Uninsurance and Purchases of Prescription Drugs with High Abuse Potential: Evidence from the Federal Dependent Coverage Mandate

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Abstract:
In recent years, use of prescription drugs with high abuse potential such as central nervous system depressants, opioids, and stimulants rose in the United States. Because health insurance lowers the cost of purchasing prescription drugs, losing coverage may cause individuals to forgo treatment and decrease prescription drug consumption which could reduce health and increase the likelihood of overdose and death if individuals substitute to risky drugs sold on the black market. Using a regression discontinuity design, I estimate the effect of aging out of health insurance from the Affordable Care Act's dependent coverage mandate at age 26 on legal purchases of prescription central nervous system depressants, opioids, and stimulants. Individuals are 0.8-1 percentage points less likely to purchase a prescription central nervous system depressant and 1 percentage point less likely to purchase a prescription opioid after turning 26. These changes are driven by women. A back of the envelope calculation suggests that at age 26, up to 44,000 women may suffer adverse health effects from a reduction in the use of central depressants and up to 35,000 may suffer worse health from a reduction in the use of opioids. Estimated effects for men are generally negative but imprecise.

Keywords: health insurance, prescription drugs, substance abuse
JEL classifications: I13, I19

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1. Introduction

Individuals with health insurance are more likely to purchase prescription drugs because insurance decreases the cost of prescriptions and increases contact with healthcare providers. The federal dependent coverage mandate (FDCM), part of the 2010 Patient Protection and Affordable Care Act (PPACA), aimed to increase insurance coverage and access to care among young adults by requiring family insurance plans to cover dependent children until their 26th birthday. Previous research shows the FDCM decreased the likelihood of uninsurance (Antwi, Moriya, and Simon, 2013; Barbaresco, Courtemanche, and Qi, 2015; Amuedo-Dorantes and Yaya, 2016) and increased the likelihood of purchasing prescription medications for young adults (Amuedo-Dorantes and Yaya, 2016; Pakyz, Wang, and Cunningham, 2017). Losing insurance coverage after aging out of the dependent coverage mandate at 26, therefore, may cause young adults to forgo prescription medications or substitute to other drugs and health behaviors which can have serious health consequences for individuals who rely on prescription medication to maintain or improve their health.

I examine the loss of insurance on purchases of prescription central nervous system (CNS) depressants, opioids, and stimulants, medications that are generally used to treat anxiety, pain, and attention-deficit disorders, respectively. I focus on these drug classes for two reasons. First, in addition to negative health consequences of forgoing medically necessary treatments, abruptly decreasing or withdrawing from consumption of these drugs can cause individuals to experience serious medical issues, although the severity of symptoms differs between drugs and how the drug is used. For example, immediate withdrawal from long-term use of CNS depressants such as benzodiazepines can lead to seizures and death, while withdrawal from stimulants may lead to changes in mood, fatigue, nausea, and stomach aches. Second, CNS depressants, opioids, and stimulants are the most commonly abused prescription medications, and nonmedical use of prescription medications by adults age 18 to 25 is a growing problem in the United States as this age group has the highest prescription medication abuse rates (Substance Abuse and Mental Health Services Administration, 2018; Schulenberg *et al*, 2019). Prior misuse of prescription medications is associated with using illegal drugs (Compton and Volkow, 2006; Compton, Jones, and Baldwin 2016) and the recent opioid epidemic in the United States (Jones, Mack, and Paulozzi, 2013). Furthermore, individuals who use these medications for the recreational high value may substitute to black market drugs which can increase the likelihood of overdose and death.

While theory is clear that increasing the price of prescriptions through a loss of insurance coverage would decrease prescription drug purchases, it cannot inform us about the magnitude of the effect or who will be affected. I examine this question using the PPACA's federal dependent coverage mandate which creates a plausibly exogenous change in insurance coverage when an individual turns 26 years old. Using the 2010-2017 Medical Expenditure Panel Survey (MEPS), I find young adults are 3.3-4.4 percentage points less likely to have health insurance, 0.8-1 percentage points less likely to purchase a prescription CNS depressant, and 1 percentage point less likely to purchase a prescription opioid after turning 26 years old. Inflating the change in opioid purchases by the change in health insurance to recover the treatment-on-the-treated (TOT) effect suggests young adults who lost insurance coverage because of the dependent coverage age restriction are 21-31 percentage points less likely to purchase a prescription CNS depressant and 26-32 percentage points less likely to purchase a prescription opioid. These results are due to changes in prescription purchases by women who are 1.5-2.1 percentage points less likely to purchase a CNS depressant and 1.5 percentage points less likely to purchase an opioid. Given the potential problems associated with decreased use of these prescription drugs, these results suggest important areas to target by policymakers and healthcare practitioners.

2. Background

2.1 ACA dependent coverage mandate

President Obama signed the PPACA in March 2010 with the goal of expanding access to healthcare and reducing costs. One of the major components of the PPACA was the dependent coverage mandate that expanded insurance coverage to young adults. This policy, which went into effect in late September 2010, requires insurers to cover family policyholder's children until their 26th birthday. Before the policy change, family plans generally only covered children until age 18, and 29 percent of young adults were uninsured, the highest rate of uninsurance among all age groups (Nicholsen *et al*, 2009).[1] Previous work shows the federal dependent coverage mandate increased insurance coverage for young adults under 26 (Antwi, Moriya, and Simon, 2013; Barbaresco, Courtemanche, and Qi, 2015; Amuedo-Dorantes and Yaya, 2016) and increased utilization (Barbaresco, Courtemanche, and Qi, 2015). Other ACA policies such as health insurance subsidies,

[1] Prior to the federal dependent coverage mandate, some states had dependent coverage mandates with different restrictions on eligibility that depended on age, school enrollment, and marital status.

Medicaid expansions, and the individual health insurance mandate also likely contributed to increasing insurance coverage among young adults either directly or indirectly through insurance gains for their parents. Related to this study, Pakyzx, Wang, and Cunningham (2017) find the FDCM was associated with an increase in prescription expenditures and a decrease in out-of-pocket expenditures, with the CNS agents being one of the most common medications. Breslau *et al* (2017) do not find evidence the FDCM increased risky substance use. Wettstein (2019) finds a 1 percentage point increase in coverage due to the mandate reduced opioid mortality among young adults by about 2.5 per 100,000 population (20 percent).

2.2 CNS depressants, opioids, stimulants and insurance coverage

Figure 1 shows trends in prescription rates for CNS depressants, opioids, and stimulants for young adults age 18-25 years old and 26-30 years old during the sample period, 2011-2017. The share of 18-25 year-olds who purchased a prescription CNS depressant from about 2.5 percent to 3.5 percent, while the share declined slightly from 4 percent to 3.75 percent for 26-30 year-olds. The 26-30 year-old group was more likely to purchase opioids, but the share falls for both groups over this period, likely due to changes in prescribing practices, prescription drug monitoring programs, and the 2010 reformulation of OxyContin. Stimulant prescription rates were relatively flat for the 18-25 group, while the share roughly doubled from 3 percent to just over 6 percent for the 26-30 group.

Therapeutic uses for these drugs vary. CNS depressants are a class of drugs that include barbituates, benzodiazepines such as alprazolam (i.e. Xanax), and sleeping aids such as zolpidem (i.e. Ambien) and are commonly used to treat seizures, anxiety, and insomnia, respectively. Opioids such as oxycodone are used for pain relief, and stimulants such as methylphenidate (i.e. Ritalin) and dextroamphetamine/amphetamine (i.e. Adderall) are used to treat attention-deficit disorders. These prescription medications also have the potential for abuse due to their recreational consumption value. Young adults cite various reasons for using prescription drugs (Rabiner et al., 2009; McCabe et al., 2007; Lord et al., 2011). For example, stimulants are often used to study and increase alertness (Rabiner et al., 2009), while opioids are often used to relieve pain and get "high" (McCabe et al., 2007). Misuse of prescription drugs is associated with addiction and illegal drug use. Nonmedical use of prescription pain relievers, for example, has been linked to later heroin use (Lankenau et al, 2012; Jones, 2013; Muhuri, Gfroerer, and Davies, 2013) Polysubstance abuse is also an issue as combinations such as benzodiazepines and opioids have reinforcing effects (Jones, Mogali, and Comer, 2012).

