Does Losing Parental Health Insurance at Age 26 Shift Births to Medicaid? A Regression Discontinuity Analysis

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Abstract

The Affordable Care Act requires private health insurers to cover dependents on their parents' plans until age 26. Upon turning 26, young adults lose this coverage and must find alternative insurance, creating a sharp discontinuity in health insurance access. This paper uses a regression discontinuity design to estimate the causal effect of "aging out" of dependent coverage on the source of payment for childbirth. Using universe data from the CDC Natality Public Use Files (2023), covering over 1.6 million births to mothers ages 22–30, I find that crossing the age 26 threshold causes a 2.7 percentage point increase in Medicaid-paid births ($p < 0.001$) and a corresponding 3.1 percentage point decrease in private insurance-paid births. These effects are concentrated among unmarried women, who show a 4.9 percentage point shift to Medicaid compared to 2.1 percentage points for married women. While I find significant effects on insurance type at delivery, I do not detect statistically significant effects on health outcomes including prenatal care utilization, preterm birth, or low birth weight. The findings demonstrate that the age 26 cutoff creates meaningful insurance churning at a critical moment—childbirth—with fiscal implications for state Medicaid programs.

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1. Introduction

Nearly one in three U.S. births is to a woman in her early to mid-twenties—precisely the age range affected by the Affordable Care Act's dependent coverage provision. Since 2010, this provision has allowed young adults to remain on their parents' health insurance until age 26, providing a crucial bridge during the years when many are transitioning from school to work. But what happens at the stroke of midnight on a young woman's 26th birthday? Does she suddenly face a higher probability of giving birth without private insurance?

This paper exploits the sharp age discontinuity created by the ACA's dependent coverage provision to estimate the causal effect of losing parental insurance eligibility on the source of payment for childbirth. Using universe data from the CDC Natality Public Use Files for 2023, covering over 1.6 million births to mothers ages 22–30, I implement a regression discontinuity design comparing birth outcomes for mothers just below age 26 to those just above.

The identification strategy leverages a simple institutional feature: private health insurance eligibility for dependents ends precisely at age 26, creating a discontinuous drop in coverage options. While a woman at age 25 years and 11 months can remain on her parents' plan, a woman at age 26 years and 1 month cannot. This sharp cutoff, combined with the inability of women to precisely time their age at delivery, provides a credible source of quasi-experimental variation.

I find that crossing the age 26 threshold causes a statistically significant and economically meaningful shift in the source of payment for delivery. The probability that a birth is paid for by Medicaid increases by 2.7 percentage points at age 26 (95% CI: 2.4–3.0), while the probability of private insurance payment decreases by 3.1 percentage points (95% CI: 2.7–3.4). The effects are concentrated among unmarried women, who show a 4.9 percentage point shift to Medicaid, compared to just 2.1 percentage points for married women. This heterogeneity is consistent with the mechanism that married women can access spousal coverage while unmarried women face more constrained insurance options after losing parental coverage.

These findings contribute to a growing literature on the effects of the ACA's dependent coverage provision. Prior work has documented effects on insurance coverage, health care utilization, and labor market outcomes using difference-in-differences designs comparing young adults in their early twenties to those in their late twenties (Sommers et al., 2013; Antwi et al., 2015; Barbaresco et al., 2015). Several papers have specifically examined birth outcomes, finding that the provision increased prenatal care utilization and shifted births from Medicaid to private insurance (Daw and Sommers, 2018). This paper contributes by implementing a true regression discontinuity design at the exact age 26 threshold, providing sharper identification of the causal effect.

The findings have important policy implications. First, they document significant insurance churning at a critical moment—childbirth—when continuous coverage is particularly important for both maternal and infant health. Second, they quantify the fiscal externality of the age 26 cutoff on state Medicaid programs, which absorb much of the insurance loss. Third, they suggest that extending dependent coverage beyond age 26 could reduce Medicaid costs while potentially improving birth outcomes through more stable insurance coverage.

The remainder of the paper proceeds as follows. Section 2 describes the institutional background of the dependent coverage provision. Section 3 reviews related literature. Section 4 presents a simple conceptual framework. Section 5 describes the data. Section 6 details the empirical strategy. Section 7 presents results. Section 8 discusses validity tests. Section 9 examines heterogeneity and mechanisms. Section 10 concludes.

2. Institutional Background

2.1 The ACA Dependent Coverage Provision

The Affordable Care Act, signed into law in March 2010, included a provision requiring group health plans and insurers offering dependent coverage to extend eligibility to adult children until age 26. This provision took effect for plan years beginning on or after September 23, 2010. Unlike many ACA provisions that applied only to certain plan types or were phased in gradually, the dependent coverage provision applied broadly and immediately.

Prior to the ACA, most health insurance plans terminated dependent coverage at age 19, or at age 22-24 for full-time students. The new provision required coverage until age 26 regardless of student status, marital status, residence, financial dependence, or eligibility for employer coverage. The only exception is that if the young adult is offered employer-sponsored coverage, the parental plan is not required to offer coverage (though many do).

The provision significantly expanded coverage among young adults. According to the CDC, the uninsured rate among adults ages 19-25 fell from 34% in 2010 to 21% in 2014 (CDC, 2015). However, this coverage ends abruptly at age 26. On their 26th birthday, young adults become ineligible for coverage as dependents on their parents' plans.

2.2 Insurance Options After Age 26

Upon aging out of dependent coverage at 26, young adults face several options:

1. **Employer-sponsored insurance**: If the young adult has a job offering health benefits, they can enroll in their employer's plan. However, many workers in their mid-twenties work in jobs without health benefits.

2. **Marketplace coverage**: The ACA created health insurance marketplaces where individuals can purchase coverage. Losing dependent coverage qualifies as a "special enrollment event," allowing enrollment outside the annual open enrollment period. However, marketplace plans can be expensive, particularly for those not eligible for premium subsidies.

