

CEWP 21-07

The Effect of ACA Medicaid Expansions on Foster Care Admissions

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August 12, 2021

CARLETON ECONOMICS WORKING PAPERS



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THE EFFECT OF ACA MEDICAID EXPANSIONS ON FOSTER CARE ADMISSIONS

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Abstract

Recent papers have documented positive externalities of Medicaid expansions on several non-health related variables, such as crime, financial stress, child support, and child abuse. In this paper, we investigate the relationship between access to public health insurance and foster care admissions following state decisions to expand Medicaid coverage after the Affordable Care Act. Over 70 percent of all foster care admissions are related to child abuse incidents, which have been found to decrease following the Medicaid expansions. Our results suggest that the Medicaid expansions are associated with a large decrease in foster care admissions, driven by neglect incidents.

JEL Classification: I13, I18, J13, K36

Keywords: Affordable Care Act, Health Insurance, Foster Care, Child Abuse

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1 Introduction

Medicaid is one of the largest social programs in the United States that provides health insurance for low-income families and individuals. Many states have increased coverage in recent years and a growing literature has shown the importance of Medicaid expansions on several outcomes. The literature finds that the Medicaid expansions change health care access (e.g., Courtemanche et al. (2019), Garthwaite et al. (2019), and Huh (2021)) and decrease mortality (e.g., Miller et al. (2019) and Borgschulte and Vogler (2020)). In addition, the literature documents positive externalities of the Medicaid expansions on non-health related outcomes, such as financial well-being (e.g., Miller et al. (2018)), crime (e.g., He and Barkowski (2020) and Vogler (2020)), and child support (e.g., Bullinger (2021)).

Brown et al. (2019) find that the Medicaid expansions lead to a significant and large decrease in child abuse reports. Child abuse is a major factor leading to foster care admissions. Over 70 percent of all foster care admissions are related to physical abuse or neglect incidents.¹ Foster care is an important preoccupation for policy makers and foster care admissions have been shown to have long-term negative effects on juvenile delinquency, teen motherhood, and employment (e.g., Doyle Jr (2007)).

In this paper, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, we investigate the relationship between access to public health insurance and foster care admissions. Our empirical strategy uses the variation in insurance eligibility generated by state decisions to expand Medicaid after the Patient Protection and Affordable Care Act (ACA).

We find that the Medicaid expansions lead to a substantial decrease in foster care admissions. The negative impact on total foster care admissions is mainly driven by a reduction in admissions due to neglect incidents. The coefficients of interest are similar among different age groups (0 to 5; 6 to 11; and 12-18) and genders. In addition, we present evidence that the estimates in Brown et al. (2019) do not rule out zero effects after the standard errors are adequately clustered (see Section 4.1).

¹Authors' calculations using the AFCARS Foster Care File. About 7 percent of all child abuse reports (substantiated or unsubstantiated) result in foster care admissions.

2 Literature Search

Medicaid is a public health insurance program for individuals with limited resources and individuals with disabilities. The ACA included a provision to expand Medicaid eligibility to low-income adults with income up to 138 percent of the federal poverty line. The expansion increased Medicaid coverage by 53 percent for adults without children and with a high school diploma or less, and by 24 percent for adults with children (Kaestner et al. (2017)).²

Our investigation into the effect of the Medicaid expansions on foster care is motivated by the decrease in child abuse reports found in Brown et al. (2019). Child abuse is a major factor leading to foster care admissions. This decrease in child abuse could result from an increase in financial well-being and child support (e.g., Cancian et al. (2013) and Berger et al. (2017)). Family income is an important risk factor for children that contributes to being reported to welfare services and admitted to foster care (e.g., Berger (2004)). However, the expected impact on foster care admissions is unclear due to the “light touch” effects. Improvements in financial well-being may decrease child abuse and neglect by reducing the number of “light touch” cases. Therefore, we may not see a decrease in foster care as the most severe cases, likely leading to foster care admissions, might be less sensitive to improvements in financial well-being (e.g., Fong (2020)).

The foster care system and child maltreatment investigations are critical to protecting children from abuses. Gihleb et al. (2019) and Fong (2020) present a good overview of key issues related to child maltreatment reports and foster care admissions.³ Several policies have been shown to decrease child abuse and foster care admissions (e.g., Berger et al. (2017), Raissian and Bullinger (2017), and Gihleb et al. (2019)).⁴ For example, Raissian and Bullinger (2017) show that increases in the minimum wage affect maltreatment reports among young children.⁵

²As mentioned previously, Medicaid expansions have been found to increase health care access, decrease mortality, and improve several non-health related outcomes.

³Fong (2020) identifies that the child protection authorities disproportionately investigate poor families and families of color.

⁴See also Hudson and Moriya (2017) on the impact of Medicaid expansions on child coverage and the discussion of the “welcome mat” effects. We do not find supporting evidence for these effects on child abuse reports (see Section 4.1).

⁵See also McLaughlin (2017) on how changes in family income affect child abuse reports.

3 Methods

3.1 Data

Our main data on foster care come from the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File. We use annual data from 2010 to 2017. We have information on child demographics including gender and age. Our main outcome variables are foster care admissions, readmissions, and exits. Table 1 presents descriptive statistics for the treatment (i.e., expanders) and control groups (i.e., non-expanders) for the main variables used in our analysis. We classify groups of states that expanded Medicaid coverage following Hu et al. (2018).⁶ Table 1 shows that our treatment and control states are similar along several characteristics, such as the fraction of families with children below the federal poverty level, unemployment rate, and teenage birth rate. This table also reports descriptive statistics for foster care admissions by reason of admissions (any, physical abuse, neglect, drug abuse, or alcohol abuse) and exits.

Following Brown et al. (2019), our annual data on child maltreatment reports come from the National Child Abuse and Neglect Data System (NCANDS) Child File for 2010-2017. Our main outcome variables include different types of child maltreatment reports: any maltreatment, physical abuse, neglect, and emotional abuse.⁷

3.2 Methodology

We estimate the impact of the Medicaid expansions employing a difference-in-differences design, based on state decisions to expand Medicaid coverage after the ACA. We use aggregate data at the state level and estimate the following equation:

$$Y_{st} = \beta_0 + \beta_1 Post_t * Treatment_s + \theta Z_{st} + S_s + T_t + \epsilon_{st} \quad (1)$$

Our main outcome variables (Y_{st}) are foster care admissions, readmissions, and exits per 100,000 children in state s in year t . We compute these counts in the natural logarithm.

