

## Supplementary Appendix

Supplement to: Wherry LR, Miller S, Kaestner R, Meyer BD. “Childhood Medicaid Coverage and Later Life Health Care Utilization.”

### Description of Eligibility Estimates in Tables 1 and 2

In the paper, we present estimates that indicate differential treatment resulting from the Medicaid expansions by race and state of residence in the form of greater eligibility gains. To arrive at these estimates, we rely on a series of eligibility simulations similar to those conducted by Wherry and Meyer in their earlier work in this area. We estimate eligibility gains by child race and state of residence using all children ages 0-17 from the pooled 1981-1988 years of the March Current Population Survey. We estimate childhood eligibility for this pooled sample for each birth month and year from September 1979 to October 1987 using detailed federal and state eligibility rules for the years 1979 to 2005. Our simulation program uses information on state of residence, family structure and size, parent employment, and family income to calculate monthly public eligibility status through age 17. This simulation holds family characteristics constant over the child’s lifetime.

Our estimates are slightly different than those found in Wherry and Meyer due to a departure in our choice of sample selection. Wherry and Meyer use a similar methodology but rely on a national sample that draws children from the CPS by race and state cells. In contrast, our estimation relies on state-specific samples from the CPS to estimate eligibility. This means that the discontinuity estimates that we present by state (Table 2) encompass differences in state socioeconomic characteristics in addition to differences in state eligibility rules.

As in Wherry and Meyer, we rely on detailed eligibility rules in our simulation that are compiled by state and year on AFDC qualifying criteria, state Ribicoff rules, and federal and state Medicaid expansions for the years prior to welfare reform. For 1997 forward, eligibility is calculated under the post-welfare reform eligibility rules for Medicaid family coverage (“Section 1931” eligibility), as well as under continuing state Medicaid expansions and new separate state programs funded by the Children’s Health Insurance Program (CHIP). Additional details on the sources used to calculate eligibility for each of these pathways is provided below.

#### *Source Information for Eligibility Rules*

For the years 1979 to 1996, Medicaid eligibility is calculated under the eligibility rules for the AFDC and the AFDC-Unemployed Parents (AFDC-UP) programs, optional state programs (e.g. Ribicoff children), and poverty-related expansions for children. For the years 1997 to 2006, public eligibility under Medicaid and CHIP are calculated under the

rules for Medicaid Section 1931 eligibility, poverty-related Medicaid expansions and additional Medicaid expansions or new state programs under CHIP.

AFDC and AFDC-UP program parameters for 1979-1996 were provided by the Urban Institute through their Transfer Income Model, version 3 (TRIM3), which may be accessed at <http://trim3.urban.org/T3Welcome.php>. Using these parameters, we were able to calculate whether a family was eligible for either program based on state rules, monthly family income and family size.

Optional state programs include Ribicoff children, under which children may meet the financial standards for AFDC but do not qualify on the basis of family structure. Information on Ribicoff children programs for 1988 forward was drawn from materials provided by Bruce Meyer and used in Meyer and Rosenbaum, "Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers," *The Quarterly Journal of Economics*, August 2001. Rules for earlier years were drawn from the TRIM3 model, as well as from the 1983 Health Care Financing Administration (HCFA)'s *Analysis of State Medicaid Program Characteristics* report.

Information on federally mandated changes in eligibility were collected from the 1988 Congressional Research Service Medicaid Source Book and the 2010 Medicaid Primer from the Henry J. Kaiser Family Foundation. Information on expansions in eligibility by state, including the population targeted, implementation date, and income cutoffs under the poverty-related Medicaid - and later CHIP-related expansions - were compiled from the sources below. Income disregard rules by state and year were downloaded from the Urban Institute's TRIM3 database.

- Maternal and Child Update, National Governors Association: 9/97, 9/98, 2/99, 1/00, 2/01, 2/02, 2/03, 9/06, accessed here: <http://www.nga.org/cms/home/nga-center-for-best-practices/center-publications/page-health-publications/col2-content/main-content-list/maternal-and-child-health-mch-up.html>
- Enrollment Increases in State CHIP Programs: December 1998 to June 1999, prepared by Vernon K. Smith at Health Management Associates for the Kaiser Commission on Medicaid and the Uninsured, July 30, 1999
- *Implementation of the State Children's Health Insurance Program: Momentum is Increasing After a Modest Start: First Annual Report*, January 2001 report prepared by Mathematica Policy Research, Inc. by Rosenbach, et al.
- Kaiser Commission on Medicaid and the Uninsured (mostly) annual surveys of state Medicaid/CHIP programs beginning in 2000: available for years 2000, 2002, and 2003-2006 at <http://www.kff.org/medicaid/50StateSurvey.cfm>