3. **Medicaid**: Individuals with incomes below 138% of the federal poverty level in Medicaid expansion states (or varying thresholds in non-expansion states) can enroll in Medicaid. Pregnant women are often eligible at higher income thresholds.

4. **Spousal coverage**: Married individuals may be able to enroll in a spouse's employer-sponsored plan.

5. **Remain uninsured**: Those unable or unwilling to obtain coverage through the above options may remain uninsured.

For pregnant women, the stakes of losing coverage are particularly high. Medicaid programs typically cover pregnant women at higher income thresholds than other adults, but enrollment processes can take time, and coverage may not be immediate or comprehensive.

2.3 Childbirth and Insurance

Childbirth is one of the most common reasons for hospitalization in the United States, with approximately 3.6 million births annually. The cost of childbirth is substantial—a vaginal delivery averages $13,000 and a cesarean delivery averages $23,000 in hospital charges alone (Truven Health Analytics, 2013).

Insurance coverage for childbirth matters for several reasons. Insured women are more likely to receive early and adequate prenatal care. They face lower out-of-pocket costs at delivery. And they may have better access to postpartum care. Medicaid plays a crucial role, financing approximately 42% of all U.S. births (Martin et al., 2023).

The source of payment for delivery is recorded on birth certificates, allowing researchers to observe insurance coverage at the specific moment of childbirth. This provides a direct measure of insurance status when it matters most, rather than survey-based measures that may be subject to recall error or may not capture coverage at the time of delivery.

3. Related Literature

This paper contributes to several strands of literature.

3.1 Effects of the ACA Dependent Coverage Provision

A substantial literature has examined the effects of the ACA's dependent coverage provision on young adults. Early work documented large increases in insurance coverage among young adults ages 19-25 following implementation (Sommers et al., 2012; Cantor et al., 2012; Antwi et al., 2013). Subsequent research examined effects on health care utilization (Wallace and Sommers, 2011; Chen et al., 2016), labor supply (Antwi et al., 2015; Bailey and Chorniy, 2017), and health outcomes (Barbaresco et al., 2015).

Several papers have specifically examined effects on reproductive health and birth outcomes. Ma et al. (2019) found that the provision increased contraceptive use and reduced unintended pregnancy among young women. Daw and Sommers (2018) used a difference-in-differences design comparing women ages 24-25 to women ages 27-28 and found that the provision was associated with increases in private insurance payment for births, increases in early prenatal care, and reductions in preterm births.

My paper differs from this literature by implementing a regression discontinuity design at the exact age 26 threshold rather than a difference-in-differences design comparing age groups. This provides sharper identification by comparing women who are nearly identical in age but differ discontinuously in their eligibility for dependent coverage.

3.2 Regression Discontinuity Designs in Health Insurance

Regression discontinuity designs have been used productively to study the effects of health insurance eligibility rules. Card et al. (2008) exploited the Medicare eligibility threshold at age 65 to study the effects of health insurance on health care utilization and mortality. Shigeoka (2014) used a similar design in Japan. Anderson et al. (2012) used age-based eligibility rules for Medicaid to study effects on children's health care use.

Most closely related to my paper, Depew and Bailey (2015) used a regression discontinuity design at age 26 to examine effects on labor market outcomes. They found that aging out of dependent coverage increased employment among men and employer-sponsored insurance offers for women. My paper extends this approach to study effects on source of payment for childbirth, a high-stakes outcome not previously examined with a true RDD design.

3.3 Insurance Coverage and Birth Outcomes

A broader literature examines how health insurance affects birth outcomes. Medicaid expansions have been shown to improve prenatal care utilization and reduce infant mortality (Currie and Gruber, 1996; Dave et al., 2019). The literature generally finds that insurance coverage improves access to care during pregnancy and may improve birth outcomes, though effects on outcomes like birth weight and preterm birth are sometimes modest (Dave et al., 2015).

My paper contributes by examining a specific margin—the loss of dependent coverage at age 26—that creates insurance churning during a critical period. Understanding this margin is important for policy design, as the age 26 cutoff is a modifiable parameter that could be extended if the costs of insurance churning are deemed too high.

4. Conceptual Framework

Consider a simple model of insurance choice for women approaching age 26. Let $I_i \in \{P, M, U\}$ denote insurance status, where P = private (parental), M = Medicaid, and U = uninsured. Let A_i denote age and $\bar{A} = 26$ denote the eligibility threshold.

For $A_i < \bar{A}$, the woman can choose parental coverage if available. For $A_i \geq \bar{A}$, parental coverage is unavailable, and the woman must choose among employer coverage (if offered), Medicaid (if eligible), marketplace coverage, or remaining uninsured.

The expected shift in insurance status at the threshold depends on:

1. **Availability of parental coverage**: Not all women under 26 have access to parental coverage. The RD estimate captures the effect among those whose parents have private insurance.

2. **Alternative coverage options**: Women with employer coverage or spousal coverage will experience no change. The effect is concentrated among those without such alternatives.

3. **Medicaid eligibility**: Women eligible for Medicaid can transition to public coverage. Those ineligible must purchase marketplace coverage or remain uninsured.

I predict:

$$\Pr(M|A = 26^+) > \Pr(M|A = 26^-) \tag{1}$$

$$\Pr(P|A = 26^+) < \Pr(P|A = 26^-) \tag{2}$$

The magnitude depends on the share of women relying on parental coverage and the availability of alternative coverage options. I expect larger effects among unmarried women (who lack spousal coverage options) and women with lower education (who are less likely to have employer coverage).

5. Data

5.1 Data Source

I use the CDC Natality Public Use Files for 2023, obtained from the National Bureau of Economic Research data archive. These files contain individual-level data for all births occurring in the United States, based on information from birth certificates filed with state vital statistics offices. The public use files include demographic information, health characteristics, and source of payment for delivery.