⁶Table A.1 categorizes states based on the expansion status of Medicaid, using data from the Kaiser Family Foundation (2018) and following Hu et al. (2018). Our main specification excludes both early and late expanders.

⁷Table A.2 presents descriptive statistics on child maltreatment reports.

$Post_t * Treatment_s$ is our treatment variable. It takes a value of 1 after a state expands Medicaid in 2014. Z_{st} refers to state-specific controls, including fraction of families with children below the federal poverty level, unemployment rate, teenage birth rate, existence of paid family leave policy, and existence of child care waitlist. Our controls follow Brown et al. (2019).⁸ S_s and T_t denote state and year fixed effects, respectively. All regressions are weighted by the state’s child population. The standard errors are clustered at the state level, which account for serial correlation within states (e.g., Bertrand et al. (2004)). We use a similar equation to study child maltreatment reports.

4 Results

Table 2 presents estimates of the effects on foster care admissions by reason of admissions (any, physical abuse, neglect, drug abuse, or alcohol abuse), as well as foster care exits. Column (1) reports results for all cases. Columns (2)-(4) report heterogeneity by age groups (0 to 5; 6 to 11; and 12-18).⁹ Columns (5)-(6) separate the sample by gender. Table 2 suggests that the Medicaid expansions lead to a significant decrease in total foster care admissions by 17.5 percent. In particular, it suggests a 32 percent reduction in foster care admissions related to neglect incidents. These effects are indistinguishable across different age groups and genders. The estimates for other subcategories and foster care exits are negative in most specifications but statistically insignificant due to large standard errors. In terms of effect size, the coefficients are quite large in many specifications. Figure 1 presents corresponding event-study graphs for foster care admissions in Panels (a)-(e), and for foster care exits in Panel (f). These graphs also suggest a decrease in total foster care admissions and admissions due to neglect. The individual coefficients, however, are insignificant after the interventions (i.e., the 95-percent confidence intervals include zero).

In Table 3, we study the effect of the Medicaid expansions on foster care readmissions, a subset of all admissions examined in Table 2.¹⁰ We study readmissions to investigate whether

⁸Our results are robust to different sets of control variables such as unemployment rate, median household income, poverty rate, fraction of the population aged 0-18, and fraction of the population that is nonwhite.

⁹Our heterogeneity investigations are motivated by Raissian and Bullinger (2017). They show that increases in the minimum wage affect maltreatment reports among young children, but the effects fade as children age.

¹⁰We compute the first admission for each child starting in the year prior to 2010, and any new admissions during 2010-2017 count as readmissions.

the expansions have a larger impact on children with repeated interactions with the foster care system. We find significant estimates for total foster care readmissions, but not for any of the subcategories. While the coefficients suggest a sizeable reduction in readmissions, the standard errors are generally large, which prevent us from drawing a clear conclusion on the effects.¹¹

As another heterogeneity analysis, Tables A.3 and A.4 separate the sample between small and large areas within a state.¹² Available resources and urbanicity differ by county size and they may generate differential impact of the Medicaid expansions on foster care admissions. Table A.3 shows no significant effects of the Medicaid expansions on any of our outcomes for large areas (i.e., population of 700,000 or above). However, Table A.4 shows significant effects for small areas (i.e., population below 700,000) for total admissions and for admissions due to physical abuse and neglect.

We examine the robustness of the main results with respect to different groupings of the treatment and control states. States implemented Medicaid expansions at different times with varying magnitude as shown in Table A.1. Different implementation timing could bias our difference-in-differences estimates if the treatment effect changes over time (e.g., Goodman-Bacon (2021)). Tables A.5 - A.8 provide results using different samples of treated states. Table A.5 presents results using all states, Table A.6 excludes early expanders, and Table A.7 excludes late expanders.¹³ In Table A.8, we exclude early and late expanders as well as states that expanded in 2014 but had full prior expansions (i.e., group 6 of Table A.1). The effect size is similar across these tables and comparable to Table 2, although the coefficients on total admissions and admissions due to neglect are not significant in several alternate specifications.¹⁴

¹¹Figure A.1 presents event-study graphs for readmissions that are consistent with Table 3.

¹²Due to the censoring of the foster care data, these data are available for the entire state, but county identifiers are provided only for large counties in it. We calculate the rate for small areas in a state by taking the weighted difference between large counties and the entire state.

¹³When including late expanders, we use moving windows to reflect different timing of the expansions.

¹⁴Table A.9 presents results in level and Table A.10 presents results with different control variables. They are qualitatively the same as our main results.

4.1 Reassessment of Brown et al. (2019) Results

We revisit previous findings on the effect of the Medicaid expansions on child abuse reports (Brown et al. (2019)) and our analyses suggest imprecise effects after adequately clustering the standard errors. In Panel A of Table 4, we follow the specification from Brown et al. (2019), using aggregate data at the state level without clustering the standard errors, and we obtain comparable estimates.¹⁵ We present results for different types of child maltreatment reports. In Panel B of Table 4, we perform a similar analysis but cluster the standard errors at the state level.¹⁶ Clustering the standard errors is crucial to account for serial correlation (e.g., Bertrand et al. (2004)). The coefficients across different sub-populations, including the one for child neglect, are large and negative but no longer statistically significant because of increased standard errors.¹⁷ While imprecise, these estimates still suggest a potentially large impact on child abuse, which is consistent with our main results on foster care admissions.

5 Conclusion

A growing literature has shown the importance of the Medicaid expansions on several variables, such as health care access, mortality, and financial well-being. Brown et al. (2019) find that the Medicaid expansions lead to a significant and large decrease in child abuse reports. Child abuse is a major factor leading to foster care admissions as more than 70 percent of all foster care admissions are related to physical abuse or neglect incidents. In this paper, we investigate the relationship between access to public health insurance and foster care admissions following state decisions to expand Medicaid after the ACA.

Our results suggest that the Medicaid expansions lead to a large decrease in foster care admissions, driven by neglect incidents. Similar to other policies (e.g., Berger et al. (2017), Raissian and Bullinger (2017), and Gihleb et al. (2019)), our findings suggest that expanding Medicaid can decrease foster care admissions.

¹⁵As in Brown et al. (2019), we use the outcomes in level, use the years 2010-2016, and drop West Virginia. We use updated datasets (e.g., version 3 of the NCANDS Child File versus version 1 in Brown et al. (2019)).

¹⁶Tables A.11 and A.12 show p -values for all analyses in Table 4.

¹⁷We also explore the possibility of an increase in exposure to mandated reporters (e.g., medical personnel) due to the expansions. In Table A.13, which follows our main specification, we find no significant association between the Medicaid expansions and child maltreatment cases reported by medical professionals. Several of the coefficients are positive but insignificant due to large standard errors, despite a potentially large effect size.