**Appendix Table 1. Estimates of Effect of Childhood Medicaid Eligibility on Health Care Utilization at Ages 8-13**

	All Races		Blacks		Non-Blacks		Households in Poverty		Households Not in Poverty	
	(1) Doctor Visit in Last 12 Mo	(2) Hospital Visit in Last 12 Mo	(3) Doctor Visit in Last 12 Mo	(4) Hospital Visit in Last 12 Mo	(5) Doctor Visit in Last 12 Mo	(6) Hospital Visit in Last 12 Mo	(7) Doctor Visit in Last 12 Mo	(8) Hospital Visit in Last 12 Mo	(9) Doctor Visit in Last 12 Mo	(10) Hospital Visit in Last 12 Mo
<i>Global polynomial model</i>										
4-Year window	0.000 (-0.017, 0.017)	-0.001 (-0.008, 0.005)	0.050** (0.007, 0.093)	-0.014 (-0.030, 0.003)	-0.010 (-0.030, 0.011)	0.001 (-0.006, 0.009)	0.005 (-0.047, 0.056)	0.006 (-0.005, 0.016)	-0.001 (-0.024, 0.022)	-0.004 (-0.011, 0.004)
3-Year window	0.006 (-0.013, 0.026)	-0.003 (-0.010, 0.005)	0.039 (-0.008, 0.087)	-0.013 (-0.033, 0.008)	0.000 (-0.023, 0.024)	-0.001 (-0.009, 0.007)	0.016 (-0.043, 0.075)	0.007 (-0.005, 0.019)	0.009 (-0.017, 0.035)	-0.006 (-0.015, 0.003)
2-Year window	-0.010 (-0.036, 0.016)	-0.005 (-0.014, 0.003)	0.042 (-0.012, 0.096)	-0.015 (-0.039, 0.009)	-0.021 (-0.052, 0.011)	-0.003 (-0.012, 0.006)	0.016 (-0.050, 0.082)	0.012** (0.000, 0.025)	-0.013 (-0.048, 0.022)	-0.011** (-0.021, -0.001)
<i>Local linear regression</i>										
IK Bandwidth Selector	0.007 (-0.016, 0.029)	-0.003 (-0.010, 0.004)	0.041* (-0.004, 0.086)	-0.011 (-0.026, 0.004)	-0.001 (-0.026, 0.023)	-0.000 (-0.007, 0.006)	0.014 (-0.024, 0.053)	0.008 (-0.006, 0.021)	0.007 (-0.020, 0.033)	-0.008* (-0.017, 0.001)
CCT Bandwidth Selector	0.005 (-0.019, 0.029)	-0.003 (-0.011, 0.004)	0.044 (-0.014, 0.102)	-0.020 (-0.045, 0.005)	-0.002 (-0.029, 0.025)	-0.001 (-0.008, 0.007)	0.007 (-0.061, 0.075)	0.008 (-0.010, 0.025)	0.007 (-0.022, 0.035)	-0.008* (-0.018, 0.001)
<i>Baseline mean</i>	0.730	0.019	0.698	0.019	0.736	0.018	0.672	0.020	0.751	0.018
<i>N</i>	58,537	58,771	9,993	10,027	48,544	48,744	11,152	11,202	44,660	42,808

Notes: Data from 1992-1996 National Health Interview Survey Health Insurance Supplements. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Appendix Table 2. "Placebo" Tests for 2009 Hospitalizations (Appendicitis and Injury)**

	All Races		Blacks		Non-Blacks	
	(1) Injury	(2) Appendicitis	(3) Injury	(4) Appendicitis	(5) Injury	(6) Appendicitis
<i>Global polynomial model</i>						
4-Year window ( <i>N</i> = 96)	-0.005 (-0.066, 0.056)	-0.038 (-0.109, 0.033)	-0.014 (-0.155, 0.126)	-0.014 (-0.444, 0.417)	-0.001 (-0.067, 0.064)	-0.021 (-0.103, 0.061)
3-Year window ( <i>N</i> = 72)	-0.008 (-0.082, 0.066)	-0.074 (-0.169, 0.021)	-0.064 (-0.237, 0.110)	0.118 (-0.357, 0.592)	0.005 (-0.073, 0.083)	-0.061 (-0.167, 0.046)
2-Year window ( <i>N</i> = 48)	-0.054 (-0.178, 0.070)	0.012 (-0.088, 0.111)	-0.096 (-0.322, 0.129)	-0.031 (-0.606, 0.545)	-0.032 (-0.165, 0.101)	0.024 (-0.081, 0.129)
<i>Local linear regression</i>						
IK Bandwidth Selector	0.008 (-0.039, 0.056)	-0.035 (-0.108, 0.038)	-0.029 (-0.171, 0.114)	-0.006 (-0.394, 0.381)	0.014 (-0.038, 0.065)	-0.014 (-0.076, 0.048)
CCT Bandwidth Selector	0.022 (-0.058, 0.103)	-0.042 (-0.123, 0.040)	-0.042 (-0.216, 0.132)	-0.451 (-1.210, 0.309)	0.037 (-0.044, 0.117)	0.003 (-0.114, 0.119)
	Low Income - All Races		Low Income - Blacks		Low Income - Non-Blacks	
	(7) Injury	(8) Appendicitis	(9) Injury	(10) Appendicitis	(11) Injury	(12) Appendicitis
<i>Global polynomial model</i>						
4-Year window ( <i>N</i> = 96)	-0.025 (-0.123, 0.074)	0.036 (-0.125, 0.198)	0.015 (-0.218, 0.248)	0.006 (-0.519, 0.531)	-0.033 (-0.153, 0.086)	0.065 (-0.108, 0.238)
3-Year window ( <i>N</i> = 72)	-0.016 (-0.139, 0.106)	-0.046 (-0.251, 0.160)	-0.029 (-0.307, 0.249)	0.178 (-0.410, 0.766)	-0.018 (-0.169, 0.133)	-0.029 (-0.249, 0.190)
2-Year window ( <i>N</i> = 48)	0.030 (-0.131, 0.191)	-0.002 (-0.279, 0.274)	-0.109 (-0.437, 0.218)	0.076 (-0.706, 0.858)	0.062 (-0.145, 0.270)	0.015 (-0.281, 0.310)
<i>Local linear regression</i>						
IK Bandwidth Selector	0.004 (-0.094, 0.101)	0.018 (-0.117, 0.153)	-0.001 (-0.244, 0.242)	-0.004 (-0.368, 0.360)	0.008 (-0.117, 0.133)	0.044 (-0.098, 0.187)
CCT Bandwidth Selector	0.052 (-0.083, 0.187)	0.002 (-0.162, 0.166)	-0.001 (-0.293, 0.291)	-0.387 (-1.070, 0.295)	0.063 (-0.099, 0.225)	0.015 (-0.181, 0.210)

Notes: Sample includes AR, AZ, CA, CO, HI, IA, KY, MD, MI, NJ, NY, OR, SD, TX, UT, VT, and WI. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Appendix Table 3. Estimates of Effect of State Childhood Medicaid Eligibility Gain on Hospitalizations At Age 15 By Race**