Since insurance increases access to care and reduces the cost of prescription medications, losing insurance should reduce prescription purchases. In the context of the FDCM, forward-looking individuals who expect to lose insurance coverage in the near future may taper consumption by increasing current period prescription purchases for future consumption, if possible, or reducing current consumption to save for future consumption. The health effects from decreased use of these prescriptions will vary depending on the medication, past consumption, and reason for use. Long-term users of CNS depressants, opioids, and stimulants, whose use is for medical or nonmedical reasons, may become physiologically dependent on these drugs, and decreased consumption or withdrawal can negatively affect health. Withdrawal symptoms vary.[2] Tapering consumption of benzodiazepines for long-term users is recommended (Lader, Tylee, and Donoghue, 2009) as withdrawal can result in anxiety, seizures, and, in some cases, death. Opioid withdrawal symptoms such as anxiety, hot and cold flushes, muscle cramps, nausea, and vomiting may last for a few days or a few weeks. Stimulant withdrawal symptoms are less severe, and generally include depression, irritability, and muscle aches. Decreased consumption by individuals who use prescription drugs for therapeutic reasons will experience further reductions in health, although this could be lessened if relatively cheaper substitutable medications or treatments are available. An increase in the cost of legal prescriptions decreases the relative price of substitutes in the black market, and this may cause nonmedical users to substitute towards drugs like heroin in the case of nonmedical opioid users (Pradip *et al.*, 2013). Quality of black market drugs is often unknown, and impurities are associated with an increased likelihood of overdose and death (Darke *et al*, 1999).

3. Data

I use data from the 2010-2017 Medical Expenditure Panel Survey (MEPS), excluding data before October 2010 since the FDCM did not go into effect until September of that year. The MEPS interviews individuals five times over two years, and approximately 30,000 individuals are interviewed each year. It includes detailed information on health insurance coverage, utilization of

[2] A detailed discussion of withdrawal symptoms and treatments for substance abuse for many commonly abused drugs can be found in a guide for substance abuse counselors and clinicians, "TIP 45: Detoxification and Substance Abuse Treatment" produced by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. Available at https://store.samhsa.gov/product/TIP-45-Detoxification-and-Substance-Abuse-Treatment/SMA15-4131. Accessed October 9, 2019.

healthcare services, the cost of these services, and how these services are paid for. More specifically, I use the MEPS full-year files that includes data on individual demographic and insurance information and link this to the prescribed medicines files which records information on prescription medications purchased in each survey round. The prescription data includes the drug name, national drug code, quantity, strength, form, days supplied, and the amount paid. Table 1 shows the summary statistics for the main sample of 23-29 year-olds.

4. Empirical strategy

Consider a simple regression to estimate the causal effect of uninsurance (X_i) on individual purchases of a prescription drug (y_i):

$$y_i = \beta_0 + \beta_1 X_i + \epsilon_i \quad (1)$$

The estimate of β_1 will be biased if unobservable individual characteristics such as risk preferences or underlying medical conditions (such as health issues that require prescription drugs for treatment or drug addiction) are correlated with health insurance coverage and purchasing prescription drugs.

To address the endogeneity of health insurance coverage, I use a regression discontinuity design (RDD) that exploits the rule that dependent children lose access to their family's health insurance coverage at age 26 as part of the FDCM. The RDD identification strategy relies on the assumption that individuals who are just below and just above an arbitrary cutoff, in this case being 26 years old, have similar observable and unobservable characteristics.[3] The federal dependent mandate creates exogenous variation in health insurance coverage at the cutoff age of 26 since individuals cannot change their age. The MEPS data includes the birth month and year of each individual which allows me to calculate an individual's age in months at the beginning of the survey round.[4]

[3] While I cannot test the assumption that unobservable characteristics are similar around cutoff, I estimate equation 1 using the control variables in vector $\boldsymbol{X_i}$ as outcomes, omitting the controls from the righthand-side of the equation, to test whether observable characteristics of individuals are similar around the cutoff. These results, in Appendix Table A1, provide evidence that observable characteristics are similar around the cutoff. In Appendix Figure A1, I also show there is no bunching of observations around the cutoff.

[4] I drop individuals who turn 26 in the month of the survey round because I do not accurately know their date of birth.

I begin by estimating the reduced form effect of aging out of the federal dependent coverage mandate at age 26 using a regression discontinuity design (RDD). More specifically, I estimate the following equation:

$$y_i = \beta_0 + \beta_1 D_i + f(age_i) + \boldsymbol{\gamma' X_i} + \epsilon_i \quad (1)$$

Where y_i is an outcome for individual i: an indicator for no health insurance coverage during the interview round and, separately, indicators for whether an individual purchased prescription CNS depressants, opioids, or stimulants during the survey round. D_i is an indicator variable equal to one if the respondent is at least 26 years old in the first month of the survey round. Therefore, β_1 is the effect of turning 26 on insurance coverage and the likelihood of purchasing a prescription drug. $\boldsymbol{X_i}$ is a vector of indicator variables that control for individual and survey characteristics including sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college or associate's degree, bachelor's degree, and more than bachelor's degree; less than a high school diploma omitted), region of the country (Midwest, South, and West; Northeast omitted), survey year, and first month of the survey round. The function, $f(age_i)$, is a smooth function of the individual's age in months before or after the 26th birthday. I estimate two models that use alternative parametric specifications of the age function with first and second order polynomials of the running variable that is also interacted with the treatment variable following the recommendation by Gelman and Imbens (2019) as follows:

$$f(age_i) = \sum_{j=1}^{k} \lambda_j age_i^j + \sum_{j=1}^{k} \delta_j (D_i \times age_i^j) \quad \text{for k = \{1,2\}} \quad (2)$$

I estimate equation (1) using the main bandwidth of individuals who are 36 months before and after their 26th birthday as well as larger (48 months) and smaller (24 months) bandwidths on either side of the cutoff. The results are also robust to using bias-corrected, robust local polynomial estimators developed by Calonico, Cattaneo, and Titiunik (2014) (see Appendix Tables A2-A4). Standard errors are clustered on the running variable, age in months, in all specifications.

While equation (1) is suitable to estimate the effect of aging out of insurance at 26 on health insurance coverage, it likely underestimates the effect of aging out of insurance on purchases of prescription drugs since only a fraction of individuals lose insurance after 26 from aging out of the

mandate. To recover the TOT effect, I use a fuzzy RDD and simultaneously estimate the following equations using two-stage least squares:

$$uninsurance_i = \beta_0 + \beta_1 D_i + f(age_i) + \boldsymbol{\gamma' X_i} + u_i \quad (3)$$

$$y_i = \alpha_0 + \alpha_1 uninsurance_i + f(age_i) + \boldsymbol{\gamma' X_i} + v_i \quad (4)$$

Where $uninsurance_i$ is an indicator for whether individual an individual does not have health insurance in the survey round, D_i is an indicator for whether an individual is at least 26 years old at the beginning of the survey round, and y_i is an indicator for whether individual i purchased a prescription (1) CNS depressant, (2) opioid, or (3) stimulant during the survey round. $\boldsymbol{X_i}$, are the same controls in equation (1), and $f(age_i)$ is a linear or quadratic function of age in months on each side of the cutoff. Standard errors are clustered on the running variable, age in months. As before, I also estimate this simultaneous equation model using a bias-corrected, robust local-linear polynomial estimator (Appendix Tables A2-A4). In this setup, α_1 captures the causal effect of uninsurance on legal prescription drug purchases for individuals who become uninsured because they aged out of the FDCM. This interpretation requires the assumption that turning 26 only affects prescription drug purchases through the change in insurance coverage via the federal dependent coverage mandate

Finally, I explore whether the effect of losing insurance on prescription purchases varies by gender because of differences in patterns of prescription use (Roe, McNamara, Motheral, 2002), pharmacological response (Anderson, 2008), and substance use disorders (McHugh *et al*, 2018).

