controls.