	Post x Size of Discontinuity Restricted	Post x Size of Discontinuity Flexible Model	N
<b>All Races</b>			
Log Total Hospitalizations (excluding pregnancy)	-0.265 (-0.883, 0.353)	0.083 (-0.008, 0.173)	672
By Relation to Chronic Illness			
log hospitalizations related to chronic illness	-0.300 (-1.367, 0.766)	0.111 (-0.055, 0.278)	672
log hospitalizations related to non-chronic illnesses	-0.190 (-0.540, 0.158)	0.075*** (0.038, 0.113)	672
<b>Blacks</b>			
Log Total Hospitalizations (excluding pregnancy)	-0.124 (-2.906, 2.658)	-0.378 (-2.566, 1.809)	288
By Relation to Chronic Illness			
log hospitalizations related to chronic illness	-0.298 (-3.430, 2.833)	-0.562 (-1.380, 0.256)	288
log hospitalizations related to non-chronic illnesses	0.146 (-1.422, 1.714)	-0.227 (-4.599, 4.146)	286
<b>Non Blacks</b>			
Log Total Hospitalizations (excluding pregnancy)	-2.245 (26.016, 21.525)	-0.601 (-5.925, 4.722)	288
By Relation to Chronic Illness			
log hospitalizations related to chronic illness	-1.311 (-23.277, 20.654)	-1.005 (-14.857, 12.848)	288
log hospitalizations related to non-chronic illnesses	-3.186 (23.992, 17.619)	-0.327 (-5.181, 4.528)	288

Notes: 1999 hospitalization data are from AZ, CA, CO, HI, IA, MD, MI, NJ, NY, OR, TX, UT, VT, and WI. In addition to the indicator for cohorts born after the cutoff and its interaction with the size of the discontinuity and state fixed effects, the flexible regression specification also includes state-specific quadratic functions in birth month cohort that are interacted with the indicator for cohorts born after the cutoff. Clustered wild bootstrap 95% confidence intervals are reported in brackets and were used for hypothesis testing.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Appendix Table 4. Estimates of Effect of Childhood Medicaid Eligibility on Hospitalizations at Age 15 (1999), CA Excluded**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( <i>N</i> = 96)	-0.002 (-0.056, 0.051)	-0.038 (-0.116, 0.040)	0.025 (-0.033, 0.083)	-0.109 (-0.276, 0.058)	-0.146 (-0.395, 0.102)	-0.055 (-0.226, 0.117)	0.022 (-0.029, 0.074)	-0.006 (-0.090, 0.078)	0.040 (-0.027, 0.108)
3-Year window ( <i>N</i> = 72)	-0.020 (-0.080, 0.040)	-0.038 (-0.129, 0.052)	-0.007 (-0.076, 0.061)	-0.001 (-0.199, 0.197)	0.008 (-0.270, 0.286)	-0.012 (-0.228, 0.203)	-0.007 (-0.063, 0.050)	-0.017 (-0.114, 0.079)	-0.003 (-0.085, 0.079)
2-Year window ( <i>N</i> = 48)	-0.013 (-0.083, 0.056)	-0.024 (-0.130, 0.082)	-0.007 (-0.108, 0.093)	0.034 (-0.195, 0.263)	-0.004 (-0.371, 0.364)	0.084 (-0.144, 0.313)	0.007 (-0.067, 0.081)	0.017 (-0.100, 0.134)	-0.005 (-0.130, 0.120)
<i>Local linear regression</i>									
IK Bandwidth Selector	-0.047** (-0.089, -0.005)	-0.048 (-0.113, 0.018)	-0.050** (-0.099, -0.000)	-0.050 (-0.205, 0.105)	-0.053 (-0.257, 0.151)	-0.038 (-0.197, 0.121)	-0.036* (-0.072, 0.000)	-0.030 (-0.096, 0.036)	-0.046 (-0.104, 0.013)
CCT Bandwidth Selector	-0.072** (-0.128, -0.017)	-0.076* (-0.166, 0.013)	-0.087*** (-0.147, -0.026)	-0.127 (-0.343, 0.089)	-0.106 (-0.454, 0.241)	-0.040 (-0.204, 0.124)	-0.069*** (-0.116, -0.023)	-0.041 (-0.137, 0.055)	-0.070* (-0.150, 0.010)

Notes: Sample includes birth-month observations from pooled AZ, CO, HI, IA, MD, MI, NJ, NY, TX, VT, and WI data. Models with all races also include OR. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Appendix Table 5. Estimates of Effect of Childhood Medicaid Eligibility on Hospitalizations at Age 25 (2009), CA Excluded**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( $N = 96$ )	-0.014 (-0.047, 0.018)	-0.007 (-0.055, 0.041)	-0.021 (-0.052, 0.009)	-0.095** (-0.178, -0.012)	-0.136** (-0.247, -0.026)	-0.040 (-0.138, 0.059)	0.002 (-0.032, 0.036)	0.023 (-0.028, 0.073)	-0.016 (-0.051, 0.018)
3-Year window ( $N = 72$ )	-0.009 (-0.045, 0.026)	0.006 (-0.050, 0.061)	-0.023 (-0.055, 0.009)	-0.113** (-0.210, -0.017)	-0.132** (-0.263, -0.001)	-0.087 (-0.202, 0.028)	0.011 (-0.027, 0.048)	0.037 (-0.024, 0.098)	-0.012 (-0.045, 0.021)
2-Year window ( $N = 48$ )	0.005 (-0.040, 0.050)	0.018 (-0.061, 0.098)	-0.007 (-0.050, 0.035)	-0.170** (-0.301, -0.040)	-0.182** (-0.359, -0.005)	-0.151* (-0.305, 0.002)	0.038* (-0.002, 0.078)	0.059 (-0.013, 0.131)	0.021 (-0.017, 0.058)
<i>Local linear regression</i>									
IK Bandwidth Selector	-0.019 (-0.043, 0.004)	-0.018 (-0.053, 0.016)	-0.024** (-0.045, -0.003)	-0.146*** (-0.228, -0.064)	-0.165*** (-0.267, -0.063)	-0.106** (-0.195, -0.016)	-0.003 (-0.033, 0.027)	0.013 (-0.033, 0.059)	-0.016 (-0.039, 0.006)
CCT Bandwidth Selector	-0.023 (-0.053, 0.008)	-0.041 (-0.101, 0.018)	-0.036*** (-0.060, -0.012)	-0.166*** (-0.270, -0.061)	-0.201*** (-0.335, -0.067)	-0.121*** (-0.211, -0.032)	-0.006 (-0.046, 0.034)	0.015 (-0.041, 0.071)	-0.009 (-0.046, 0.028)