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6 Tables and Figures

Table 1: Summary statistics - foster care

Variable	Expansion			Control		
	N	Mean	Std Dev	N	Mean	Std Dev
Total admissions per 100,000	112	363.22	155.34	176	326.69	132.94
Physical abuse per 100,000	112	52.83	37.00	176	50.56	26.79
Neglect per 100,000	112	207.12	95.69	176	202.30	92.29
Drug abuse per 100,000	112	126.46	95.60	176	106.12	61.15
Alcohol abuse per 100,000	112	30.50	33.25	176	27.63	32.82
Exits per 100,000	112	389.95	171.56	176	341.41	143.01
Families below FPL (in %)	112	19.36	5.16	176	19.40	5.16
Unemployment rate (in %)	112	7.35	2.32	176	6.60	2.35
Teenage birth rate (in %)	112	27.17	10.11	176	27.75	9.65
States with paid family leave (in %)	112	10.71	31.07	176	0.00	0.00
States with child care waitlist (in %)	112	41.07	49.42	176	41.48	49.41

Notes: This table shows descriptive statistics of key variables at the state level for the treatment and control groups. Outcome variables on foster care admissions and exits come from the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, and control variables from the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women’s Law Center for 2010-2017. Physical abuse involves physical abuse, physical injury, or physical maltreatment of the child. Neglect involves negligent treatment or negligent maltreatment of the child. Drug abuse involves non-temporary and compulsive use of drugs by the caretaker. Alcohol abuse involves non-temporary and compulsive use of alcohol by the caretaker.

Table 2: Effects on foster care admissions and exits

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.175* (0.084) [0.044]	-0.178* (0.081) [0.035]	-0.170 (0.091) [0.070]	-0.175 (0.086) [0.050]	-0.179* (0.083) [0.038]	-0.171 (0.085) [0.052]
Physical abuse	-0.165 (0.107) [0.131]	-0.158 (0.108) [0.151]	-0.167 (0.126) [0.195]	-0.163 (0.101) [0.115]	-0.156 (0.103) [0.139]	-0.172 (0.111) [0.131]
Neglect	-0.320* (0.150) [0.040]	-0.344* (0.155) [0.033]	-0.312* (0.153) [0.049]	-0.268 (0.139) [0.061]	-0.323* (0.150) [0.039]	-0.318* (0.151) [0.043]
Drug abuse	-0.018 (0.183) [0.922]	0.014 (0.213) [0.948]	-0.018 (0.162) [0.912]	-0.096 (0.158) [0.547]	-0.026 (0.175) [0.883]	-0.009 (0.192) [0.962]
Alcohol abuse	0.117 (0.204) [0.569]	0.216 (0.263) [0.417]	0.130 (0.214) [0.546]	0.016 (0.171) [0.928]	0.107 (0.193) [0.582]	0.131 (0.219) [0.553]
Exit	-0.027 (0.044) [0.546]	-0.026 (0.046) [0.572]	-0.024 (0.057) [0.674]	-0.053 (0.047) [0.275]	-0.026 (0.045) [0.565]	-0.027 (0.042) [0.528]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. Equation (1) is estimated separately for different reasons of foster care admissions and for exits. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child's age and gender, respectively. All regressions are weighted by the state's child population, and standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table 3: Effects on foster care readmissions

Readmission	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.233* (0.107) [0.036]	-0.260 (0.156) [0.105]	-0.201 (0.125) [0.117]	-0.188* (0.071) [0.012]	-0.215* (0.093) [0.027]	-0.250 (0.124) [0.052]
Physical abuse	0.015 (0.144) [0.918]	0.116 (0.151) [0.449]	-0.002 (0.153) [0.989]	-0.047 (0.159) [0.771]	-0.013 (0.122) [0.914]	0.037 (0.173) [0.831]
Neglect	-0.131 (0.171) [0.451]	-0.196 (0.200) [0.334]	-0.107 (0.179) [0.555]	-0.055 (0.164) [0.741]	-0.119 (0.178) [0.506]	-0.142 (0.170) [0.407]
Drug abuse	0.021 (0.170) [0.904]	0.100 (0.162) [0.539]	0.014 (0.207) [0.946]	-0.036 (0.174) [0.839]	0.008 (0.177) [0.965]	0.027 (0.168) [0.874]
Alcohol abuse	0.052 (0.120) [0.670]	0.067 (0.138) [0.632]	0.146 (0.113) [0.207]	-0.042 (0.137) [0.762]	0.020 (0.126) [0.877]	0.079 (0.121) [0.516]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