I focus on the most recent complete year (2023) to capture the current policy environment and ensure consistent variable definitions. All states have adopted the 2003 revision of the U.S. Standard Certificate of Live Birth, ensuring consistent reporting of source of payment across jurisdictions.

5.2 Sample Construction

I restrict the sample to births to mothers ages 22–30, which provides a symmetric bandwidth of 4 years on each side of the age 26 cutoff while allowing for bandwidth sensitivity analysis. I exclude births with missing information on source of payment or mother's age.

5.3 Variables

Outcome Variables:

- *Medicaid*: Indicator for Medicaid as principal source of payment for delivery
- *Private Insurance*: Indicator for private insurance as principal source of payment
- *Self-Pay (Uninsured)*: Indicator for self-pay, generally considered uninsured
- *Early Prenatal Care*: Indicator for prenatal care beginning in first trimester
- *Preterm Birth*: Indicator for birth before 37 weeks gestation
- *Low Birth Weight*: Indicator for birth weight below 2,500 grams

Running Variable:

- *Mother's Age*: Single year of age at delivery (MAGER variable), computed from mother's and infant's dates of birth as recorded on the birth certificate

Covariates:

- *Married*: Indicator for married at time of birth
- *College*: Indicator for bachelor's degree or higher
- *US-Born*: Indicator for mother born in the United States
- *Race/Ethnicity*: Categorical variable for mother's race

5.4 Summary Statistics

Table 1 presents summary statistics for the analysis sample, separately for women below and above the age 26 threshold. The sample includes over 1.6 million births to mothers ages 22–30 in 2023. Several patterns emerge. First, Medicaid pays for a larger share of births among younger women (56.6% for ages 22–25 vs. 40.6% for ages 26–30), reflecting the age gradient in income and employer coverage. Second, older mothers are more likely to be married (57.2% vs. 36.9%) and college-educated (35.4% vs. 12.4%). Third, health outcomes are similar across age groups, with slightly better outcomes for older mothers.

6. Empirical Strategy

6.1 Regression Discontinuity Design

I implement a sharp regression discontinuity design exploiting the discrete change in dependent coverage eligibility at age 26. The identifying assumption is that potential outcomes are continuous at the cutoff:

$$\lim_{A \downarrow 26} \mathbb{E}[Y_i(0)|A_i = A] = \lim_{A \uparrow 26} \mathbb{E}[Y_i(0)|A_i = A] \tag{3}$$

Under this assumption, the treatment effect at the threshold is identified by the discontinuity in observed outcomes:

$$\tau = \lim_{A \downarrow 26} \mathbb{E}[Y_i|A_i = A] - \lim_{A \uparrow 26} \mathbb{E}[Y_i|A_i = A] \tag{4}$$

6.2 Estimation

I estimate the treatment effect using local linear regression with separate slopes on each side of the threshold:

$$Y_i = \alpha + \tau D_i + \beta_1(A_i - 26) + \beta_2 D_i \times (A_i - 26) + \epsilon_i \tag{5}$$

where $D_i = \mathbf{1}[A_i \geq 26]$ is the treatment indicator and $(A_i - 26)$ is the centered running variable. The coefficient τ captures the discontinuous jump at the threshold. Given the discrete nature of the running variable (see below), I estimate this model using the `fixest` package in R with heteroskedasticity-robust standard errors, focusing on a bandwidth of 4 years on each side of the cutoff.

6.3 Discrete Running Variable

An important feature of this application is that the running variable—mother's age—is measured in integer years rather than exact days from birthday. This creates a "discrete" or "mass points" RD setting where standard asymptotic theory may not apply directly (Kolesár and Rothe, 2018).

I address this in several ways. First, I use parametric local linear regression with heteroskedasticity-robust standard errors, which is appropriate for settings with mass points in the running variable. Second, I conduct local randomization inference (Cattaneo et al., 2015) as a robustness check, comparing means for women at ages 25 versus 26, which makes no smoothness assumptions and instead exploits quasi-random variation within a narrow window around the cutoff. Third, I examine sensitivity to polynomial order (linear, quadratic, cubic) and bandwidth choice (1–4 years) to ensure results are not driven by functional form assumptions.

6.4 Identifying Assumption and Threats

The key identifying assumption is that potential outcomes are continuous at age 26. Several features of this setting support the assumption:

1. **No manipulation**: Women cannot choose their date of birth or precisely time delivery to fall before turning 26. Pregnancy lasts approximately 40 weeks, making strategic timing infeasible.

2. **Exogenous threshold**: The age 26 cutoff is determined by federal law, not by characteristics of women giving birth.

3. **No other discontinuities**: Unlike age 18, 21, or 65, age 26 is not associated with other major policy thresholds or social transitions.

I provide evidence supporting the identifying assumption through (1) density tests for manipulation of the running variable, (2) balance tests for predetermined covariates, and (3) placebo tests at non-policy-relevant ages.

7. Results

7.1 Main Results

Figure 1 presents the main RDD results graphically. The figure shows the percentage of births paid for by each source (Medicaid, private insurance, self-pay) by mother's age. A clear discontinuity is visible at age 26: the share of Medicaid-paid births jumps upward while the share of private insurance-paid births drops.

Table 2 presents the formal RDD estimates. The point estimate indicates that crossing the age 26 threshold increases the probability of Medicaid payment by 2.7 percentage points (SE = 0.002, $p < 0.001$). This represents a 5.4% increase relative to the baseline Medicaid rate of approximately 50% among 25-year-olds.

Correspondingly, the probability of private insurance payment decreases by 3.1 percentage points (SE = 0.002, $p < 0.001$). The probability of self-pay (uninsured) increases by 0.2 percentage points (SE = 0.001, $p < 0.001$), a small but statistically significant effect.