Notes: Sample includes birth-month observations from pooled AR, AZ, CO, HI, IA, KY, MD, MI, NJ, NY, OR, SD, TX, UT, VT and WI hospital data. Models with all races also include NC and NE. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Appendix Table 6. Estimates of Effect of Childhood Medicaid Eligibility on ED Visits at Age 25 (2009), CA Excluded**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( <i>N</i> = 96)	-0.019 (-0.049, 0.010)	-0.035* (-0.073, 0.002)	-0.017 (-0.048, 0.014)	-0.050** (-0.089, -0.011)	-0.050** (-0.089, -0.011)	-0.044** (-0.082, -0.005)	-0.012 (-0.043, 0.019)	-0.021 (-0.058, 0.015)	-0.011 (-0.044, 0.022)
3-Year window ( <i>N</i> = 72)	-0.017 (-0.051, 0.016)	-0.038* (-0.080, 0.004)	-0.014 (-0.050, 0.021)	-0.028 (-0.089, 0.033)	-0.114 (-0.292, 0.064)	-0.013 (-0.075, 0.049)	-0.011 (-0.046, 0.025)	-0.024 (-0.067, 0.019)	-0.009 (-0.046, 0.029)
2-Year window ( <i>N</i> = 48)	0.004 (-0.036, 0.043)	-0.008 (-0.063, 0.047)	0.005 (-0.036, 0.046)	-0.047** (-0.094, -0.001)	-0.086 (-0.224, 0.053)	-0.040* (-0.087, 0.007)	0.010 (-0.033, 0.054)	0.022 (-0.036, 0.080)	0.009 (-0.038, 0.056)
<i>Local linear regression</i>									
IK Bandwidth Selector	-0.005 (-0.032, 0.022)	-0.027* (-0.054, 0.000)	-0.002 (-0.031, 0.027)	-0.026* (-0.052, 0.001)	-0.084 (-0.192, 0.023)	-0.018 (-0.045, 0.010)	0.004 (-0.032, 0.039)	-0.004 (-0.040, 0.032)	0.002 (-0.032, 0.036)
CCT Bandwidth Selector	0.006 (-0.033, 0.046)	-0.026 (-0.062, 0.011)	0.014 (-0.030, 0.059)	-0.021 (-0.050, 0.008)	-0.102 (-0.223, 0.020)	0.000 (-0.035, 0.036)	0.011 (-0.033, 0.055)	-0.004 (-0.041, 0.032)	0.014 (-0.035, 0.063)

Notes: Sample includes birth-month observations from pooled AZ, HI, IA, KY, NJ, NY, UT, and WI ED data. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



**Appendix Table 7. Estimates of Effect of Childhood Medicaid Eligibility on Hospitalizations in Low-Income Zipcodes at Age 25 (2009), CA Excluded**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( <i>N</i> = 96)	-0.025 (-0.062, 0.011)	-0.025 (-0.086, 0.035)	0.020 (-0.028, 0.068)	-0.116* (-0.247, 0.016)	-0.178** (-0.328, -0.027)	-0.025 (-0.195, 0.144)	0.043 (-0.024, 0.109)	0.040 (-0.049, 0.128)	0.047 (-0.018, 0.111)
3-Year window ( <i>N</i> = 72)	-0.016 (-0.068, 0.036)	-0.032 (-0.105, 0.041)	-0.000 (-0.054, 0.054)	-0.163** (-0.317, -0.010)	-0.215** (-0.389, -0.040)	-0.088 (-0.286, 0.110)	0.040 (-0.046, 0.126)	0.048 (-0.065, 0.161)	0.035 (-0.044, 0.115)
2-Year window ( <i>N</i> = 48)	-0.017 (-0.078, 0.044)	-0.035 (-0.116, 0.045)	0.002 (-0.072, 0.075)	-0.248** (-0.444, -0.053)	-0.327*** (-0.520, -0.134)	-0.135 (-0.381, 0.110)	0.064 (-0.041, 0.168)	0.081 (-0.037, 0.199)	0.049 (-0.065, 0.163)
<i>Local linear regression</i>									
IK Bandwidth Selector	-0.003 (-0.048, 0.043)	-0.044* (-0.094, 0.007)	0.000 (-0.037, 0.037)	-0.188** (-0.344, -0.032)	-0.278*** (-0.446, -0.109)	-0.073 (-0.253, 0.107)	0.022 (-0.043, 0.087)	0.020 (-0.076, 0.116)	0.033 (-0.014, 0.080)
CCT Bandwidth Selector	-0.034* (-0.073, 0.005)	-0.069** (-0.135, -0.002)	-0.011 (-0.049, 0.027)	-0.188** (-0.343, -0.033)	-0.294*** (-0.486, -0.101)	-0.068 (-0.275, 0.139)	0.027 (-0.051, 0.105)	0.024 (-0.087, 0.135)	0.027 (-0.048, 0.102)

Notes: Sample includes birth-month observations from pooled AR, AZ, CO, HI, IA, KY, MD, MI, NJ, NY, OR, SD, TX, UT, VT and WI hospital data. Models with all races also include NC and NE. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Appendix Table 8. Estimates of Effect of Childhood Medicaid Eligibility on ED Visits in Low-Income Zipcodes at Age 25 (2009), CA Excluded**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( <i>N</i> = 96)	-0.043** (-0.080 - -0.005)	-0.055* (-0.116 - 0.006)	-0.041** (-0.081 - -0.000)	-0.065** (-0.117 - -0.012)	-0.123 (-0.281 - 0.034)	-0.055** (-0.104 - -0.006)	-0.034 (-0.080 - 0.012)	-0.024 (-0.094 - 0.046)	-0.036 (-0.084 - 0.013)
3-Year window ( <i>N</i> = 72)	-0.054** (-0.098 - -0.009)	-0.071* (-0.147 - 0.005)	-0.051** (-0.098 - -0.004)	-0.066** (-0.129 - -0.003)	-0.109 (-0.283 - 0.066)	-0.060* (-0.119 - 0.000)	-0.049* (-0.103 - 0.006)	-0.054 (-0.139 - 0.031)	-0.048* (-0.104 - 0.009)
2-Year window ( <i>N</i> = 48)	-0.033 (-0.083 - 0.016)	-0.058 (-0.154 - 0.038)	-0.030 (-0.080 - 0.021)	-0.040 (-0.123 - 0.043)	-0.174* (-0.380 - 0.033)	-0.016 (-0.091 - 0.058)	-0.031 (-0.089 - 0.028)	-0.006 (-0.104 - 0.092)	-0.034 (-0.096 - 0.029)
<i>Local linear regression</i>									
IK Bandwidth Selector	-0.032** (-0.062 - -0.003)	-0.051* (-0.103 - 0.001)	-0.028* (-0.057 - 0.002)	-0.040** (-0.077 - -0.002)	-0.108 (-0.245 - 0.029)	-0.032* (-0.064 - 0.000)	-0.026 (-0.061 - 0.008)	-0.029 (-0.079 - 0.020)	-0.027 (-0.066 - 0.011)
CCT Bandwidth Selector	-0.017 (-0.066 - 0.033)	-0.057** (-0.113 - -0.002)	-0.009 (-0.064 - 0.047)	0.009 (-0.033 - 0.052)	-0.124* (-0.267 - 0.020)	0.061** (0.012 - 0.111)	-0.025 (-0.081 - 0.030)	-0.028 (-0.084 - 0.028)	-0.026 (-0.084 - 0.033)