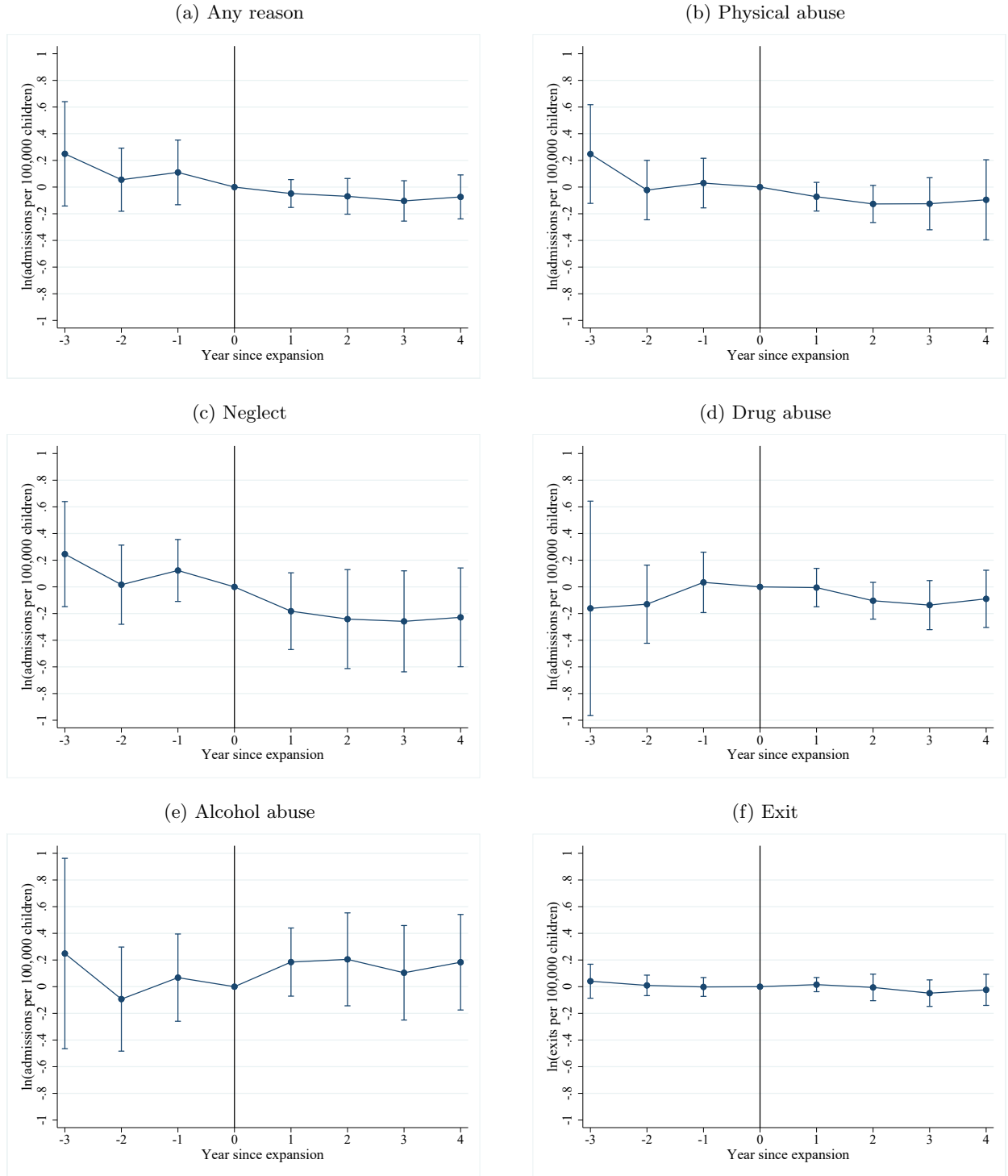
Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women’s Law Center for 2010-2017. Equation (1) is estimated separately for different reasons of foster care readmissions. When identifying readmissions, we look for the first admission for each child starting in the year prior to 2010, and any admissions after the first one count as readmissions. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child’s age and gender, respectively. All regressions are weighted by the state’s child population, and standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table 4: Effects on child maltreatment reports following Brown et al. (2019), with and without clustering

Maltreatment type	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)	Issues (7)	No issues (8)
<i>Panel A: without clustering</i>								
Any maltreatment	-1,200.3** (340.4)	-1,483.4** (364.9)	-1,419.0** (364.9)	-829.7* (364.9)	-1,142.7** (340.9)	-1,214.8** (340.9)	-243.0 (258.4)	-1,188.4** (258.4)
Physical abuse	-175.2* (80.4)	-211.0* (87.9)	-215.2* (87.9)	-119.8 (87.9)	-158.5* (80.4)	-185.1* (80.4)	-45.0 (63.4)	-185.4** (63.4)
Neglect	-329.0* (149.0)	-357.8* (158.9)	-410.2* (158.9)	-251.7 (158.9)	-306.4* (149.0)	-324.5* (149.0)	-10.7 (135.1)	-369.3** (135.1)
Emotional abuse	-340.3** (89.0)	-478.0** (96.9)	-366.2** (96.9)	-221.4* (96.9)	-332.4** (89.1)	-347.7** (89.1)	-98.5 (61.9)	-277.8** (61.9)
<i>Panel B: with clustering</i>								
Any maltreatment	-1,200.3 (1,257.1)	-1,483.4 (1,682.6)	-1,419.0 (1,384.1)	-829.7 (860.2)	-1,142.7 (1,244.5)	-1,214.8 (1,276.7)	-243.0 (535.5)	-1,188.4 (1,029.5)
Physical abuse	-175.2 (212.6)	-211.0 (268.3)	-215.2 (251.0)	-119.8 (143.6)	-158.5 (208.4)	-185.1 (218.3)	-45.0 (87.8)	-185.4 (194.8)
Neglect	-329.0 (403.8)	-357.8 (507.1)	-410.2 (449.6)	-251.7 (301.7)	-306.4 (401.6)	-324.5 (410.1)	-10.7 (298.8)	-369.3 (373.0)
Emotional abuse	-340.3 (345.5)	-478.0 (492.9)	-366.2 (366.4)	-221.4 (223.1)	-332.4 (340.3)	-347.7 (351.7)	-98.5 (98.3)	-277.8 (284.7)
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) following Brown et al. (2019) for different maltreatment types (substantiated and unsubstantiated cases combined) among all children and by child or caregiver characteristics, using the National Child Abuse and Neglect Data System (NCANDS) Child File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2016. As in Brown et al. (2019), we use the outcomes in level, use the years 2010-2016 instead of 2010-2017, and drop WV. Most importantly, we do not cluster the standard errors in Panel A, but we cluster them at the state level in Panel B. Column (1) provides estimates for all children Columns (2)-(6) provide estimates by child's age and gender, respectively. Columns (7)-(8) provide estimates by whether caregiver has any of the following issues: alcohol abuse, drug abuse, and emotional disturbance. All regressions are weighted by the state's child population. * Significant at 5 percent. ** Significant at 1 percent.

Figure 1: Event-study graphs for foster care admissions by reason and foster care exits



Notes: Panels plot event-study estimates of Equation (1) for different reasons of foster care admissions and for foster care exits, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. Vertical line indicates the year before the Medicaid expansions in 2014, and bands indicate 95% confidence intervals.

Appendix: Tables

Table A.1: Medicaid expansions by states

Group	Medicaid Expansion Status	States
1	Expansion in 2014 and limited or no prior expansion	AR, CO, IL, KY, MD, MI, NJ, NV, NM, ND, OH, OR, RI, WV
2	Expansion in 2014, but partial prior expansion	AZ, CA, CT, HI, IA, MN, WA
3	Expansion between June 2014 and June 2016	AK (9/1/2015), IN (2/1/2015), LA (7/1/2016), MT (1/1/2016), NH (8/15/2014), PA (1/1/2015)
4	No expansion in 2014 and limited or no prior expansion	AL, FL, GA, ID, KS, MS, MO, NE, NC, OK, SC, SD, TN, TX, UT, VA, WY
5	No expansion in 2014, but partial prior expansion	ME, WI
6	Expansion in 2014, but full prior expansion	DE, DC, MA, NY, VT

Notes: This table categorizes states based on the expansion status of Medicaid, using data from the Kaiser Family Foundation (2018) and following Hu et al. (2018). Groups 2 and 5 refer to early expanders, and Group 3 refers to late expanders. Groups 1-3 make up the treatment states and Groups 4-6 make up the control states. For our main specification, we exclude both early expanders (i.e., Groups 2 and 5) and late expanders (i.e., Group 3).