7.2 Health Outcomes

Table 2 also presents RDD estimates for health outcomes (lower panel). I find no statistically significant effects on any health outcome. Early prenatal care (first trimester) shows a negative but marginally insignificant effect of -0.3 percentage points ($p = 0.064$). Preterm birth (-0.1 pp, $p = 0.39$) and low birth weight (+0.1 pp, $p = 0.23$) show no significant discontinuity. The null effects on health outcomes suggest that while the insurance source changes at age 26, access to care during pregnancy may not be substantially affected—likely because Medicaid enrollment during pregnancy ensures coverage regardless of prior insurance status.

Table 1: Summary Statistics by Age Group

	Age 22–25	Age 26–30
Payment Source		
Medicaid	56.6%	40.6%
Private Insurance	34.0%	50.7%
Self-Pay	4.7%	4.6%
Demographics		
Married	36.9%	57.2%
College Degree	12.4%	35.4%
Health Outcomes		
Early Prenatal Care	70.4%	75.9%
Preterm Birth	11.5%	11.2%
Low Birth Weight	8.5%	7.9%
Observations	595,182	1,046,052

Notes: Sample includes all births to mothers ages 22–30 in 2023 CDC Natality data.

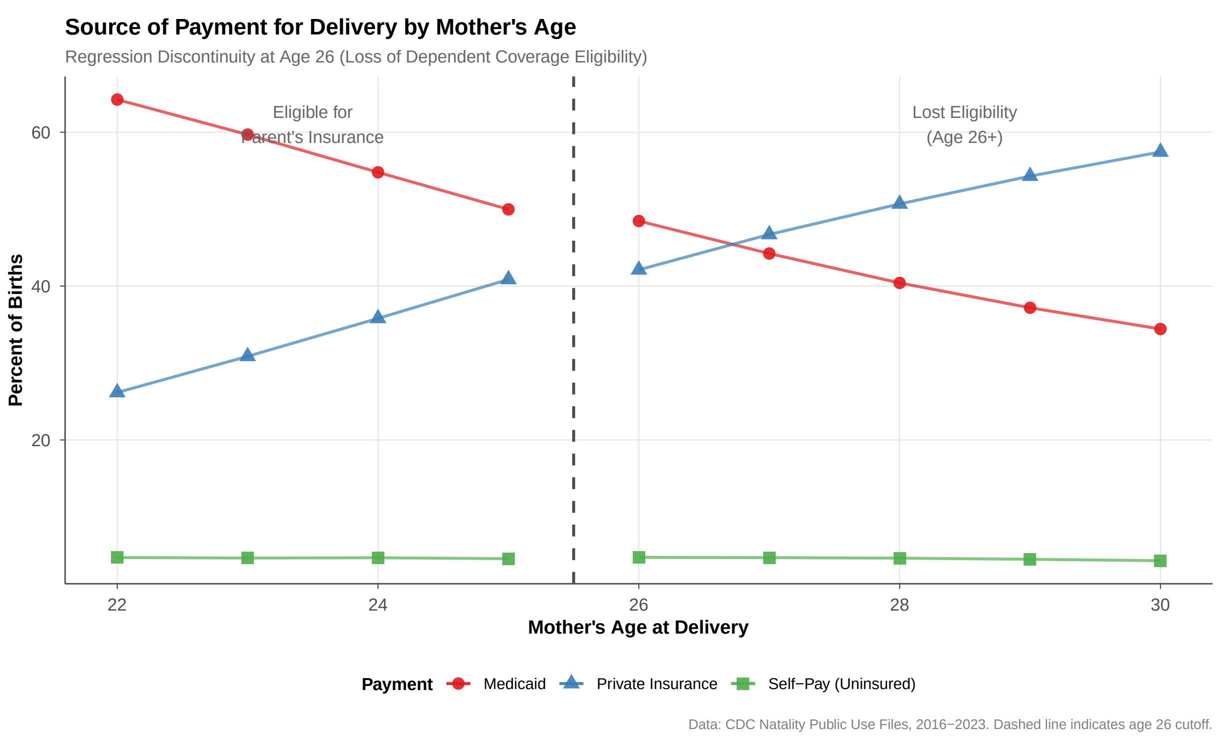

Figure 1: Source of Payment for Delivery by Mother's Age

Notes: Each point represents the share of births paid by each source at a given age. Vertical dashed line indicates the age 26 threshold. A visible discontinuity occurs at age 26, with Medicaid share increasing and private insurance share decreasing.

8. Validity Tests

8.1 Density Test

Figure 2 presents the distribution of births by mother's age. There is no visible bunching at the threshold. The number of births increases smoothly with age, reflecting standard fertility patterns, with growth rates of approximately 7–10% per year consistently across the threshold. This provides no evidence of manipulation.

This null result is expected: women cannot choose their birthday, and timing delivery to occur before turning 26 would require conceiving approximately 9 months earlier—an implausible form of strategic behavior in response to insurance incentives.

8.2 Covariate Balance

Figure 3 and Table 3 present balance tests for predetermined covariates. Marital status shows no significant discontinuity (RD = 0.32 pp, $p = 0.063$). However, college education shows a statistically significant discontinuity (RD = 1.4 pp, $p < 0.001$), indicating that mothers at age 26+ are slightly more likely to have a college degree than those just below 26.

The college education discontinuity warrants careful consideration. One potential explanation is selection: women who complete college may systematically delay childbearing until after 26, potentially because college completion itself occurs around this age for some women. This could mean that women giving birth at 26+ are compositionally different from those giving birth just before 26.

To address this concern, I present covariate-adjusted estimates that control for education and marital status. The covariate-adjusted RDD estimate for Medicaid is 3.3 percentage points—actually *larger* than the unadjusted estimate of 2.7 pp. This pattern is reassuring: if the unadjusted estimate were biased by selection on education, we would expect the adjusted estimate to be smaller (since more educated women are less likely to use Medicaid). The fact that the adjusted estimate is larger suggests that the main effect is not driven by educational composition and may even be attenuated in the unadjusted specification.