Notes: Sample includes birth-month observations from pooled AZ, HI, IA, KY, NJ, NY, UT, and WI ED data. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Appendix Table 9. Estimates of Effect of Childhood Medicaid Eligibility on Hospitalizations at Age 15 (1999), including controls for birth cohort characteristics**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( $N = 96$ )	0.005 (-0.032 - 0.042)	-0.007 (-0.077 - 0.062)	0.012 (-0.030 - 0.054)	-0.006 (-0.122 - 0.111)	-0.073 (-0.260 - 0.114)	0.087 (-0.052 - 0.226)	0.035* (-0.001 - 0.072)	0.037 (-0.028 - 0.101)	0.034 (-0.009 - 0.078)
3-Year window ( $N = 72$ )	0.006 (-0.032 - 0.043)	0.009 (-0.065 - 0.083)	0.001 (-0.043 - 0.045)	0.027 (-0.120 - 0.173)	0.022 (-0.194 - 0.239)	0.047 (-0.124 - 0.218)	0.024 (-0.017 - 0.064)	0.027 (-0.048 - 0.101)	0.021 (-0.027 - 0.069)
2-Year window ( $N = 48$ )	-0.001 (-0.061 - 0.059)	0.009 (-0.093 - 0.111)	-0.011 (-0.083 - 0.061)	0.039 (-0.112 - 0.190)	-0.007 (-0.261 - 0.248)	0.108 (-0.087 - 0.304)	0.054* (-0.010 - 0.117)	0.076 (-0.018 - 0.170)	0.035 (-0.053 - 0.123)
<i>Local linear regression</i>									
IK Bandwidth Selector	0.015 (-0.031 - 0.060)	0.063** (0.009 - 0.118)	0.004 (-0.042 - 0.050)	-0.012 (-0.096 - 0.073)	-0.023 (-0.180 - 0.133)	0.039 (-0.059 - 0.138)	0.066*** (0.024 - 0.109)	0.073*** (0.020 - 0.126)	0.034 (-0.015 - 0.082)
CCT Bandwidth Selector	0.028 (-0.039 - 0.095)	0.051 (-0.050 - 0.152)	0.003 (-0.051 - 0.056)	-0.030 (-0.177 - 0.118)	-0.046 (-0.290 - 0.199)	0.032 (-0.082 - 0.147)	0.090*** (0.032 - 0.148)	0.077** (0.017 - 0.137)	0.096** (0.023 - 0.169)

Notes: Sample includes birth-month observations from pooled AZ, CA, CO, HI, IA, MD, MI, NJ, NY, TX, VT, and WI data. Models with all races also include OR. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. Models include controls for the following birth outcomes: fraction of mothers with high school education, fraction of mothers married, fraction of mother receiving prenatal care, fraction of births low birthweight, fraction of births very low birthweight, number of births. 95% confidence intervals reported in parentheses; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Appendix Table 10. Estimates of Effect of Childhood Medicaid Eligibility on Hospitalizations at Age 25 (2009), including controls for birth cohort characteristics**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( <i>N</i> = 96)	0.019 (-0.004 - 0.042)	0.031* (-0.004 - 0.066)	0.008 (-0.023 - 0.038)	-0.066 (-0.149 - 0.017)	-0.098* (-0.197 - 0.001)	-0.023 (-0.115 - 0.069)	0.035 (0.008 - 0.061)	0.061*** (0.019 - 0.103)	0.013 (-0.021 - 0.047)
3-Year window ( <i>N</i> = 72)	0.013 (-0.015 - 0.041)	0.028 (-0.015 - 0.070)	0.000 (-0.032 - 0.032)	-0.094** (-0.185 - -0.003)	-0.122** (-0.229 - -0.015)	-0.057 (-0.171 - 0.057)	0.033** (0.002 - 0.064)	0.066*** (0.017 - 0.114)	0.006 (-0.031 - 0.043)
2-Year window ( <i>N</i> = 48)	0.034 (-0.012 - 0.080)	0.040 (-0.033 - 0.112)	0.029 (-0.025 - 0.082)	-0.149** (-0.269 - -0.030)	-0.177** (-0.325 - -0.029)	-0.114 (-0.255 - 0.027)	0.059** (0.011 - 0.108)	0.072** (0.013 - 0.132)	0.048 (-0.017 - 0.112)
<i>Local linear regression</i>									
IK Bandwidth Selector	-0.005 (-0.025 - 0.014)	0.003 (-0.021 - 0.027)	-0.007 (-0.031 - 0.017)	-0.133*** (-0.198 - -0.068)	-0.102*** (-0.174 - -0.029)	-0.113*** (-0.188 - -0.039)	0.018 (-0.011 - 0.048)	0.025 (-0.003 - 0.054)	0.004 (-0.029 - 0.037)
CCT Bandwidth Selector	-0.005 (-0.035 - 0.026)	0.005 (-0.032 - 0.041)	-0.005 (-0.045 - 0.035)	-0.142*** (-0.225 - -0.059)	-0.162*** (-0.256 - -0.068)	-0.115** (-0.205 - -0.024)	0.018 (-0.015 - 0.052)	0.031 (-0.010 - 0.072)	0.023 (-0.024 - 0.069)