Table A.2: Summary statistics - child maltreatment reports

Variable	Expansion			Control		
	N	Mean	Std Dev	N	Mean	Std Dev
Any maltreatment per 100,000	110	6,474.62	3,969.25	176	5,561.14	2,203.25
Physical abuse per 100,000	110	1,456.50	1,275.77	176	1,234.22	851.05
Neglect per 100,000	110	3,732.80	1,822.81	176	2,910.07	1,645.90
Emotional abuse per 100,000	110	644.15	1,237.16	176	365.41	443.09
Families below FPL (in %)	110	19.34	5.20	176	19.40	5.16
Unemployment rate (in %)	110	7.29	2.29	176	6.60	2.35
Teenage birth rate (in %)	110	27.17	10.20	176	27.75	9.65
States with paid family leave (in %)	110	10.91	31.32	176	0.00	0.00
States with child care waitlist (in %)	110	41.82	49.55	176	41.48	49.41

Notes: This table shows descriptive statistics of key variables at the state level for the treatment and control groups. Outcome variables on child maltreatment reports come from the National Child Abuse and Neglect Data System (NCANDS) Child File, and control variables from the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women’s Law Center for 2010-2017. Physical abuse is defined as maltreatment that involves physical contacts that resulted in or could have resulted in physical injuries to the child. Neglect is defined as maltreatment where the caregiver, while having financial ability or support to do so, failed to provide age-appropriate care that is necessary for the child. Emotional abuse is defined as maltreatment that involves acts or omissions that resulted in or could have resulted in behavioral or mental disorders of the child.

Table A.3: Effects on foster care admissions and exits, for large areas using 700,000 population cutoff

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.055 (0.094) [0.564]	-0.044 (0.102) [0.674]	0.014 (0.103) [0.891]	-0.127 (0.103) [0.234]	-0.065 (0.095) [0.504]	-0.044 (0.093) [0.644]
Physical abuse	0.018 (0.160) [0.914]	0.054 (0.162) [0.744]	0.042 (0.195) [0.832]	-0.106 (0.198) [0.597]	0.033 (0.169) [0.848]	-0.001 (0.156) [0.996]
Neglect	-0.346 (0.242) [0.171]	-0.372 (0.244) [0.145]	-0.294 (0.257) [0.269]	-0.326 (0.224) [0.164]	-0.346 (0.242) [0.172]	-0.347 (0.243) [0.172]
Drug abuse	-0.056 (0.098) [0.576]	0.055 (0.090) [0.549]	-0.137 (0.171) [0.436]	-0.210 (0.212) [0.335]	-0.077 (0.116) [0.518]	-0.033 (0.093) [0.727]
Alcohol abuse	0.174 (0.217) [0.434]	0.363 (0.349) [0.313]	0.257 (0.297) [0.400]	0.054 (0.219) [0.809]	0.239 (0.215) [0.283]	0.115 (0.237) [0.635]
Exit	-0.087 (0.068) [0.220]	-0.022 (0.055) [0.694]	-0.051 (0.085) [0.557]	-0.223 (0.164) [0.191]	-0.079 (0.072) [0.283]	-0.097 (0.066) [0.162]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women’s Law Center for 2010-2017. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. The sample includes large counties with population of 700,000 or above. There are 93 unique counties with population of 700,000 or greater nationwide. Of these, our foster care data identify 44 after dropping early and late expanders. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child’s age and gender, respectively. All regressions are weighted by the corresponding populations of the large/small areas, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.4: Effects on foster care admissions and exits, for small areas using 700,000 population cutoff

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.197* (0.073) [0.011]	-0.199** (0.069) [0.007]	-0.200* (0.080) [0.017]	-0.183* (0.083) [0.033]	-0.197** (0.070) [0.008]	-0.197* (0.077) [0.015]
Physical abuse	-0.164* (0.070) [0.025]	-0.141 (0.072) [0.058]	-0.173* (0.083) [0.045]	-0.177* (0.081) [0.037]	-0.141* (0.068) [0.046]	-0.190* (0.081) [0.024]
Neglect	-0.307* (0.131) [0.025]	-0.327* (0.140) [0.026]	-0.299* (0.132) [0.029]	-0.260* (0.120) [0.037]	-0.307* (0.132) [0.026]	-0.307* (0.132) [0.025]
Drug abuse	-0.076 (0.188) [0.689]	-0.064 (0.210) [0.762]	-0.072 (0.167) [0.667]	-0.100 (0.174) [0.569]	-0.081 (0.186) [0.668]	-0.070 (0.192) [0.718]
Alcohol abuse	0.123 (0.202) [0.546]	0.187 (0.237) [0.436]	0.121 (0.185) [0.517]	0.049 (0.192) [0.802]	0.103 (0.198) [0.605]	0.145 (0.208) [0.492]
Exit	-0.048 (0.049) [0.332]	-0.063 (0.045) [0.171]	-0.064 (0.056) [0.257]	-0.036 (0.052) [0.495]	-0.049 (0.050) [0.333]	-0.048 (0.049) [0.336]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. The sample includes small counties with population below 700,000. There are 93 unique counties with population of 700,000 or greater nationwide. Of these, our foster care data identify 44 after dropping early and late expanders. This table has the remainder of counties (based on more than 2,300 counties). Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child's age and gender, respectively. All regressions are weighted by the corresponding populations of the large/small areas, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.5: Effects on foster care admissions and exits, including all states

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.122 (0.066) [0.070]	-0.116 (0.066) [0.083]	-0.109 (0.070) [0.129]	-0.142* (0.069) [0.045]	-0.128 (0.066) [0.060]	-0.117 (0.066) [0.083]
Physical abuse	-0.113 (0.078) [0.153]	-0.102 (0.079) [0.204]	-0.106 (0.091) [0.249]	-0.127 (0.080) [0.119]	-0.107 (0.074) [0.158]	-0.120 (0.082) [0.153]
Neglect	-0.223 (0.130) [0.093]	-0.244 (0.135) [0.076]	-0.214 (0.132) [0.112]	-0.183 (0.114) [0.116]	-0.224 (0.131) [0.092]	-0.222 (0.130) [0.095]
Drug abuse	-0.107 (0.126) [0.400]	-0.077 (0.131) [0.560]	-0.076 (0.112) [0.504]	-0.176 (0.147) [0.237]	-0.113 (0.125) [0.369]	-0.100 (0.128) [0.437]
Alcohol abuse	-0.021 (0.139) [0.882]	-0.023 (0.171) [0.893]	0.028 (0.136) [0.839]	-0.037 (0.125) [0.767]	-0.016 (0.136) [0.906]	-0.025 (0.144) [0.860]
Exit	-0.005 (0.037) [0.885]	0.015 (0.035) [0.678]	0.008 (0.043) [0.849]	-0.051 (0.045) [0.255]	-0.007 (0.038) [0.848]	-0.003 (0.036) [0.934]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women’s Law Center for 2010-2017. The sample includes all 50 states and the District of Columbia. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child’s age and gender, respectively. All regressions are weighted by the state’s child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.6: Effects on foster care admissions and exits, excluding early expanders