5. Results

5.1 Reduced form RDD estimates

I first concentrate on the effect of aging out of the federal dependent coverage mandate at 26 on the likelihood of being uninsured. The top-left panel in Figure 2 plots the share of individuals who are uninsuraned by age in months three years before and after age 26 and shows a clear jump in uninsurance at 26. I formally estimate this change in uninsurance at 26 by estimating equation 1. Table 2 shows these estimates across multiple specifications that vary the bandwidth around 26 functional form (linear or quadratic trends in age on either side of the cutoff), and inclusion of controls. I find that aging out of the federal dependent coverage mandate at 26 increases the

probability of being uninsured by 3.8-4.4. These estimates are between 14-18 percent of the sample means and consistent with previous estimates (Yoruk, 2018).

Next, I turn to the question of whether purchases of addictive prescription drugs change after age 26. Figure 2 plots, separately, the share of individuals that purchased a prescription CNS depressant, opioid, or stimulant by age in months in a three-year window on either side of age 26. There is a decrease in opioid purchases at 26, but changes in purchases of CNS depressants and stimulants are less obvious. Table 3 shows the reduced-form or intent-to-treat (ITT) estimated effects of being at least 26 years old on the likelihood of purchasing addictive prescription drugs. Columns 1, 2, and 3 in Table 3 show the estimated effects on the likelihood of purchasing a prescription CNS depressant. These estimates are negative and statistically significant in the 36 and 48-month bandwidths in the specifications with a linear function of age on each side of the cutoff. These estimates suggest the likelihood of purchasing a CNS depressant decreases by 0.8-1 percentage points. The estimates in columns 4, 5, and 6 suggest the likelihood of purchasing an opioid at age 26 decreases by about 1 percentage point. The estimates are statistically significant at the 10 percent or lower, except in the 24 and 36-month bandwidths when the age function is quadratic. Finally, the estimated effects on prescription stimulants are all negative, but imprecise. Overall, these results are consistent with the idea that losing health insurance increases the cost of prescription drugs, therefore reducing the likelihood of purchasing these prescription drugs.

5.2 Fuzzy RDD estimates

Table 4 shows the estimated effects of uninsurance on the likelihood of purchasing prescription drugs using the fuzzy RDD strategy that uses an indicator variable for being at least 26 years old as an instrument for being uninsured. These TOT effects can be interpreted as the effect of uninsurance on the likelihood of purchasing prescription drugs for individuals who lost insurance coverage from aging out of the federal dependent coverage mandate at age 26. The F-statistics for all of the specifications are above 10, the conventional level for instrument relevance (Staiger and Stock, 1997). These estimates are larger in magnitude since they are the reduced form estimates inflated by the change in uninsurance, and the sign and statistical significance follow similar patterns to the reduced form estimates in Table 3. These estimates suggest that individuals who lost insurance coverage from aging out of the federal dependent coverage mandate at 26 were 21-30 percent less likely to purchase a prescription CNS depressant (statistically significant at the 5

percent level) and 26-32 percentage points less likely to purchase a prescription opioid. The estimates for stimulants provide suggestive evidence of decreases in purchases of these medications by compliers, although the magnitudes are much smaller.

6. Effects by gender

The top left panels in Figure 3 and Figure 4 plot the mean uninsurance rate by age before and after 26 for men and women, respectively. Table 5 shows that turning 26 increases the probability of being uninsured by 3.6-5 percentage points for men. These estimates are statistically significant at the 10 percent or lower. For women, the likelihood of being uninsured at 26 increases by a statistically significant 2.7-4 percentage points.

Table 6 shows the reduced form effects of being at least 26 years old on the likelihood of purchasing prescription CNS depressants, opioids, or stimulants by gender. For men, the estimates are negative for opioids and stimulants, but mostly positive for CNS depressants. In addition, just two of the 27 estimates are statistically significant. Thus, there is little evidence to conclude prescription purchases by men changed after 26. The instrumental variables estimates in Table 7 provide similar conclusions.

The reduced for estimates for women in Table 8 show statistically significant decreases in the likelihood of purchasing a CNS depressant and purchasing an opioid at age 26. The estimated effect on purchasing a CNS depressant ranges from 1.5-2.1 percentage points. The likelihood of purchasing an opioid decreases by 1.4-1.5 percentage points. Estimated effects on purchasing a stimulant are negative but not statistically significant. The F-statistics for the instrumental variables specifications in Table 9 are all below 10, but the estimates suggest that women who lose insurance coverage due to aging out of the FDCM are about 50 percentage points less likely to purchase a CNS depressant and 40-50 percentage points less likely to purchase an opioid.

7. Discussion

In this paper, I examine the effects of aging out of the federal dependent coverage mandate at 26 on uninsurance and the likelihood of purchasing prescription drugs with high potential for abuse: CNS depressants, opioids, and stimulants. These prescription medications can produce significant negative health effects when consumption decreases or stops and decreased access to

these prescriptions may cause nonmedical users to seek substitutes in the black market which could increase the likelihood of overdose and death. Overall, I find evidence that turning 26 reduces the likelihood of purchasing a prescription CNS depressant or opioid, particularly among women. A back of the envelope calculation shows that 37,000-44,000 women may not purchase a prescription CNS depressant after turning 26 and 21,000-35,000 may not purchase a prescription opioid, increasing the likelihood of health issues associated with decreased consumption of prescription CNS depressants and opioids.[5] These numbers may be overestimated, however, due to polysubstance use of CNS depressants and opioids.[6] Policies and interventions targeted to individuals nearing their 26 birthday and at risk of losing insurance coverage, particularly women with prescriptions for CNS depressants and opioids, to address the possible negative health consequences of reductions in consumption of prescription drugs may be beneficial.

This analysis has some limitations and directions for future work. The estimated effects only apply to individuals around the cutoff because of the empirical design, so it is not possible to extrapolate how changes in insurance coverage affects prescription purchases for a broader population. I am unable to estimate whether consumption of prescriptions change since the data is limited to information about purchases. This is problematic because some individuals may change consumption prior to losing insurance. For example, individuals may reduce consumption of their medication to save for future consumption in anticipation of losing insurance. I am also unable to test whether individuals substitute to drugs sold on the black market, either illegal prescriptions or drugs such as heroin or methamphetamine. Future work can explore the relationship between aging out of the federal dependent coverage mandate and illegal drug use (identifying possible substitution effects), treatment for substance abuse, emergency hospitalizations related to drug abuse, and drug-related mortality.

[5] I calculate the number of women who do not purchase a prescription CNS depressant and prescription opioid at age 26 by multiplying the estimated effects on each drug by the age 26 population of women (2,306,260). I estimate the age 26 population using the 2017 American Community Survey.
[6] About 0.4 percent of women report purchasing both a prescription CNS depressant and opioid in the main sample.