Notes: Sample includes birth-month observations from pooled AR, AZ, CA, CO, HI, IA, KY, MD, MI, NJ, NY, OR, SD, TX, UT, VT and WI hospital data. Models with all races also include NC and NE. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. Models include controls for the following birth outcomes: fraction of mothers with high school education, fraction of mothers married, fraction of mother receiving prenatal care, fraction of births low birthweight, fraction of births very low birthweight, number of births. 95% confidence intervals reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Appendix Table 11. Estimates of Effect of Childhood Medicaid Eligibility on ED Visits at Age 25 (2009), including controls for birth cohort characteristics**

	All Races			Blacks			Non-Blacks		
	(1) All	(2) Chronic	(3) Non-Chronic	(4) All	(5) Chronic	(6) Non-Chronic	(7) All	(8) Chronic	(9) Non-Chronic
<i>Global polynomial model</i>									
4-Year window ( <i>N</i> = 96)	-0.004 (-0.019 - 0.011)	-0.014 (-0.047 - 0.019)	-0.003 (-0.019 - 0.014)	-0.031* (-0.063 - 0.001)	-0.105* (-0.222 - 0.013)	-0.019 (-0.046 - 0.007)	0.003 (-0.013 - 0.019)	0.018 (-0.012 - 0.048)	0.001 (-0.017 - 0.019)
3-Year window ( <i>N</i> = 72)	-0.002 (-0.017 - 0.013)	-0.013 (-0.050 - 0.024)	-0.001 (-0.017 - 0.016)	-0.037** (-0.073 - -0.001)	-0.133* (-0.268 - 0.002)	-0.020 (-0.048 - 0.008)	0.004 (-0.013 - 0.020)	0.018 (-0.017 - 0.054)	0.002 (-0.016 - 0.020)
2-Year window ( <i>N</i> = 48)	0.010 (-0.014 - 0.033)	0.026 (-0.030 - 0.083)	0.007 (-0.015 - 0.029)	-0.022 (-0.075 - 0.032)	-0.087 (-0.280 - 0.106)	-0.010 (-0.054 - 0.035)	0.015 (-0.009 - 0.039)	0.066** (0.011 - 0.120)	0.008 (-0.018 - 0.034)
<i>Local linear regression</i>									
IK Bandwidth Selector	0.002 (-0.009 - 0.012)	-0.003 (-0.023 - 0.017)	0.003 (-0.010 - 0.015)	-0.033*** (-0.054 - -0.011)	-0.092 (-0.203 - 0.019)	-0.017* (-0.034 - 0.001)	0.010 (-0.004 - 0.025)	0.014 (-0.009 - 0.036)	0.009 (-0.007 - 0.026)
CCT Bandwidth Selector	0.001 (-0.011 - 0.013)	-0.014 (-0.037 - 0.008)	0.004 (-0.010 - 0.019)	-0.035*** (-0.057 - -0.013)	-0.129** (-0.234 - -0.024)	-0.017* (-0.035 - 0.001)	0.010 (-0.005 - 0.025)	0.015 (-0.008 - 0.039)	0.010 (-0.008 - 0.028)

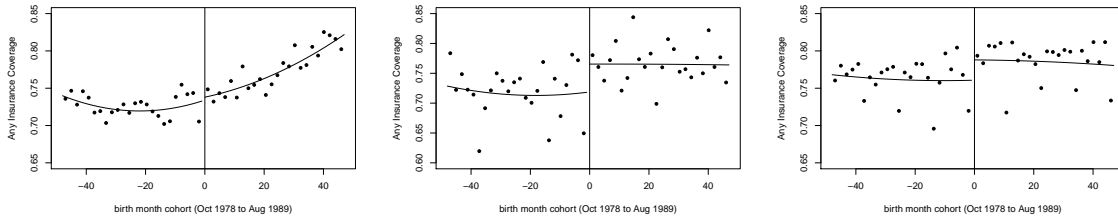
Notes: Sample includes birth-month observations from pooled AZ, CA, HI, IA, KY, NJ, NY, UT, and WI ED data. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. Models include controls for the following birth outcomes: fraction of mothers with high school education, fraction of mothers married, fraction of mother receiving prenatal care, fraction of births low birthweight, fraction of births very low birthweight, number of births. 95% confidence intervals reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Appendix Table 12. Change in Log Total Costs by Payer, Black Patients**

	Hospitalizations				ED Visits			
	(1) Costs of Publicly- Insured Visits	(2) Costs of Privately- Insured Visits	(3) Costs of Self Pay Visits	(4) Costs of Uncompensated Care Visits	(1) Costs of Publicly- Insured Visits	(2) Costs of Privately- Insured Visits	(3) Costs of Self Pay Visits	(4) Costs of Uncompensated Care Visits
<i>Global polynomial model</i>								
4-Year window (N= 96)	-0.141** (-0.280 - -0.003)	0.060 (-0.146 - 0.266)	0.012 (-0.140 - 0.165)	-0.009 (-0.445 - 0.427)	-0.026 (-0.118 - 0.066)	-0.073** (-0.136 - -0.009)	-0.048 (-0.107 - 0.012)	-0.323 (-1.069 - 0.423)
3-Year window (N = 72)	-0.143* (-0.307 - 0.021)	0.072 (-0.165 - 0.310)	0.055 (-0.113 - 0.223)	-0.143 (-0.627 - 0.341)	-0.051 (-0.161 - 0.059)	-0.089** (-0.160 - -0.018)	-0.101*** (-0.172 - -0.030)	-0.153 (-0.904 - 0.597)
2-Year window (N = 48)	-0.168 (-0.376 - 0.040)	-0.074 (-0.369 - 0.221)	0.079 (-0.157 - 0.314)	-0.346 (-0.959 - 0.267)	-0.079 (-0.227 - 0.068)	-0.065 (-0.164 - 0.034)	-0.075* (-0.160 - 0.009)	0.436 (-0.287 - 1.159)
<i>Local linear regression</i>								
IK Bandwidth Selector	-0.144** (-0.263 - -0.025)	-0.028 (-0.199 - 0.144)	0.046 (-0.068 - 0.161)	-0.134 (-0.540 - 0.272)	-0.043 (-0.129 - 0.042)	-0.071*** (-0.119 - -0.022)	-0.039 (-0.096 - 0.017)	0.175 (-0.528 - 0.878)
CCT Bandwidth Selector	-0.150* (-0.316 - 0.016)	-0.249* (-0.505 - 0.007)	0.056 (-0.112 - 0.223)	-0.114 (-0.582 - 0.354)	-0.049 (-0.141 - 0.042)	-0.114*** (-0.185 - -0.043)	-0.033 (-0.101 - 0.035)	0.130 (-0.683 - 0.943)