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.135 (0.082) [0.108]	-0.128 (0.079) [0.112]	-0.113 (0.087) [0.203]	-0.158 (0.091) [0.089]	-0.140 (0.083) [0.097]	-0.130 (0.083) [0.123]
Physical abuse	-0.128 (0.096) [0.188]	-0.105 (0.096) [0.283]	-0.105 (0.109) [0.340]	-0.162 (0.102) [0.120]	-0.114 (0.091) [0.216]	-0.141 (0.101) [0.171]
Neglect	-0.227 (0.139) [0.111]	-0.253 (0.142) [0.083]	-0.214 (0.143) [0.141]	-0.179 (0.128) [0.171]	-0.227 (0.140) [0.112]	-0.227 (0.140) [0.111]
Drug abuse	-0.069 (0.172) [0.691]	-0.019 (0.178) [0.917]	-0.024 (0.146) [0.871]	-0.195 (0.202) [0.340]	-0.081 (0.170) [0.636]	-0.056 (0.175) [0.752]
Alcohol abuse	0.135 (0.179) [0.455]	0.189 (0.221) [0.398]	0.183 (0.185) [0.330]	0.053 (0.158) [0.737]	0.141 (0.173) [0.418]	0.130 (0.189) [0.496]
Exit	0.008 (0.040) [0.848]	0.007 (0.042) [0.871]	0.010 (0.050) [0.844]	-0.012 (0.043) [0.786]	0.007 (0.041) [0.869]	0.009 (0.040) [0.824]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. The sample excludes early expanders only. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child's age and gender, respectively. All regressions are weighted by the state's child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.7: Effects on foster care admissions and exits, excluding late expanders

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.146* (0.068) [0.038]	-0.145* (0.069) [0.041]	-0.145 (0.073) [0.053]	-0.150* (0.065) [0.027]	-0.150* (0.067) [0.032]	-0.141* (0.069) [0.046]
Physical abuse	-0.131 (0.084) [0.125]	-0.132 (0.086) [0.134]	-0.143 (0.100) [0.158]	-0.120 (0.076) [0.121]	-0.130 (0.081) [0.114]	-0.132 (0.088) [0.141]
Neglect	-0.286* (0.141) [0.048]	-0.305* (0.147) [0.044]	-0.281 (0.142) [0.054]	-0.244* (0.121) [0.050]	-0.289* (0.141) [0.046]	-0.283 (0.141) [0.052]
Drug abuse	-0.070 (0.130) [0.591]	-0.057 (0.148) [0.704]	-0.073 (0.122) [0.554]	-0.091 (0.110) [0.415]	-0.072 (0.126) [0.573]	-0.069 (0.135) [0.612]
Alcohol abuse	-0.035 (0.153) [0.821]	-0.017 (0.195) [0.929]	-0.005 (0.147) [0.973]	-0.055 (0.135) [0.686]	-0.040 (0.149) [0.792]	-0.029 (0.159) [0.857]
Exit	-0.027 (0.039) [0.490]	-0.002 (0.038) [0.962]	-0.010 (0.047) [0.832]	-0.086 (0.048) [0.079]	-0.029 (0.040) [0.481]	-0.026 (0.039) [0.511]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. The sample excludes late expanders only. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child's age and gender, respectively. All regressions are weighted by the state's child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.8: Effects on foster care admissions and exits, excluding early and late expanders and also states that expanded in 2014 but had full prior expansions

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.071 (0.040) [0.088]	-0.073 (0.040) [0.078]	-0.061 (0.054) [0.273]	-0.083 (0.046) [0.079]	-0.075 (0.039) [0.064]	-0.067 (0.043) [0.125]
Physical abuse	-0.064 (0.076) [0.403]	-0.063 (0.078) [0.426]	-0.046 (0.091) [0.620]	-0.074 (0.080) [0.364]	-0.061 (0.077) [0.431]	-0.066 (0.077) [0.399]
Neglect	-0.275 (0.205) [0.190]	-0.300 (0.213) [0.168]	-0.263 (0.209) [0.218]	-0.229 (0.180) [0.212]	-0.279 (0.206) [0.185]	-0.271 (0.206) [0.197]
Drug abuse	0.062 (0.165) [0.711]	0.093 (0.193) [0.634]	0.059 (0.148) [0.695]	-0.024 (0.147) [0.869]	0.054 (0.157) [0.733]	0.070 (0.174) [0.691]
Alcohol abuse	0.242 (0.186) [0.203]	0.344 (0.248) [0.176]	0.262 (0.200) [0.201]	0.131 (0.148) [0.384]	0.233 (0.175) [0.193]	0.255 (0.201) [0.214]
Exit	-0.037 (0.040) [0.362]	-0.030 (0.042) [0.473]	-0.037 (0.051) [0.478]	-0.062 (0.047) [0.196]	-0.039 (0.041) [0.346]	-0.034 (0.039) [0.389]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. The sample excludes states that expanded in 2014 but had full prior expansions, in addition to early and late expanders. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child's age and gender, respectively. All regressions are weighted by the state's child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.9: Effects on foster care admissions and exits, with the outcome variables in level