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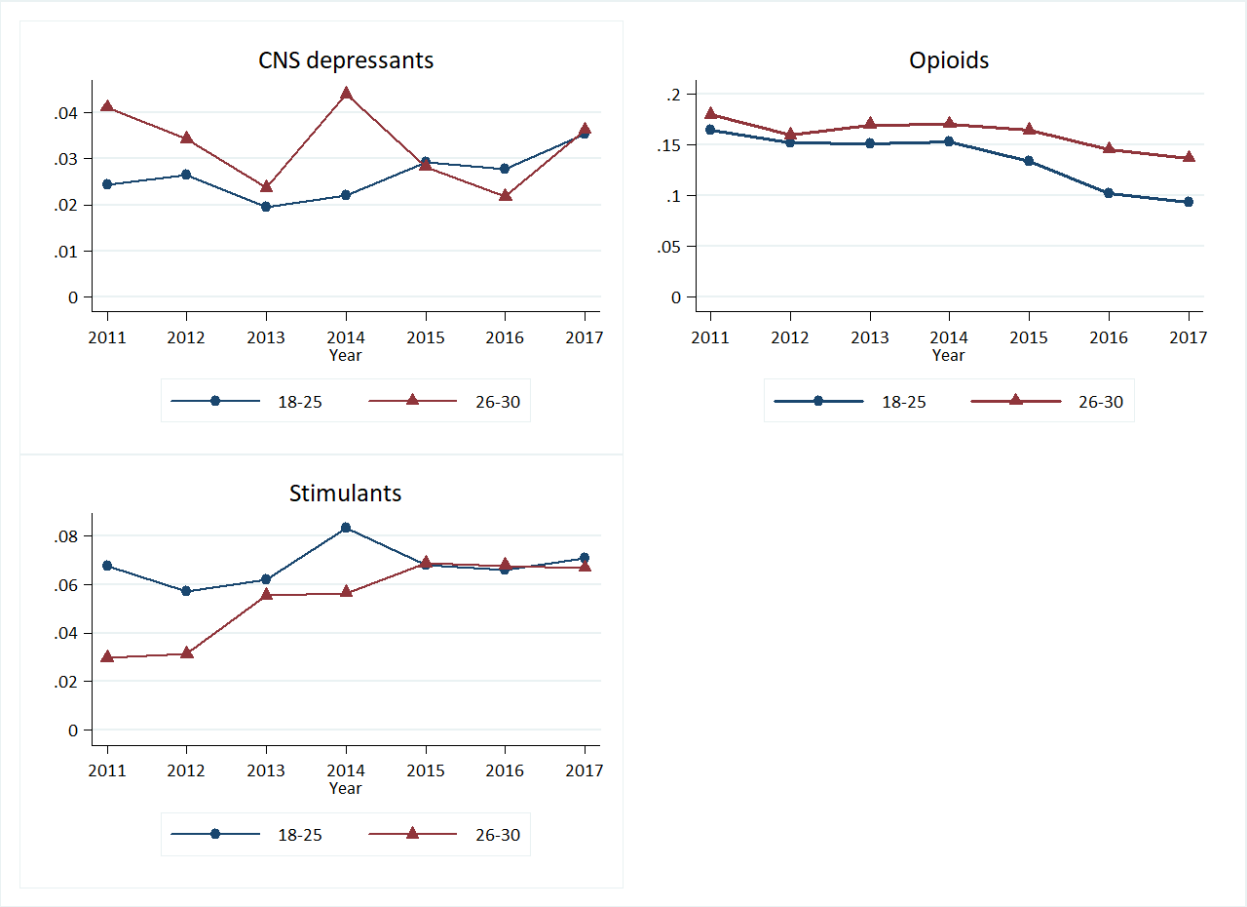
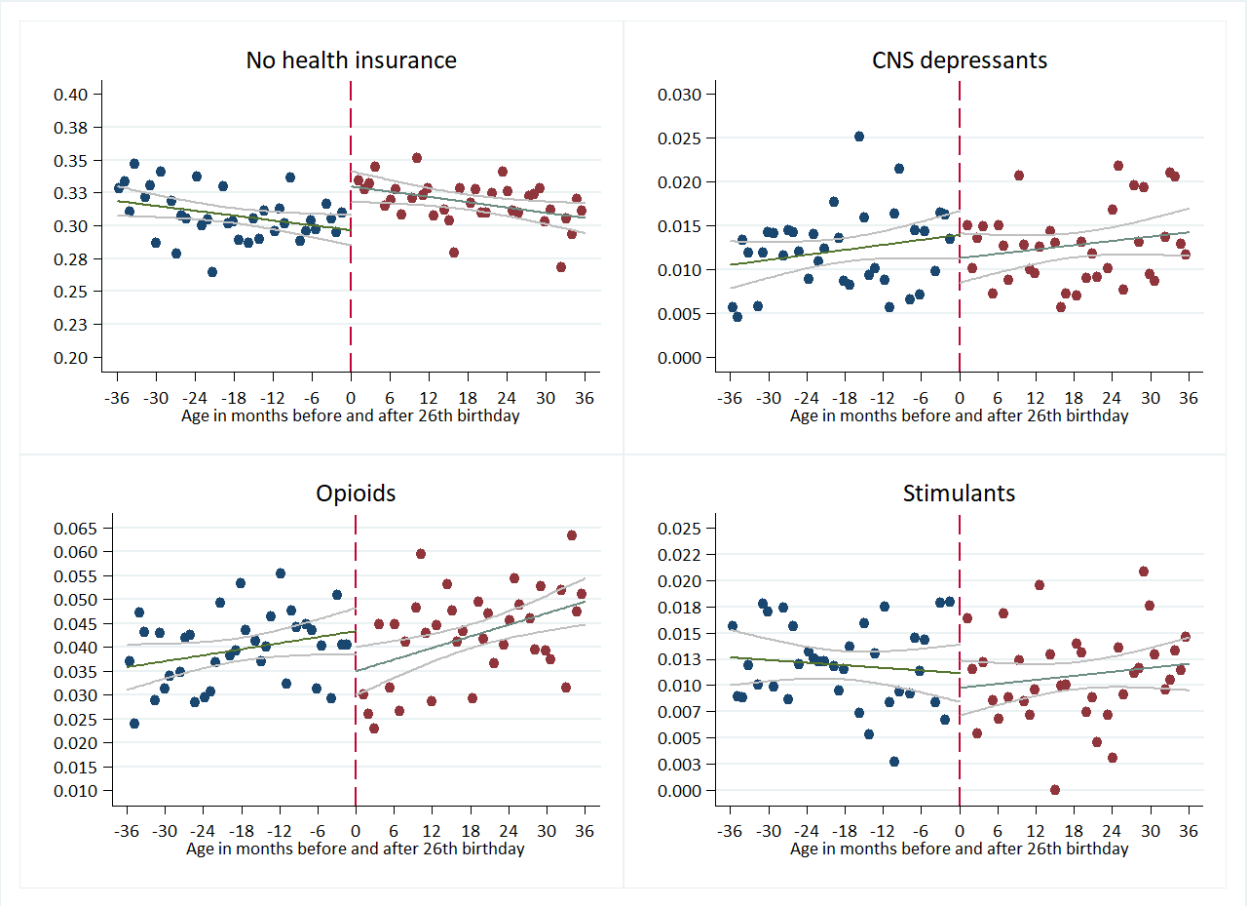
Figures

Figure 1: Prescription purchases of CNS depressants, opioids, or stimulants by young adults, 2011-2017