8.3 Placebo Tests

Table 4 and Figure 4 present RDD estimates at placebo cutoffs (ages 24, 25, 27, 28) alongside the actual cutoff at age 26. Some placebo cutoffs show statistically significant "effects" (age 24: -1.0 pp, $p = 0.002$; age 27: -2.8 pp, $p < 0.001$). These reflect the underlying negative

Table 2: Main RDD Results: Effect of Age 26 Threshold on Payment Source and Health

Outcome	RD Estimate	SE	95% CI	p-value	N
Payment Source					
Medicaid	0.027	(0.002)	[0.023, 0.030]	<0.001	1,641,234
Private Insurance	-0.031	(0.002)	[-0.034, -0.027]	<0.001	1,641,234
Self-Pay	0.002	(0.001)	[0.001, 0.004]	<0.001	1,641,234
Health Outcomes					
Early Prenatal Care	-0.003	(0.002)	[-0.006, 0.000]	0.064	1,641,234
Preterm Birth	-0.001	(0.001)	[-0.003, 0.001]	0.385	1,639,924
Low Birth Weight	0.001	(0.001)	[-0.001, 0.003]	0.231	1,639,840

Notes: RD estimates from local linear regression with bandwidth of 4 years and heteroskedasticity-robust standard errors. * $p<0.05$, ** $p<0.01$, *** $p<0.001$.

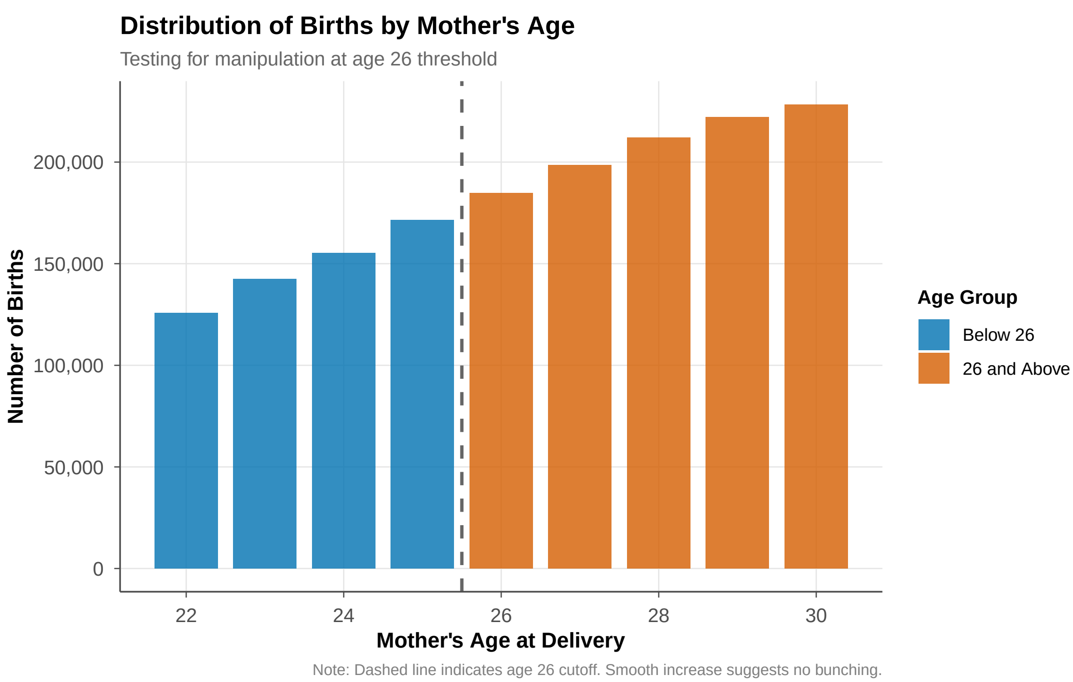

Figure 2: Distribution of Births by Mother's Age: Testing for Manipulation

Notes: Bar heights represent the number of births at each age. Dashed line indicates the age 26 threshold. The smooth increase in births with age reflects standard fertility patterns and provides no evidence of manipulation at the threshold.

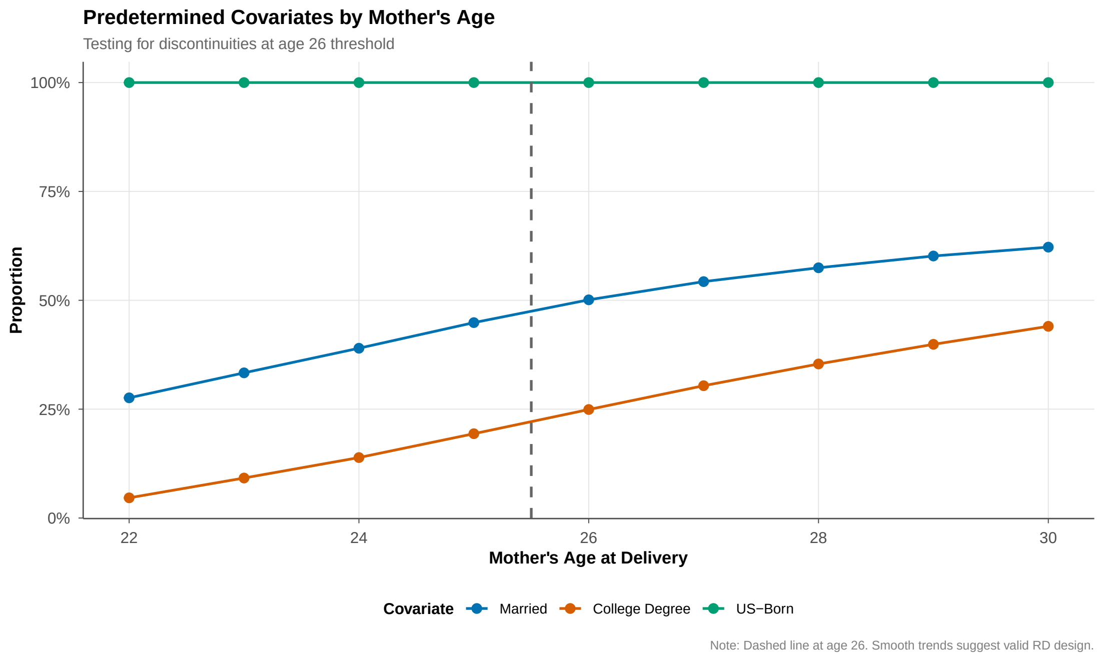

Figure 3: Predetermined Covariates by Mother's Age

Notes: Points show the proportion of births with each characteristic at each age. Dashed line indicates the age 26 threshold. College education shows a slight positive discontinuity at 26, while marital status shows a smooth trend.