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-21.780 (14.517) [0.142]	-36.391 (22.698) [0.118]	-14.944 (16.153) [0.361]	-16.333 (9.183) [0.084]	-22.074 (13.867) [0.120]	-21.473 (15.311) [0.170]
Physical abuse	-3.676 (5.362) [0.497]	-5.771 (9.385) [0.543]	-2.750 (5.153) [0.597]	-2.960 (2.865) [0.309]	-3.375 (5.339) [0.531]	-3.999 (5.436) [0.467]
Neglect	-32.661 (18.526) [0.087]	-59.902 (33.342) [0.081]	-27.708 (17.244) [0.117]	-15.846 (9.101) [0.090]	-32.038 (18.110) [0.086]	-33.301 (19.034) [0.089]
Drug abuse	-4.439 (9.466) [0.642]	-8.108 (17.479) [0.646]	-2.636 (9.088) [0.774]	-3.276 (4.269) [0.448]	-4.770 (9.425) [0.616]	-4.140 (9.546) [0.667]
Alcohol abuse	-1.845 (3.165) [0.564]	-3.443 (6.056) [0.573]	-0.969 (2.611) [0.713]	-1.207 (1.733) [0.491]	-1.884 (3.108) [0.548]	-1.803 (3.260) [0.584]
Exit	-5.342 (12.465) [0.671]	-8.982 (16.384) [0.587]	-4.128 (13.400) [0.760]	-3.638 (12.966) [0.781]	-4.514 (12.808) [0.727]	-6.158 (12.382) [0.622]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. The outcomes are in level. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child's age and gender, respectively. All regressions are weighted by the state's child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.10: Effects on foster care admissions and exits, using an alternative set of control variables

Admission/Exit	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)
Any reason	-0.185 (0.101) [0.074]	-0.196* (0.095) [0.047]	-0.175 (0.110) [0.118]	-0.178 (0.102) [0.089]	-0.189 (0.100) [0.068]	-0.182 (0.102) [0.083]
Physical abuse	-0.161 (0.137) [0.248]	-0.155 (0.137) [0.264]	-0.165 (0.159) [0.304]	-0.153 (0.123) [0.223]	-0.151 (0.132) [0.262]	-0.169 (0.142) [0.242]
Neglect	-0.297* (0.142) [0.044]	-0.329* (0.142) [0.026]	-0.283 (0.149) [0.065]	-0.235 (0.138) [0.098]	-0.299* (0.141) [0.041]	-0.295* (0.145) [0.049]
Drug abuse	-0.074 (0.128) [0.567]	-0.069 (0.132) [0.607]	-0.052 (0.126) [0.680]	-0.102 (0.148) [0.497]	-0.078 (0.125) [0.540]	-0.070 (0.133) [0.600]
Alcohol abuse	0.066 (0.184) [0.723]	0.138 (0.213) [0.520]	0.108 (0.225) [0.635]	-0.035 (0.155) [0.825]	0.051 (0.174) [0.771]	0.083 (0.197) [0.677]
Exit	-0.027 (0.055) [0.625]	-0.034 (0.055) [0.534]	-0.022 (0.067) [0.746]	-0.037 (0.053) [0.487]	-0.026 (0.057) [0.644]	-0.028 (0.053) [0.610]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) among all children and by child characteristics, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, and the Bureau of Labor Statistics for 2010-2017. An alternative set of controls is used: county's unemployment rate, median household income, poverty rate, fraction of the population aged 0-18, and fraction of the population that is nonwhite. Equation (1) is estimated separately for different reasons of foster care admissions, and also for foster care exits. Column (1) provides estimates for all children. Columns (2)-(6) provide estimates by child's age and gender, respectively. All regressions are weighted by the state's child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.11: Effects on child maltreatment reports following Brown et al. (2019), without clustering

Maltreatment type	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)	Issues (7)	No issues (8)
Any maltreatment	-1,200.3** (340.4) [0.001]	-1,483.4** (364.9) [0.000]	-1,419.0** (364.9) [0.000]	-829.7* (364.9) [0.023]	-1,142.7** (340.9) [0.001]	-1,214.8** (340.9) [0.000]	-243.0 (258.4) [0.348]	-1,188.4** (258.4) [0.000]
Physical abuse	-175.2* (80.4) [0.031]	-211.0* (87.9) [0.017]	-215.2* (87.9) [0.015]	-119.8 (87.9) [0.173]	-158.5* (80.4) [0.049]	-185.1* (80.4) [0.022]	-45.0 (63.4) [0.479]	-185.4** (63.4) [0.004]
Neglect	-329.0* (149.0) [0.028]	-357.8* (158.9) [0.025]	-410.2* (158.9) [0.010]	-251.7 (158.9) [0.114]	-306.4* (149.0) [0.040]	-324.5* (149.0) [0.030]	-10.7 (135.1) [0.937]	-369.3** (135.1) [0.007]
Emotional abuse	-340.3** (89.0) [0.000]	-478.0** (96.9) [0.000]	-366.2** (96.9) [0.000]	-221.4* (96.9) [0.023]	-332.4** (89.1) [0.000]	-347.7** (89.1) [0.000]	-98.5 (61.9) [0.112]	-277.8** (61.9) [0.000]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) following Brown et al. (2019) for different maltreatment types (substantiated and unsubstantiated cases combined) among all children and by child or caregiver characteristics, using the National Child Abuse and Neglect Data System (NCANDS) Child File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2016. As in Brown et al. (2019), we use the outcomes in level, use the years 2010-2016 instead of 2010-2017, and drop WV. Most importantly, we do not cluster the standard errors. Column (1) provides estimates for all children Columns (2)-(6) provide estimates by child's age and gender, respectively. Columns (7)-(8) provide estimates by whether caregiver has any of the following issues: alcohol abuse, drug abuse, and emotional disturbance. All regressions are weighted by the state's child population. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Table A.12: Effects on child maltreatment reports following Brown et al. (2019), with clustering

Maltreatment type	All (1)	Ages 0-5 (2)	Ages 6-11 (3)	Ages 12-18 (4)	Male (5)	Female (6)	Issues (7)	No issues (8)
Any maltreatment	-1,200.3 (1,257.1) [0.346]	-1,483.4 (1,682.6) [0.384]	-1,419.0 (1,384.1) [0.312]	-829.7 (860.2) [0.341]	-1,142.7 (1,244.5) [0.365]	-1,214.8 (1,276.7) [0.348]	-243.0 (535.5) [0.653]	-1,188.4 (1,029.5) [0.257]
Physical abuse	-175.2 (212.6) [0.416]	-211.0 (268.3) [0.437]	-215.2 (251.0) [0.397]	-119.8 (143.6) [0.410]	-158.5 (208.4) [0.452]	-185.1 (218.3) [0.402]	-45.0 (87.8) [0.612]	-185.4 (194.8) [0.349]
Neglect	-329.0 (403.8) [0.421]	-357.8 (507.1) [0.485]	-410.2 (449.6) [0.368]	-251.7 (301.7) [0.410]	-306.4 (401.6) [0.451]	-324.5 (410.1) [0.434]	-10.7 (298.8) [0.972]	-369.3 (373.0) [0.330]
Emotional abuse	-340.3 (345.5) [0.331]	-478.0 (492.9) [0.339]	-366.2 (366.4) [0.324]	-221.4 (223.1) [0.328]	-332.4 (340.3) [0.335]	-347.7 (351.7) [0.330]	-98.5 (98.3) [0.324]	-277.8 (284.7) [0.337]
State fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) following Brown et al. (2019) for different maltreatment types (substantiated and unsubstantiated cases combined) among all children and by child or caregiver characteristics, using the National Child Abuse and Neglect Data System (NCANDS) Child File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2016. As in Brown et al. (2019), we use the outcomes in level, use the years 2010-2016 instead of 2010-2017, and drop WV. Column (1) provides estimates for all children Columns (2)-(6) provide estimates by child's age and gender, respectively. Columns (7)-(8) provide estimates by whether caregiver has any of the following issues: alcohol abuse, drug abuse, and emotional disturbance. All regressions are weighted by the state's child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