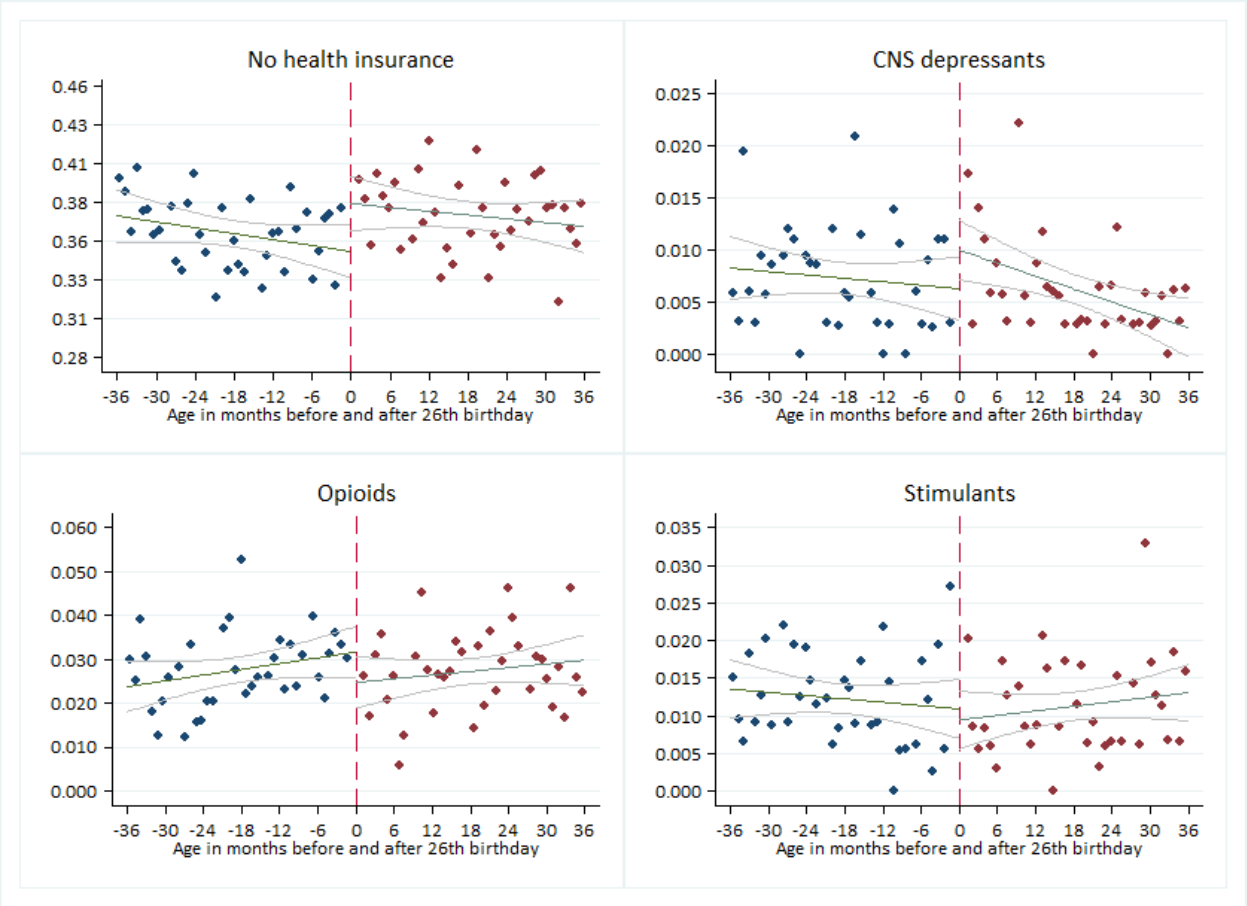
Note: Fraction of individuals, age 18-25 or 26-30, who purchased a prescription CNS depressant, opioid, or stimulant each year. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Figure 2: Changes in insurance coverage and prescription purchases around 26 years old



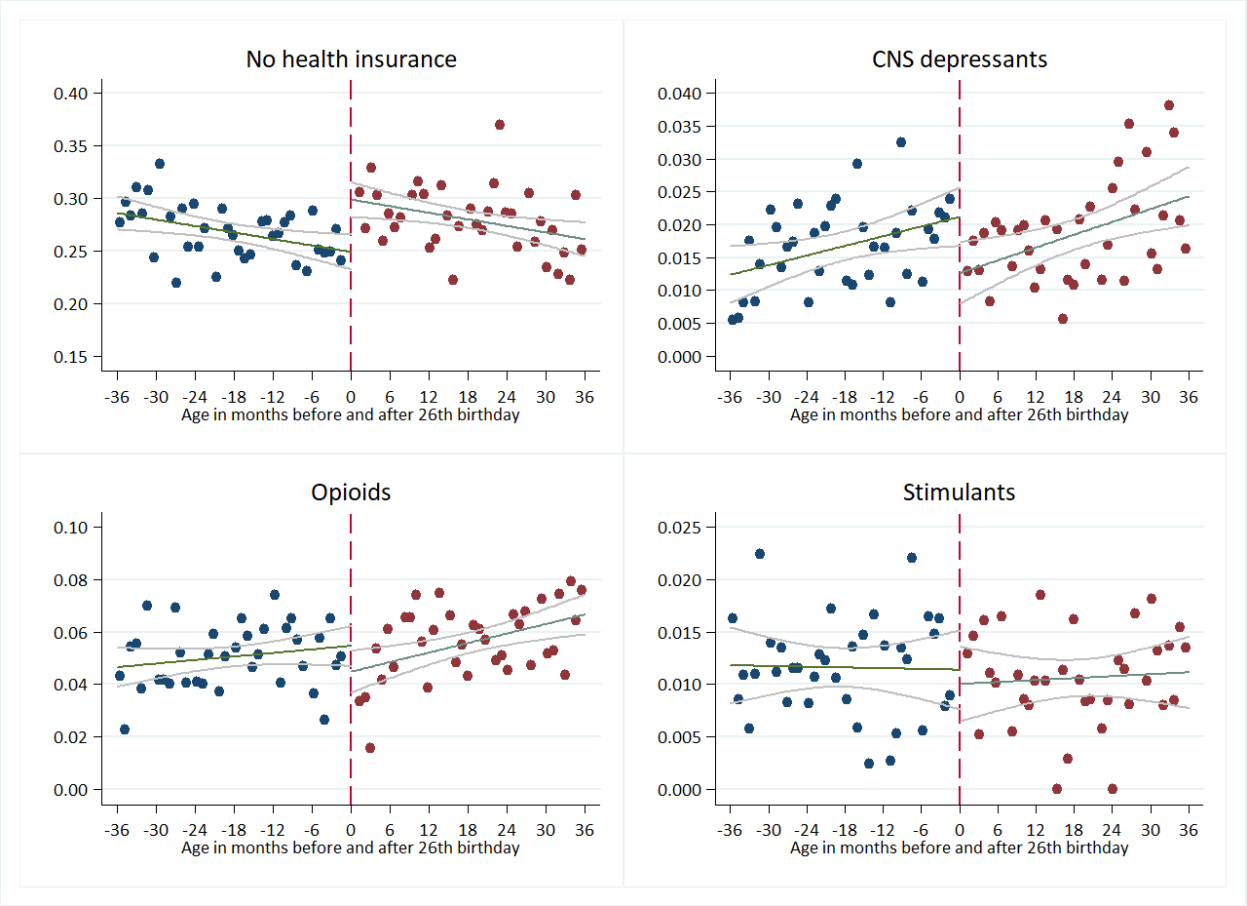
Notes: Mean of outcomes in 1-month intervals for individuals who are between 36 months before and 36 months after their 26th birthday. Lines of best fit with confidence intervals are also shown on either side of age 26. Dashed red line at zero represents cutoff point, age 26 and zero months. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Figure 2: Changes in insurance coverage and prescription purchases around 26 years old, men



Notes: Mean of outcomes in 1-month intervals for men who are between 36 months before and 36 months after their 26th birthday. Lines of best fit with confidence intervals are also shown on either side of age 26. Dashed red line at zero represents cutoff point, age 26 and zero months. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Figure 3: Changes in insurance coverage and prescription purchases around 26 years old, women