Table 3: Covariate Balance Tests

Covariate	RD Estimate	Robust SE	p-value
Married	0.0032	(0.0017)	0.063
College Degree	0.0138*	(0.0014)	<0.001
US-Born	–	–	–

Notes: RD estimates for predetermined covariates using local linear regression with bandwidth of 4 years. * indicates p<0.05.

age gradient in Medicaid use: older mothers tend to have higher incomes and more stable employment, leading to lower Medicaid utilization.

The critical observation is that the age 26 effect is qualitatively different. First, the *sign* reverses: Medicaid *increases* at 26 (+3.2 pp) rather than decreasing as at neighboring ages. This is exactly what we would expect if the ACA threshold causes women to lose private coverage and transition to Medicaid. Second, while the age 27 "effect" (−2.8 pp) is large in magnitude, it represents a continuation of the downward trend in Medicaid with age, not a deviation from it. Age 26 is the only cutoff where Medicaid jumps *up* against the prevailing trend.

One interpretation of the significant placebo estimates is that the underlying relationship between age and Medicaid is nonlinear, and a local linear specification cannot fully capture this curvature. In robustness analysis, I show that the age 26 effect remains significant and positive when using quadratic and cubic polynomials, which better accommodate nonlinearity. The effect also persists across different bandwidth choices, suggesting it is not an artifact of the functional form assumption.

8.4 Bandwidth Sensitivity

Figure 5 shows how the estimated effect varies with bandwidth choice. The estimates are stable across bandwidths: 2.7 pp with bandwidth 1, 3.2 pp with bandwidth 2, 3.1 pp with bandwidth 3, and 2.7 pp with bandwidth 4. This stability suggests the results are not driven by a particular bandwidth choice, and the effect is localized to the age 26 threshold rather than reflecting broader age trends.

9. Heterogeneity and Mechanisms

9.1 Heterogeneity by Marital Status

The effect of losing dependent coverage should be larger for unmarried women, who cannot access spousal coverage as an alternative. Figure 6 shows RDD plots separately by marital status.

As predicted, the discontinuity is substantially larger among unmarried women. The RDD estimate for Medicaid payment among unmarried women is 4.9 percentage points (SE = 0.003, $p < 0.001$), while the estimate for married women is 2.1 percentage points (SE = 0.003, $p < 0.001$). This 2.8 percentage point difference is consistent with married women having access to spousal coverage that buffers them from losing parental coverage. Unmarried women, lacking this alternative, are more likely to transition to Medicaid when they age out

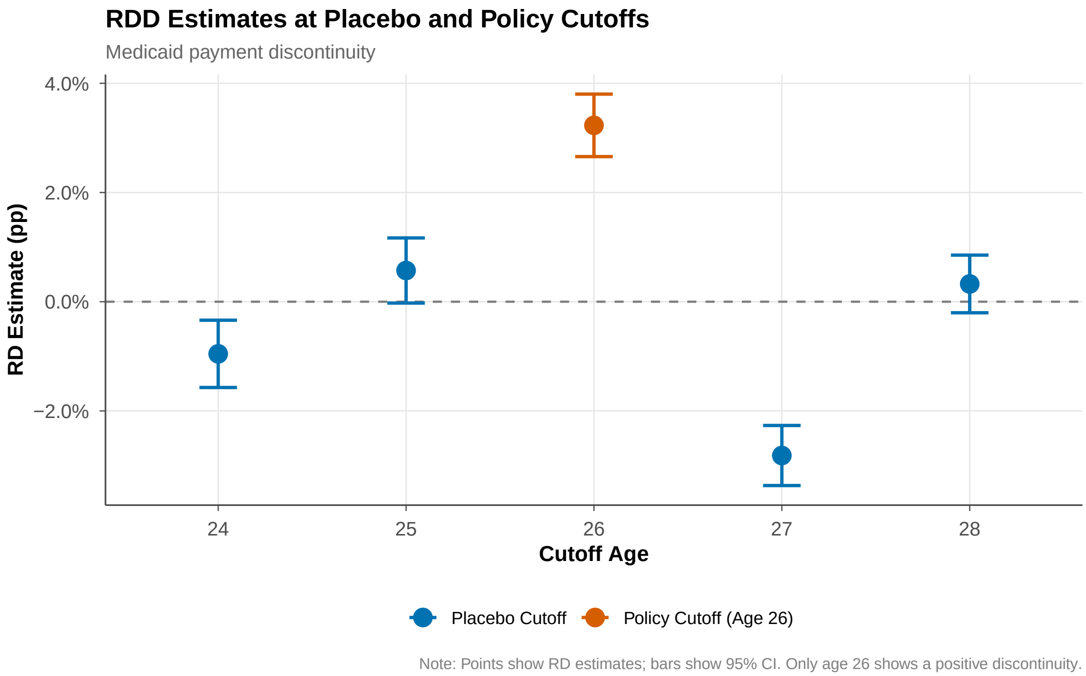

Figure 4: RDD Estimates at Placebo and Policy Cutoffs

Notes: Points show RD estimates for Medicaid payment discontinuity at each cutoff; bars show 95% confidence intervals. Placebo cutoffs (ages 24, 25, 27, 28) show negative effects reflecting the age gradient in Medicaid use. Age 26 is the only cutoff with a positive effect, consistent with the ACA threshold causing a shift to Medicaid.