Notes: Sample includes AR, AZ, CA, CO, HI, IA, KY, MD, MI, NJ, NY, OR, SD, TX, UT, VT and WI. Results for all races also include NC and NE. All global regression models include birth month fixed effects and a quadratic function in birth month cohort interacted with an indicator that the birth month cohort is October 1983 or later. 95% confidence intervals reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

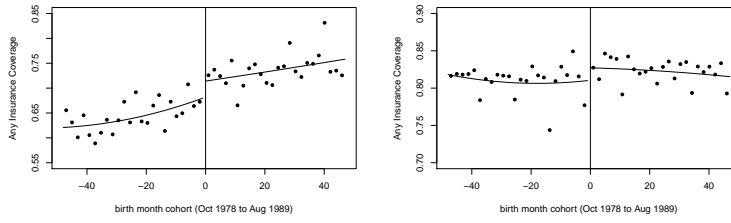
Appendix Figure 1: Insurance Coverage in Last Month, Ages 8 to 13, NHIS



(a) All Races

(b) Blacks

(c) Non-Blacks

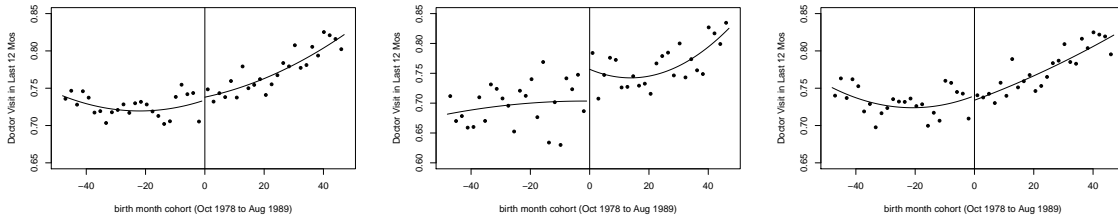


(d) Households below  
poverty level

(e) Households above  
poverty level

Source: Authors' calculations from the National Health Interview Survey, 1992-1996. Cohorts born in 1983 are between the ages of 8 and 13 in these figures. The trend is estimated using children between the ages of 4 and 17.

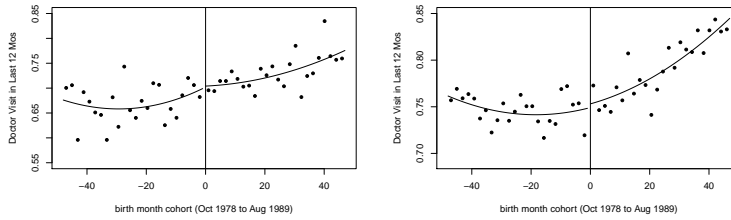
## Appendix Figure 2: Doctor Visits, Ages 8 to 13, NHIS



(a) All Races

(b) Blacks

(c) Non-Blacks



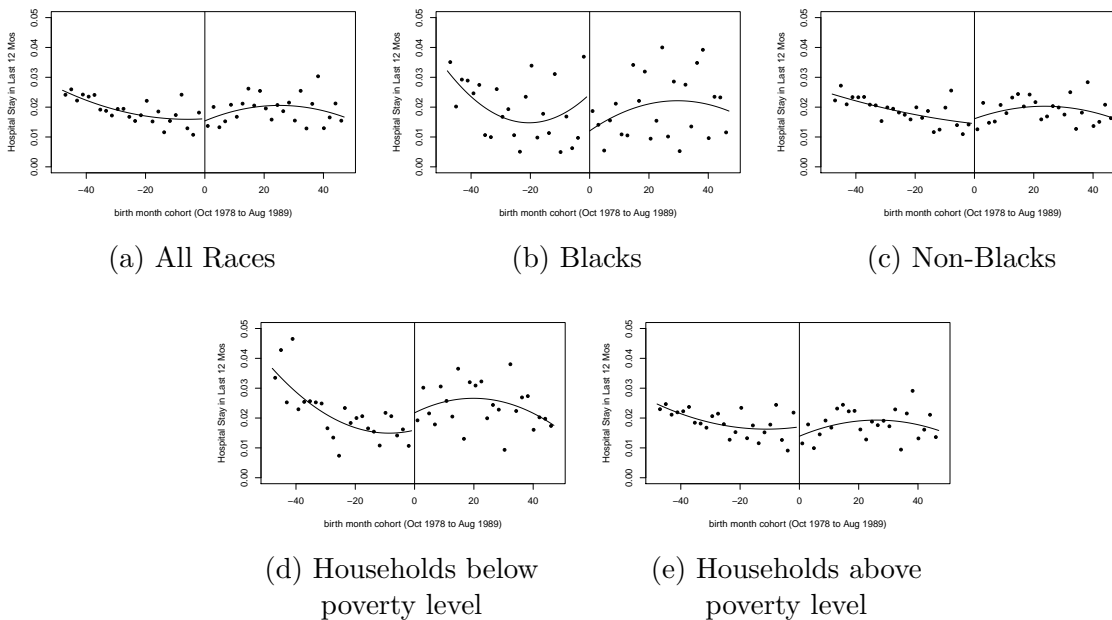
(d) Households below  
poverty level

(e) Households above  
poverty level

Source: Authors' calculations from the National Health Interview Survey, 1992-1996. Cohorts born in 1983 are between the ages of 8 and 13 in these figures. The trend is estimated using children between the ages of 4 and 17.

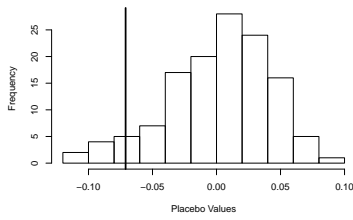


### Appendix Figure 3: Hospitalizations, Ages 8 to 13, NHIS

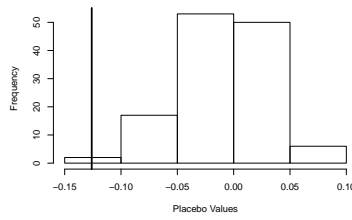


Source: Authors' calculations from the National Health Interview Survey, 1992-1996. Cohorts born in 1983 are between the ages of 8 and 13 in these figures. The trend is estimated using children between the ages of 4 and 17.