Notes: Mean of outcomes in 1-month intervals for women who are between 36 months before and 36 months after their 26th birthday. Lines of best fit with confidence intervals are also shown on either side of age 26. Dashed red line at zero represents cutoff point, age 26 and zero months. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Tables

Table 1: Summary statistics for 23-29 year olds

	Full sample	23-25	26-29
Outcomes			
No health insurance	0.240	0.236	0.245
Purchased CNS depressant	0.017	0.017	0.016
Purchased opioid	0.043	0.043	0.043
Purchased stimulant	0.016	0.016	0.016
Controls			
Female	0.506	0.503	0.508
Black	0.131	0.134	0.128
Hispanic	0.207	0.210	0.203
Asian	0.067	0.061	0.073
Other race/ethnicity	0.030	0.032	0.029
High school degree	0.086	0.090	0.083
Some college	0.821	0.829	0.813
Bachelor's degree	0.128	0.095	0.162
Post bachelor's degree	0.018	0.011	0.025
Married	0.284	0.203	0.368
Northeast	0.171	0.168	0.173
Midwest	0.218	0.217	0.219
South	0.366	0.379	0.352
West	0.245	0.236	0.255
N	47.346	23,657	23,689

Notes: Weighted sample means reported. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Table 2: Reduced form estimates of turning 26 years old on being uninsured

	(1)	(2)	(3)
Panel A: 24-month bandwidth			
At least 26 years old	0.041***	0.039***	0.044***
	(0.011)	(0.009)	(0.012)
Mean: 0.242			
R^2	0.001	0.121	0.121
N: 31,700			
Panel B: 36-month bandwidth			
At least 26 years old	0.039***	0.035***	0.040***
	(0.009)	(0.008)	(0.010)
Mean: 0.240			
R^2	0.001	0.120	0.120
N: 47.346			
Panel C: 48-month bandwidth			
At least 26 years old	0.034***	0.033***	0.038***
	(0.008)	(0.007)	(0.009)
Mean: 0.240			
R^2	0.000	0.123	0.123
N: 62,991			
Controls	No	Yes	Yes
Polynomial degree	1	1	2

Notes: Standard errors clustered on age in months. Column (1) does not include individual or survey controls and interacts the running variable with a linear polynomial on each side of the cutoff. Column (2) includes individual or survey controls and interacts the running variable with a linear polynomial on each side of the cutoff. Column (3) includes individual and survey controls and interacts the running variable with a quadratic polynomial on each side of the cutoff. Individual and survey characteristics include age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Reduced form estimates of turning 26 years old on prescription purchases

	CNS depressants			Opioids			Stimulants		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: 24-month bandwidth									
At least 26 years old	-0.006	-0.006	-0.002	-0.010*	-0.010*	-0.005	-0.003	-0.003	-0.009
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.007)	(0.005)	(0.005)	(0.008)
N: 31,700									
Mean		0.017			0.043			0.015	
R^2	0.000	0.009	0.010	0.000	0.010	0.010	0.000	0.009	0.009
Panel B: 36-month bandwidth									
At least 26 years old	-0.008**	-0.008**	-0.004	-0.010**	-0.010**	-0.009	-0.004	-0.004	-0.007
	(0.003)	(0.003)	(0.004)	(0.005)	(0.005)	(0.006)	(0.004)	(0.004)	(0.006)
N: 47,346									
Mean		0.017			0.043			0.016	
R^2	0.000	0.008	0.008	0.000	0.011	0.011			
Panel C: 48-month bandwidth									
At least 26 years old	-0.010***	-0.010***	-0.006	-0.011***	-0.010**	-0.011*	-0.003	-0.003	-0.006
	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.006)	(0.003)	(0.003)	(0.006)
N: 62,991									
Mean		0.017			0.043			0.016	
R^2	0.001	0.009	0.009	0.001	0.012	0.012	0.000	0.009	0.009
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Polynomial degree	1	1	2	1	1	2	1	1	2

Notes: Standard errors clustered on age in months. Columns (1), (4), and (7) do not include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (2), (5), and (8) include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (3), (6), and (9) include individual and survey controls and interact the running variable with a quadratic polynomial on each side of the cutoff. Individual and survey characteristics include age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Instrumental variable estimates of turning 26 years old on prescription purchases

	CNS depressants			Opioids			Stimulants		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(5)	(6)
Panel A: 24-month bandwidth									
$\widehat{uninsured}$	-0.145	-0.157	-0.053	-0.255*	-0.262*	-0.105	-0.082	-0.088	-0.203
	(0.102)	(0.105)	(0.103)	(0.153)	(0.159)	(0.157)	(0.123)	(0.131)	(0.203)
N: 31,700									
Mean		0.017			0.043			0.015	
First stage F-statistic	14.70	17.97	14.07	14.70	17.97	14.07	14.70	17.97	14.07
Panel B: 36-month bandwidth									
$\widehat{uninsured}$	-0.212**	-0.231**	-0.092	-0.268*	-0.281*	-0.229	-0.100	-0.116	-0.179
	(0.101)	(0.110)	(0.104)	(0.0138)	(0.152)	(0.163)	(0.113)	(0.127)	(0.174)
N: 47,346									
Mean		0.017			0.043			0.016	
First stage F-statistic	18.50	19.86	15.50	18.50	19.86	15.50	18.50	19.86	15.50
Panel C: 48-month bandwidth									
$\widehat{uninsured}$	-0.306**	-0.302**	-0.152	-0.324**	-0.311**	-0.301*	-0.084	-0.082	-0.170
	(0.124)	(0.118)	(0.111)	(0.143)	(0.144)	(0.181)	(0.106)	(0.109)	(0.167)
N: 62,991									
Mean		0.017			0.043			0.016	
First stage F-statistic	18.86	23.83	15.88	18.86	23.83	15.88	18.86	23.83	15.88
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Polynomial degree	1	1	2	1	1	2	1	1	2

Notes: Standard errors clustered on age in months. Columns (1), (4), and (7) do not include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (2), (5), and (8) include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (3), (6), and (9) include individual and survey controls and interact the running variable with a quadratic polynomial on each side of the cutoff. Individual and survey characteristics include age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Table 5: Reduced form estimates of turning 26 years old on being uninsured

	Men			Women		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: 24-month bandwidth						
At least 26 years old	0.042**	0.045***	0.050*	0.040***	0.034**	0.040**
	(0.017)	(0.015)	(0.025)	(0.014)	(0.014)	(0.019)
N		15,076			16.624	
Mean		0.288			0.197	
R^2	0.001	0.134	0.134	0.001	0.093	0.093
Panel B: 36-month bandwidth						
At least 26 years old	0.039***	0.043***	0.043**	0.036***	0.028**	0.039**
	(0.013)	(0.12)	(0.019)	(0.012)	(0.011)	(0.016)
N		22,364			24.982	
Mean		0.288			0.194	
R^2	0.001	0.132	0.132	0.001	0.091	0.091
Panel C: 48-month bandwidth						
At least 26 years old	0.036***	0.040***	0.049***	0.031***	0.027***	0.028*
	(0.011)	(0.010)	(0.017)	(0.010)	(0.009)	(0.014)
N		29,851			33,140	
Mean		0.288			0.192	
R^2	0.001	0.136	0.136	0.001	0.093	0.093
Controls	No	Yes	Yes	No	Yes	Yes
Polynomial	1	1	2	1	1	2

Notes: Standard errors clustered on age in months. Columns (1) and (40 do not include individual or survey controls and interacts the running variable with a linear polynomial on each side of the cutoff. Columns (2) and (3) include individual or survey controls and interacts the running variable with a linear polynomial on each side of the cutoff. Columns (3) and (6) include individual and survey controls and interacts the running variable with a quadratic polynomial on each side of the cutoff. Individual and survey characteristics include age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Reduced form estimates of turning 26 years old on prescription purchases, men