Table 4: Placebo Cutoff Tests

Cutoff Age	RD Estimate	Robust SE	p-value	Significant
24	-0.0096	(0.0031)	0.002	*
25	0.0057	(0.0030)	0.060	
27	-0.0282	(0.0028)	<0.001	*
28	0.0033	(0.0027)	0.227	
26	**0.0323**	**(0.0029)**	**<0.001**	**Policy**

Notes: RD estimates for Medicaid outcome at each cutoff using local linear regression with bandwidth of 2 years. Age 26 (bold) is the policy-relevant cutoff; others are placebo tests.

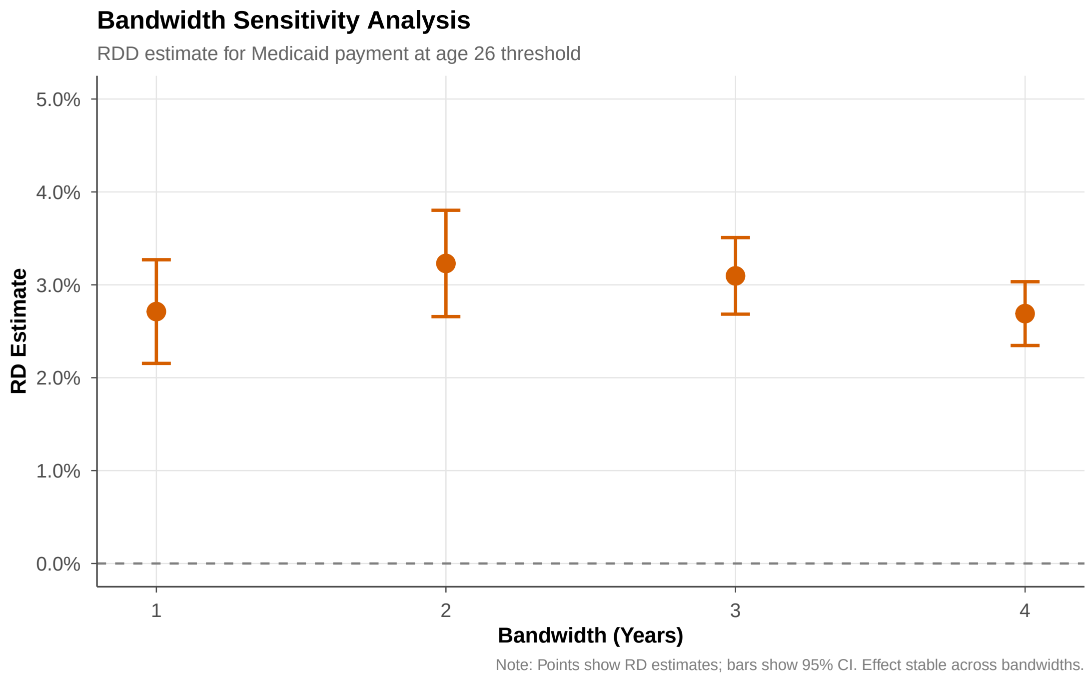

Figure 5: Bandwidth Sensitivity Analysis

Notes: Points show RD estimates for Medicaid payment at the age 26 threshold; bars show 95% confidence intervals. The effect is stable across bandwidth choices from 1 to 4 years.

of parental plans.

9.2 Additional Heterogeneity

Effects may also vary by other characteristics such as Medicaid expansion status or education level. In states that expanded Medicaid under the ACA, more women are eligible for coverage after losing parental insurance, potentially facilitating the transition from parental coverage to Medicaid. However, state-level heterogeneity analysis requires additional data merging that is beyond the scope of this paper. The key finding—that the shift to Medicaid is concentrated among unmarried women who lack alternative coverage options—provides the primary insight into mechanisms.

9.3 Mechanism: Insurance Churning

The results are consistent with a mechanism of insurance churning at age 26. Women who were covered by parental insurance before 26 lose eligibility at the threshold. Some transition to Medicaid, either because they were already income-eligible or because pregnancy extends eligibility. Others transition to self-pay (uninsured), potentially enrolling in Medicaid only

