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RESEARCH ARTICLE

Impact of Medicaid Expansion on Reported Incidents of Child Neglect and Physical Abuse



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Introduction: The U.S. Affordable Care Act Medicaid expansion, which allowed states to expand Medicaid coverage to low-income adults beginning in 2014, has reduced the risk factors for child neglect and physical abuse, including parental financial insecurity, substance use, and untreated mental illness. This study examines the associations between Medicaid expansion and the rates of overall, first-time, and repeat reports of child neglect and physical abuse incidents per 100,000 children aged 0–5, 6–12, and 13–17 years.

Methods: The 2008–2018 National Child Abuse and Neglect Data System was analyzed using an extension of the difference-in-differences approach that accounts for staggered policy implementation across time. Owing to evidence of nonparallel preperiod trends in the 6 states that expanded Medicaid from 2015 to 2017, the main analyses included 20 states that newly expanded Medicaid in 2014 and 18 states that did not expand Medicaid from 2008 to 2018. Analyses were conducted in 2020–2021.

Results: Medicaid expansion states were associated with reductions of 13.4% (95% CI= -24.2, -9.6), 14.8% (95% CI= -26.4, -1.4), and 16.0% (-27.6, -2.6) in the average rate of child neglect reports per 100,000 children aged 0-5, 6-12, and 13-17 years, per state-year, relative to control states. Expansion was associated with a 17.3% (95% CI= -28.9, -3.8) reduction in the rate of first-time neglect reports among children aged 0-5 years and with 16.6% (95% CI= -29.3, -1.6) and 18.7% (95% CI= -32.5, -2.1) reductions in the rates of repeat neglect reports among children aged 6-12 and 13-17 years, respectively. There were no statistically significant associations between Medicaid expansion and the rates of physical abuse among children in any age group.

Conclusions: Insurance expansions for low-income adults may reduce child neglect. *Am J Prev Med* 2022;62(1):e11–e20. © 2021 American Journal of Preventive Medicine. Published by Elsevier Inc. *All rights reserved.*

INTRODUCTION

his study examines whether expanding health insurance coverage for low-income adults is associated with reduced child neglect and physical abuse, the 2 most common types of reported child maltreatment.¹ Neglect is when a child's well-being is threatened by the failure of a parent or other caregiver to provide needed food, clothing, shelter, medical care, or supervision.² *Physical abuse* is defined as any nonaccidental injury to a child.² Among incidents investigated in 2019 by Child Protective Services (CPS), 61.0% of victims suffered neglect only, 10.3% suffered physical abuse only, and 15.5% were victims of multiple maltreatment types, which typically included neglect or physical abuse.¹ Child neglect and physical abuse are associated with a host of negative outcomes across the life course, including developmental delays³⁻⁵; behavioral and

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emotional issues^{6,7}; and increased risk of developing chronic health conditions, including heart disease, cancer, mental illness, and substance use disorder.^{8–12}

This study considers the potential impacts of the U.S. Affordable Care Act (ACA) Medicaid expansion, a federal law that provided insurance coverage for lowincome adults up to 138% of the federal poverty level, on the rates of reported child neglect and physical abuse. Although the ACA was designed to expand Medicaid nationwide, a 2012 Supreme Court decision allowed states to decide whether to expand Medicaid.¹³ A total of 24 states and Washington, District of Columbia opted to expand Medicaid on January 1, 2014, the earliest date allowed by the ACA, and 14 additional states adopted expansion between 2014 and April 2021.¹⁴ About two thirds of child maltreatment incidents are perpetrated by parents.¹⁵ An estimated 30% of the low-income adults newly eligible for Medicaid coverage through the ACA expansion had children.¹⁶ In addition, some lowincome parents who were eligible for Medicaid but unenrolled before expansion likely became enrolled owing to the ACA's welcome mat effect.¹⁷

Poverty and related social determinants of health, including unemployment and housing instability, are widely recognized as root causes of child neglect and physical abuse.^{18–20} In addition, robust research shows that caregiver mental illness or substance use can lead to child maltreatment.^{21–25} The causal pathways among caregiver poverty, mental illness, and substance use are intertwined because poverty confers an elevated risk of both development and undertreatment of these conditions.²⁶⁻²⁹ Medicaid expansion may protect against child neglect and physical abuse by intervening along these pathways: increased insurance coverage through Medicaid expansion has been shown to enhance financial well-being as well as improve access to mental health and substance use disorder treatment.³⁰⁻³⁷ Results of a previous study on this topic, by Brown and colleagues,³⁸ suggested that the ACA Medicaid expansion was associated with reduced rates of child neglect but had no impacts on physical abuse among children aged 0-5 years during the first 3 years of implementation.