	CNS depressants			Opioids			Stimulants		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: 24-month bandwidth									
At least 26 years old	0.006	0.007*	0.005	-0.009	-0.009	0.004	-0.005	-0.006	-0.014
	(0.004)	(0.004)	(0.006)	(0.006)	(0.006)	(0.008)	(0.008)	(0.008)	(0.013)
N: 15,076									
Mean		0.011			0.032			0.015	
R^2	0.001	0.008	0.008	0.000	0.007	0.007	0.000	0.014	0.014
Panel B: 36-month bandwidth									
At least 26 years old	0.002	0.003	0.008	-0.006	-0.006	-0.011	-0.007	-0.008	-0.010
	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)	(0.007)	(0.006)	(0.006)	(0.010)
N: 22,364									
Mean		0.010			0.032			0.017	
R^2	0.001	0.005	0.005	0.000	0.008	0.008	0.001	0.013	0.013
Panel C: 48-month bandwidth									
At least 26 years old	-0.005	-0.004	0.010**	-0.007	-0.007	-0.010	-0.002	-0.002	-0.012
	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.006)	(0.005)	(0.005)	(0.009)
N: 29,851									
Mean		0.010			0.032			0.017	
R^2	0.000	0.004	0.005	0.000	0.008	0.008	0.000	0.012	0.012
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Polynomial degree	1	1	2	1	1	2	1	1	2

Notes: Standard errors clustered on age in months. Regressions control for individual and survey characteristics including age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. Columns (1), (4), and (7) do not include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (2), (5), and (8) include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (3), (6), and (9) include individual and survey controls and interact the running variable with a quadratic polynomial on each side of the cutoff * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 7: Instrumental variable estimates of turning 26 years old on prescription purchases, men

	CNS depressants			Opioids			Stimulants		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(5)	(6)
Panel A: 24-month bandwidth									
$\widehat{uninsured}$	0.151	0.144	0.109	-0.211	-0.201	0.082	-0.128	-0.138	-0.274
	(0.109)	(0.097)	(0.139)	(0.157)	(0.148)	(0.168)	(0.201)	(0.193)	(0.365)
N: 15,076									
Mean		0.011			0.032			0.015	
First stage F-statistic	6.449	8.794	3.882	6.449	8.794	3.882	6.449	8.794	3.882
Panel B: 36-month bandwidth									
$\widehat{uninsured}$	0.062	0.064	0.174	-0.141	-0.140	-0.244	-0.169	-0.174	-0.227
	(0.083)	(0.074)	(0.144)	(0.133)	(0.121)	(0.202)	(0.177)	(0.167)	(0.297)
N: 22,364									
Mean		0.010			0.032			0.017	
First stage F-statistic	9.395	12.91	5.004	9.395	12.91	5.004	9.395	12.91	5.004
Panel C: 48-month bandwidth									
$\widehat{uninsured}$	-0.132	-0.110	0.194*	-0.183	-0.167	-0.196	-0.044	-0.054	-0.246
	(0.100)	(0.085)	(0.109)	(0.130)	(0.115)	(0.145)	(0.146)	(0.134)	(0.227)
N: 29,851									
Mean		0.010			0.032			0.017	
First stage F-statistic	10.51	15.29	8.675	10.51	15.29	8.675	10.51	15.29	8.675
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Polynomial degree	1	1	2	1	1	2	1	1	2

Notes: Standard errors clustered on age in months. Columns (1), (4), and (7) do not include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (2), (5), and (8) include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (3), (6), and (9) include individual and survey controls and interact the running variable with a quadratic polynomial on each side of the cutoff. Individual and survey characteristics include age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Table 8: Reduced form estimates of turning 26 years old on prescription purchases, women

	CNS depressants			Opioids			Stimulants		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: 24-month bandwidth									
At least 26 years old	-0.018***	-0.018***	-0.011	-0.012	-0.012	-0.014	-0.001	-0.001	-0.005
	(0.006)	(0.006)	(0.007)	(0.010)	(0.009)	(0.011)	(0.005)	(0.005)	(0.008)
N: 16,624									
Mean		0.023			0.053			0.014	
R^2	0.001	0.012	0.012	0.000	0.011	0.012	0.001	0.013	0.013
Panel B: 36-month bandwidth									
At least 26 years old	-0.016***	-0.019***	-0.015**	-0.015*	-0.014*	-0.009	-0.001	-0.001	-0.005
	(0.005)	(0.005)	(0.006)	(0.008)	(0.008)	(0.010)	(0.005)	(0.005)	(0.007)
N: 24,892									
Mean		0.023			0.054			0.015	
R^2	0.001	0.010	0.010	0.001	0.012	0.012	0.000	0.011	0.011
Panel C: 48-month bandwidth									
At least 26 years old	-0.016***	-0.016***	-0.021***	-0.015**	-0.015**	-0.013	-0.004	-0.004	-0.001
	(0.004)	(0.004)	(0.006)	(0.007)	(0.007)	(0.010)	(0.004)	(0.004)	(0.006)
N: 33,140									
Mean		0.023			0.055			0.016	
R^2	0.002	0.010	0.010	0.001	0.012	0.012	0.000	0.010	0.010
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Polynomial degree	1	1	2	1	1	2	1	1	2

Notes: Standard errors clustered on age in months. Regressions control for individual and survey characteristics including age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. Columns (1), (4), and (7) do not include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (2), (5), and (8) include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (3), (6), and (9) include individual and survey controls and interact the running variable with a quadratic polynomial on each side of the cutoff * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

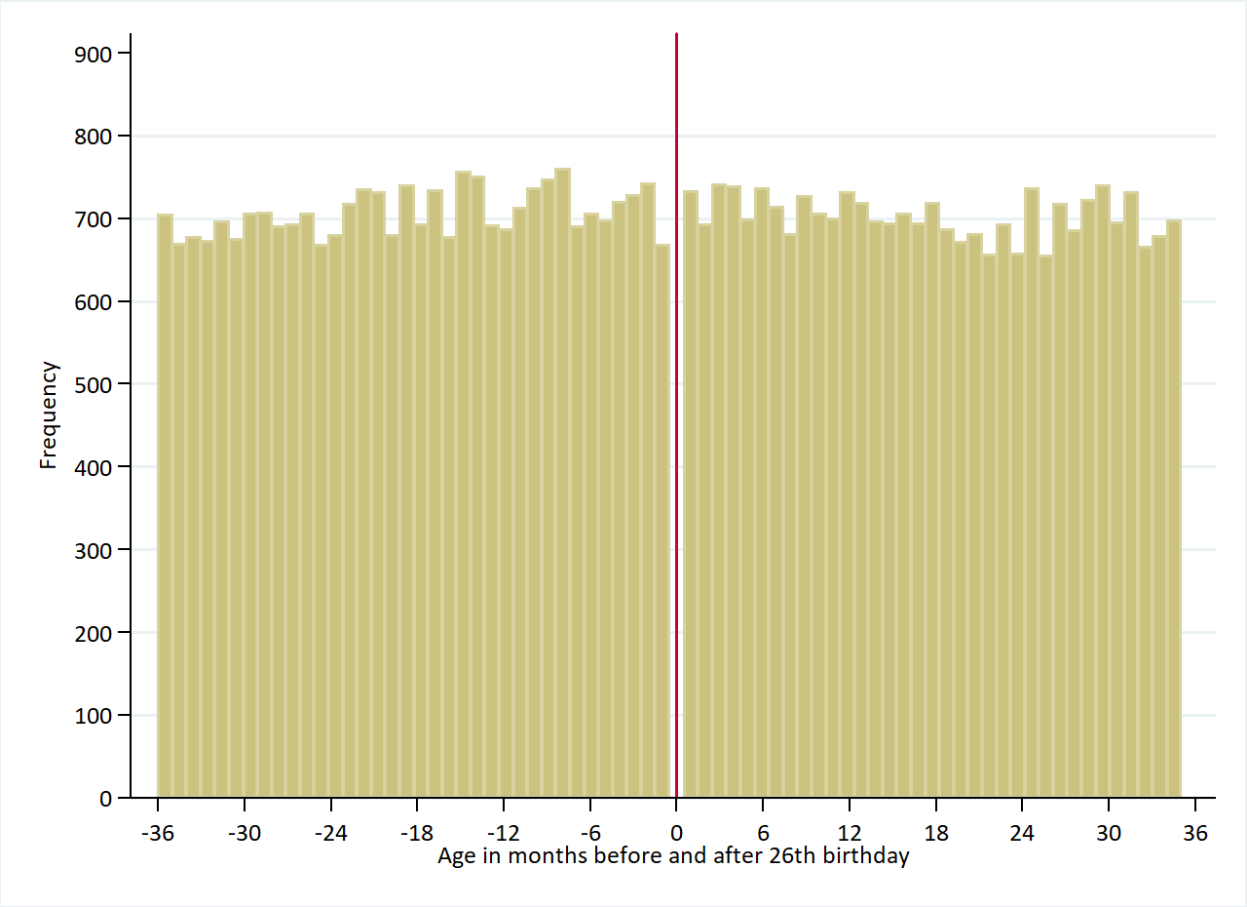
Table 9: Instrumental variable estimates of turning 26 years old on prescription purchases, women