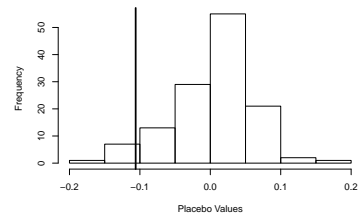
Appendix Figure 4: Placebo Tests (Jan 1965 to Sep 1983 - 129 total placebo tests) for Hospitalization Models, Black Patients



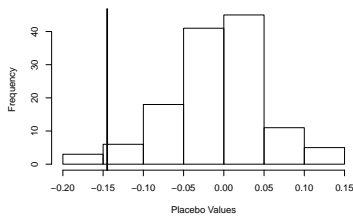
(a) All Hospitalizations  
(Global)  
True effect is larger in magnitude than  
≈ 90 % of placebo estimates



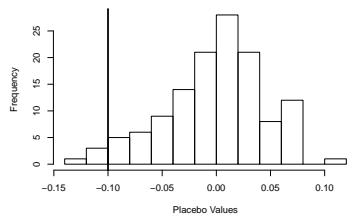
(b) All Hospitalizations  
(Local)  
True effect is larger in magnitude than  
≈ 99 % of placebo estimates



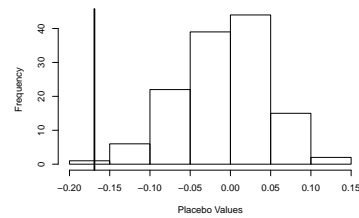
(c) Chronic Illness  
Hospitalizations (Global)  
True effect is larger in magnitude than  
≈ 95 % of placebo estimates



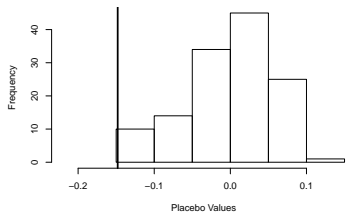
(d) Chronic Illness  
Hospitalizations (Local)  
True effect is larger in magnitude than  
≈ 97 % of placebo estimates



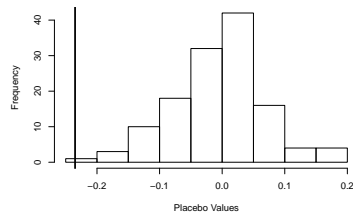
(e) All Hospitalizations  
(Global), Low Income  
True effect is larger in magnitude than  
≈ 96 % of placebo estimates



(f) All Hospitalizations  
(Local), Low Income  
True effect is larger in magnitude than  
≈ 100 % of placebo estimates



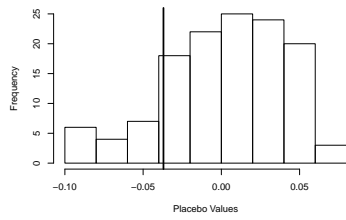
(g) Chronic Illness  
Hospitalizations (Global),  
Low Income  
True effect is larger in magnitude than  
≈ 100 % of placebo estimates



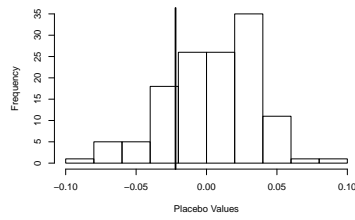
(h) Chronic Illness  
Hospitalizations (Local),  
Low Income  
True effect is larger in magnitude than  
≈ 100 % of placebo estimates

These figures are histograms of the 129 “placebo” regression discontinuity estimates generated using every 4-year period between January 1965 and September 1983, prior to the actual discontinuity in Medicaid eligibility. The vertical line represents the effect estimated at the true Medicaid eligibility discontinuity.

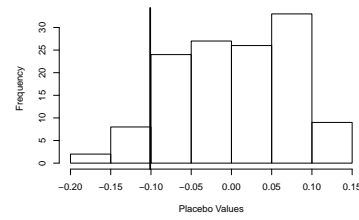
Appendix Figure 5: Placebo Tests (Jan 1965 to Sep 1983 - 129 total placebo tests) for ED Models, Black Patients



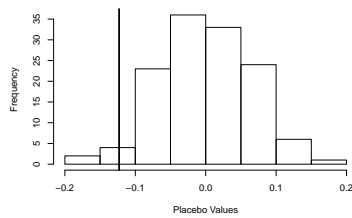
(e) ED Visits (Global)  
True effect is larger in magnitude than  
≈ 64 % of placebo estimates



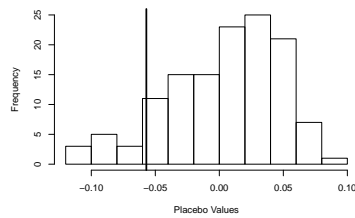
(e) ED Visits (Local)  
True effect is larger in magnitude than  
≈ 45 % of placebo estimates



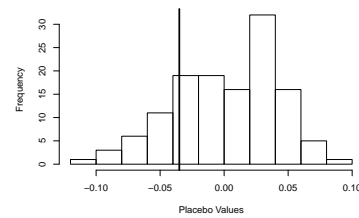
(e) ED Visits for Chronic  
Illnesses (Global)  
True effect is larger in magnitude than  
≈ 86 % of placebo estimates



(e) ED Visits for Chronic  
Illnesses (Local)  
True effect is larger in magnitude than  
≈ 94 % of placebo estimates



(f) ED Visits (Global),  
Low Income  
True effect is larger in magnitude than  
≈ 78 % of placebo estimates



(f) ED Visits (Global),  
Low Income  
True effect is larger in magnitude than  
≈ 54 % of placebo estimates

These figures are histograms of the 129 “placebo” regression discontinuity estimates generated using every 4-year period between January 1965 and September 1983, prior to the actual discontinuity in Medicaid eligibility (global model) and an optimally-chosen bandwidth following Imbens and Kalyanaraman (2012) within this 4-year period (local model). The vertical line represents the effect estimated at the true Medicaid eligibility discontinuity.