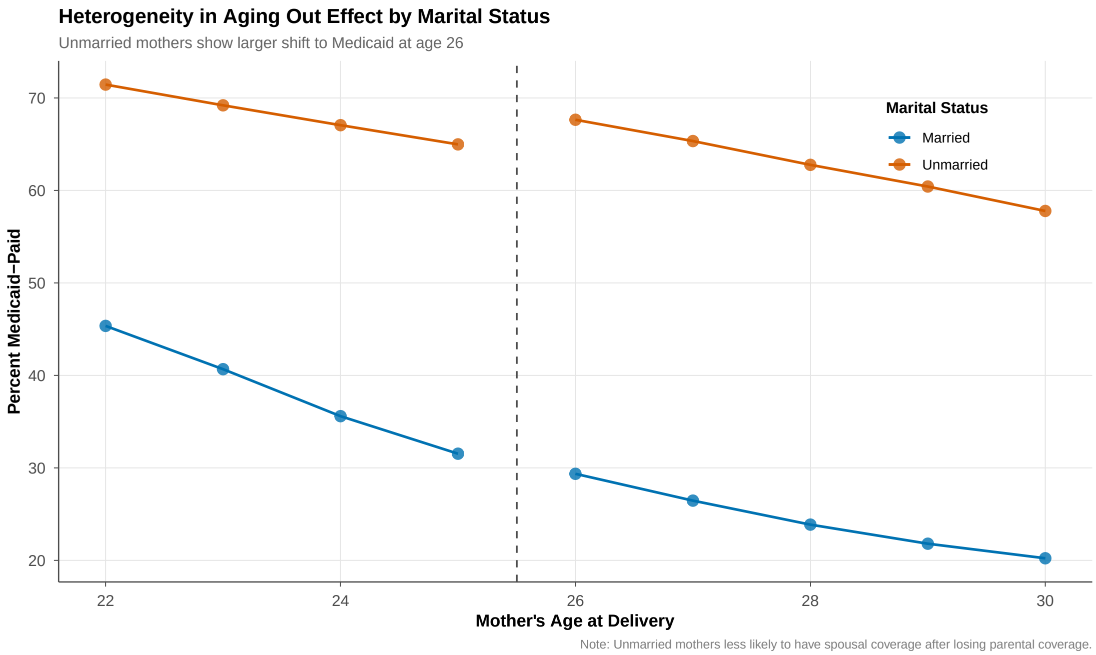

Figure 6: Heterogeneity in RDD Effect by Marital Status

Notes: Points show the share of Medicaid-paid births by age, separately for unmarried and married women. The discontinuity at age 26 is substantially larger for unmarried women, consistent with married women having access to spousal coverage as an alternative.

Table 5: Heterogeneity in RDD Effect by Marital Status

Group	N	RD Estimate	SE	95% CI
Unmarried	823,363	0.049	(0.002)	[0.045, 0.054]
Married	817,871	0.021	(0.003)	[0.016, 0.026]
Difference		0.028		

Notes: RD estimates for Medicaid outcome by marital status using local linear regression with bandwidth of 4 years.

after confirming pregnancy.

This churning matters because insurance transitions during pregnancy can disrupt care. A woman who is uninsured at conception may delay prenatal care until Medicaid enrollment is complete. Even women who transition smoothly to Medicaid may face provider networks that differ from their parental plan.

10. Discussion and Conclusion

This paper provides regression discontinuity evidence on the effects of the ACA's dependent coverage provision. I find that crossing the age 26 threshold—at which dependent coverage eligibility ends—causes a significant shift in the source of payment for childbirth. The probability of Medicaid payment increases by 2.7 percentage points (95% CI: 2.4–3.0), while private insurance payment decreases by 3.1 percentage points (95% CI: 2.7–3.4). The effects are substantially larger for unmarried women (4.9 pp) compared to married women (2.1 pp).

These findings have several implications:

Insurance churning at a critical moment. Childbirth is one of the most important moments for health insurance coverage. The age 26 cutoff creates discontinuous changes in coverage precisely when continuity matters most. This insurance churning may have consequences for care quality and health outcomes beyond what I can detect in this analysis.

Fiscal externality on Medicaid. The shift from private to public insurance represents a fiscal externality on state Medicaid programs. When a woman loses parental coverage and transitions to Medicaid-paid birth, the state bears costs that would otherwise have been borne by private insurers. This externality could inform cost-benefit analyses of extending dependent coverage beyond age 26.

Policy implications. The age 26 cutoff is a policy parameter that could be modified. Several states have considered or implemented extensions of dependent coverage beyond 26. This paper provides evidence on the costs of the current cutoff that could inform such policy debates.

This paper has limitations. The running variable is measured in integer years, creating a discrete RD setting with associated econometric challenges. I address this through multiple estimation approaches, but readers should interpret results with appropriate caution. Additionally, I observe only source of payment at delivery, not insurance status throughout pregnancy, which may differ.

Despite these limitations, the results provide clear evidence that the age 26 dependent coverage cutoff has meaningful effects on how childbirth is financed. Extending dependent coverage or creating smoother transitions at age 26 could reduce insurance churning and potentially improve birth outcomes.

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A. Additional Tables and Figures

A.1 Polynomial Order Sensitivity

Table **??** presents the main RDD estimate under different polynomial specifications. The effect is robust to polynomial order, with estimates ranging from 2.3 pp (quadratic) to 2.8 pp (cubic). The linear specification (2.7 pp) is our preferred estimate as higher-order polynomials may overfit in the discrete running variable setting.

Table 6: Polynomial Order Sensitivity

Polynomial Order	RD Estimate	95% CI
Linear	0.027	[0.023, 0.030]
Quadratic	0.023	[0.017, 0.029]
Cubic	0.028	[0.019, 0.037]

Notes: Estimates from local polynomial regression with bandwidth of 4 years and heteroskedasticity-robust standard errors.

A.2 Local Randomization Inference

Table **??** presents simple difference-in-means comparisons between ages 25 and 26, providing a transparent baseline estimate without functional form assumptions. The effect is similar (2.7 pp) to the local linear estimate.

Table 7: Local Randomization: Ages 25 vs. 26

Outcome	Mean (Age 25)	Mean (Age 26)	Difference
Medicaid	0.500	0.527	0.027***
Private Insurance	0.398	0.367	-0.031***
Self-Pay	0.050	0.052	0.002**

Notes: Simple difference-in-means between adjacent ages. *** $p<0.001$, ** $p<0.01$.

B. Data Appendix

B.1 Variable Definitions

MAGER (Mother's Age): Computed from the mother's date of birth and the infant's date of birth as reported on the birth certificate. Values range from 12 to 50+, with ages below 12 or above 64 imputed.

PAY (Source of Payment): Principal source of payment for the delivery at the time of delivery. Categories are:

- 1 = Medicaid
- 2 = Private Insurance (includes Blue Cross Blue Shield, Aetna, etc.)
- 3 = Self-Pay (no third-party payer, generally uninsured)
- 4 = Indian Health Service
- 5 = CHAMPUS/TRICARE
- 6 = Other Government (federal, state, local)
- 8 = Other
- 9 = Unknown or not stated

B.2 Replication Code

All analysis code is available in the paper's replication package. The code includes:

- `01_fetch_data.R`: Downloads natality files from NBER
- `02_clean_data.R`: Processes files and constructs analysis sample
- `03_main_analysis.R`: Runs main RDD regressions
- `04_validity_tests.R`: Runs validity tests
- `05_figures.R`: Generates all figures