	CNS depressants			Opioids			Stimulants		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(5)	(6)
Panel A: 24-month bandwidth									
$\widehat{uninsured}$	-0.467**	-0.540*	-0.268	-0.303	-0.348	-0.361	-0.034	-0.047	-0.125
	(0.225)	(0.277)	(0.209)	(0.250)	(0.293)	(0.292)	(0.123)	(0.163)	(0.165)
N: 16,624									
Mean		0.023			0.053			0.015	
First stage F-statistic	7.687	6.064	4.381	7.687	6.064	4.381	7.687	6.064	4.381
Panel B: 36-month bandwidth									
$\widehat{uninsured}$	-0.511**	-0.668**	-0.400*	-0.407*	-0.519	-0.220	-0.036	-0.035	-0.115
	(0.225)	(0.339)	(0.226)	(0.245)	90.346)	(0.266)	(0.0126)	(0.148)	(0.180)
N: 24,982									
Mean		0.023			0.054			0.014	
First stage F-statistic	9.644	6.127	5.876	9.644	6.127	5.876	9.644	6.127	5.876
Panel C: 48-month bandwidth									
$\widehat{uninsured}$	-0.521**	-0.590**	-0.767	-0.494*	-0.556*	-0.486	-0.133	-0.138	-0.052
	(0.237)	(0.286)	(0.468)	(0.273)	(0.331)	(0.415)	(0.122)	(0.144)	0.203)
N: 33,140									
Mean		0.023			0.055				
First stage F-statistic	9.707	8.077	3.813	9.707	8.077	3.813	9.707	8.077	3.813
Controls	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Polynomial degree	1	1	2	1	1	2	1	1	2

Notes: Standard errors clustered on age in months. Columns (1), (4), and (7) do not include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (2), (5), and (8) include individual and survey controls and interact the running variable with a linear polynomial on each side of the cutoff. Columns (3), (6), and (9) include individual and survey controls and interact the running variable with a quadratic polynomial on each side of the cutoff. Individual and survey characteristics include age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Appendix

Figure A1: Frequency of observations by age in months



Note: Frequency of observations in each month, 36 months before and after 26. Red line marks the cutoff point for the discontinuity at age 26 and zero months. Data from the 2010-2017 Medical Expenditure Panel Surveys.

Appendix Table A1: Test for changes in individual characteristics at age 26

	(1)	(2)
Female	-0.007	-0.006
	(0.013)	(0.019)
White	-0.014	0.008
	(0.012)	(0.013)
Black	0.011*	0.005
	(0.006)	(0.007)
Hispanic	-0.006	-0.027***
	(0.008)	(0.009)
Asian	0.005	0.009
	(0.005)	(0.007)
Other race/ethnicity	0.003	0.004
	(0.003)	(0.005)
Married	-0.000	-0.009
	(0.011)	(0.016)
Less than high school degree	0.013***	0.009
	(0.004)	(0.007)
High school degree	-0.013	-0.005
	(0.008)	(0.013)
Some college	0.001	-0.003
	(0.009)	(0.014)
Bachelor's degree	0.010	0.018
	(0.012)	(0.018)
Post-bachelor's degree	-0.001	-0.001
	(0.003)	(0.005)
Northeast	0.008	0.029**
	(0.009)	(0.0130
Midwest	-0.011	-0.017
	(0.009)	(0.013)
South	-0.001	0.001
	(0.011)	(0.017)
West	0.004	-0.013
	(0.010)	(0.016)
Polynomial degree	1	2
N	47,346	47,346

Notes: Standard errors clustered on age in months. Column (1) interacts the running variable with a linear polynomial on each side of the cutoff. Column (2) interacts the running variable with a linear and quadratic polynomial on each side of the cutoff. Data from the 2010-2017 Medical Expenditure Panel Surveys. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix Table A2: Bias-corrected, robust local polynomial estimates of turning 26 on uninsurance and prescription purchases

	Uninsured	CNS depressants	Opioids	Stimulants
Panel A: reduced form				
At least 26 years old	0.044***	-0.007***	-0.012*	-0.010
	(0.015)	(0.003)	(0.006)	(0.006)
Panel B: IV				
$\widehat{uninsured}$		-0.184**	-0.256	-0.176
		(0.074)	(0.153)	(0.113)

Notes: Bias-corrected, robust local polynomial estimates using triangular kernel (Calonico, Cattaneo, and Titiunik, 2014). Standard errors clustered on age in months. Regressions control for individual and survey characteristics including age in months, sex, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, associate's degree, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix Table A3: Bias-corrected, robust local polynomial estimates of turning 26 on uninsurance and prescription purchases, men

	Uninsured	CNS depressants	Opioids	Stimulants
Panel A: reduced form				
At least 26 years old	0.042*	-0.006	-0.002	-0.017*
	(0.023)	(0.004)	(0.004)	(0.010)
Panel B: IV				
$\widehat{uninsured}$		-0.161	-0.069	-0.706**
		(0.137)	(0.165)	(0.330)

Notes: Bias-corrected, robust local polynomial estimates using triangular kernel (Calonico, Cattaneo, and Titiunik, 2014). Standard errors clustered on age in months. Regressions control for individual and survey characteristics including age in months, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, associate's degree, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix Table A4: Bias-corrected, robust local polynomial estimates of turning 26 on uninsurance and prescription purchases, women

	Uninsured	CNS depressants	Opioids	Stimulants
Panel A: reduced form				
At least 26 years old	0.047***	-0.013***	-0.023**	0.001
	(0.013)	(0.004)	(0.012)	(0.006)
Panel B: IV				
$\widehat{uninsured}$		-0.291**	-0.283*	0.012
		(0.145)	(0.170)	(0.120)

Notes: Bias-corrected, robust local polynomial estimates using triangular kernel (Calonico, Cattaneo, and Titiunik, 2014). Standard errors clustered on age in months. Regressions control for individual and survey characteristics including age in months, marital status (married during survey round), race/ethnicity (black, Hispanic, Asian, and other race/ethnicity; white omitted), highest level of education (high school diploma, some college, associate's degree, bachelor's degree, and higher than a bachelor's degree; less than high school diploma omitted), region of the country (Midwest, south, and west; northeast omitted), survey year, and first month of the survey round. Data from the 2010-2017 Medical Expenditure Panel Surveys. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$