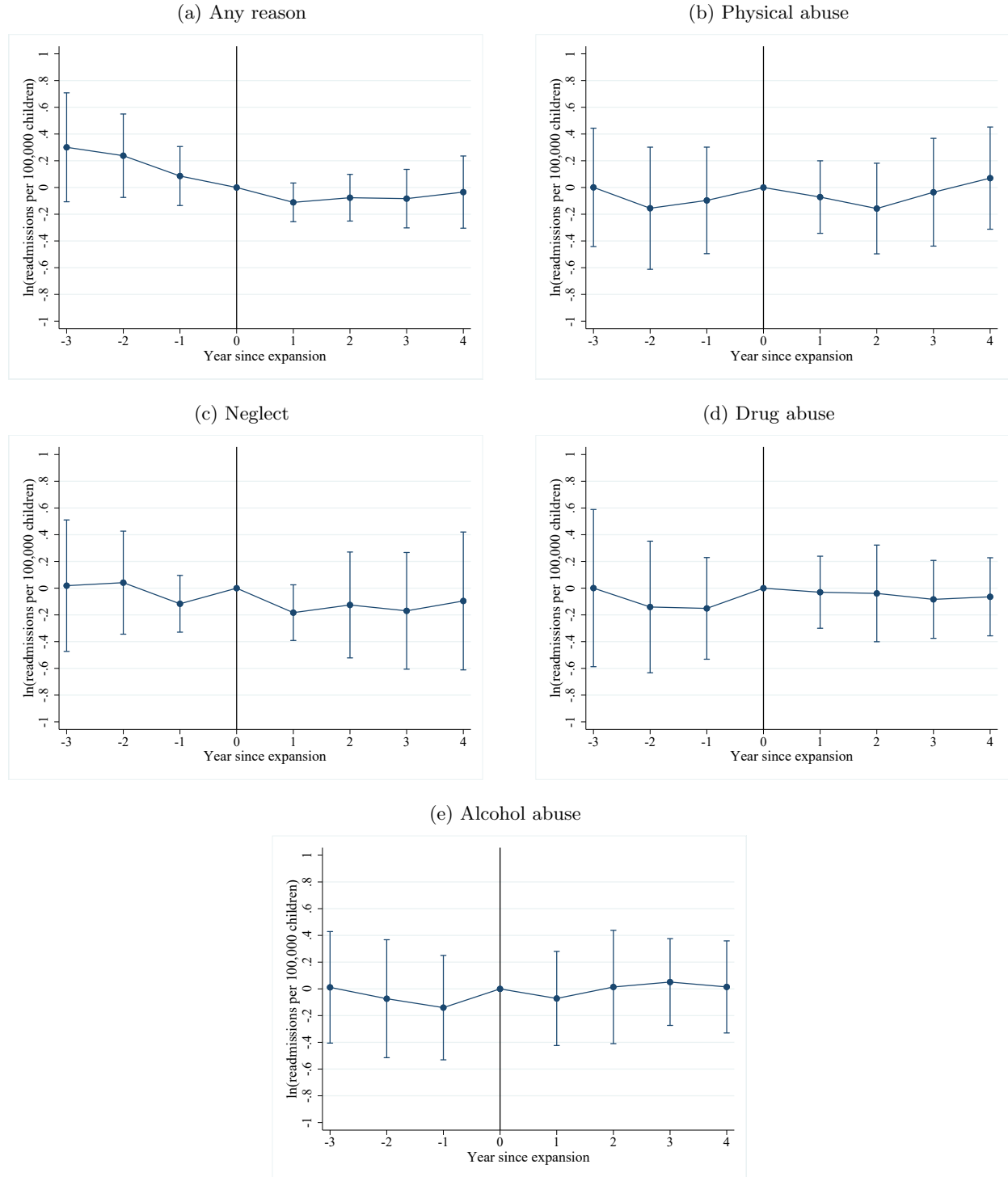
Table A.13: Effects on child maltreatment reports by medical personnel

Maltreatment type	Full sample (1)	Substantiated (2)	Unsubstantiated (3)
Any maltreatment	0.081 (0.276) [0.772]	0.211 (0.230) [0.365]	0.013 (0.290) [0.966]
Physical abuse	0.132 (0.245) [0.595]	0.217 (0.207) [0.301]	0.117 (0.260) [0.654]
Neglect	0.115 (0.240) [0.635]	0.272 (0.209) [0.203]	0.042 (0.252) [0.870]
Emotional abuse	-0.264 (0.477) [0.584]	-0.332 (0.407) [0.420]	-0.237 (0.457) [0.608]
State fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
State controls	Yes	Yes	Yes

Notes: This table shows estimates of Equation (1) for different maltreatment reports types, using the National Child Abuse and Neglect Data System (NCANDS) Child File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women’s Law Center for 2010-2017. The sample is restricted to cases reported by medical personnel and we compute these counts in the natural logarithm. Columns (2) and (3) provide estimates separately for substantiated and unsubstantiated cases, respectively. All regressions are weighted by the state’s child population, and the standard errors in parentheses are clustered by state. The corresponding p -values are reported in square brackets. * Significant at 5 percent. ** Significant at 1 percent.

Appendix: Figures

Figure A.1: Event-study graphs for foster care readmissions by reason



Notes: Panels plot event-study estimates of Equation (1) for different reasons of foster care readmissions, using the Adoption and Foster Care Analysis and Reporting System (AFCARS) Foster Care File, the Census Bureau, the Bureau of Labor Statistics, the National Vital Statistics System, the National Partnership for Women & Families, and the National Women's Law Center for 2010-2017. When identifying readmissions, we look for the first admission for each child starting in the year prior to 2010, and any admissions after the first one count as readmissions. Vertical line indicates the year before the Medicaid expansions in 2014, and bands indicate 95% confidence intervals.