This study expands on this previous work in several ways. First, the 2008–2018 study period allows consideration of the impacts of Medicaid expansion on child neglect and physical abuse during the first 5 years of implementation, a more robust postpolicy period than that of the previous research.³⁸ Second, this study examines Medicaid expansion's impacts on children aged 0-5 years as well as older children aged 6-12 and 13-17 years. Because the mechanisms by which Medicaid expansion might influence neglect and physical abuse among younger children are also relevant for older children, no a priori hypotheses regarding differential impacts of Medicaid expansion by age group are posed. Rather, the goal is to explore the impacts of the policy in all the 3 age groups to inform intervention development and implementation. If the ACA Medicaid expansion is shown to be protective, interventions to support children identified as being at risk of maltreatment could include facilitated enrollment of eligible parents/caregivers. Interventions for youth experiencing or at risk of maltreatment are commonly targeted toward these 3 age groups, likely owing to their alignment with U.S. schooling stages (age 0-5 years: preschool, age 6-12 years: elementary school, and age 13-17 years: secondary school).³⁹ Third, this study examines how Medicaid expansion influences first-time versus repeat reported incidents of child neglect and physical abuse. Parents who are already connected with CPS may be well positioned to benefit from Medicaid expansion, supporting prevention of repeat incidents.^{40–42} For example, CPS case managers may help parents enroll in Medicaid and facilitate referrals to healthcare services. Fourth, the study uses recently developed methods shown to reduce bias in the standard 2-way fixed effects (TWFE) difference-in-differences models⁴³ employed in the study by Brown et al.³⁸ The hypothesis was that Medicaid expansion would be associated with reduced overall, first-time, and repeat child neglect and physical abuse incidents among all age groups.

METHODS

Study Sample

The original sample included 26 states that expanded Medicaid between 2014 and 2017—20 states that expanded Medicaid in 2014 (AZ, AR, CA, CO, CT, HI, IL, IA, KY, MD, MN, NV, NJ, NM, ND, OH, OR, RI, WA, and MI), 3 states that expanded in 2015 (IN, PA, and NH), 2 states that expanded in 2016 (AK and MT), and 1 state that expanded in 2017 (LA)—and 18 states that had not adopted the ACA Medicaid expansion by the end of the study period in 2018. The control group included 18 states that did not adopt the ACA Medicaid expansion during the study period (AL, FL, GA, ID, KS, MS, MO, NE, NC, OK, SC, SD, TN, TX, UT, VA, WI, and WY). The analyses revealed that including the 2015–2017 adopters in the statistical models potentially violated the key assumptions of the approach. To address this issue, the main analyses were limited to the cohort of 20 states that adopted Medicaid expansion in 2013.

On the basis of previous research, Delaware; Massachusetts; New York; Vermont; and Washington, District of Columbia were excluded because they provided state-based insurance coverage for low-income adults during 2008–2013, this study's prepolicy period.⁴⁴ Maine and West Virginia were also excluded. Maine's Medicaid expansion took effect on July 2, 2018 and thus was only active during the final 6 months of the study period. West Virginia, which expanded Medicaid in January 2014, had unreliable data reporting to the National Child Abuse and Neglect Data System (NCANDS) during the study period.^{38,45}

The study used NCANDS⁴⁶ data on child neglect and physical abuse reports from 2008 to 2018. The NCANDS includes deidentified records for every report of suspected child maltreatment made to a U.S. state child protection agency. For this study, all screened-in reports of neglect and physical abuse, defined as reports that have passed initial review by CPS and have been determined to warrant investigation, were included. All screened-in reports were included, as opposed to the subset ultimately deemed substantiated, on the basis of previous research showing that (1) substantiation policies and processes vary across states and over time and (2) parental recidivism, child behavior, and child developmental milestones are similar among those with substantiated versus with unsubstantiated reports.38,47-50 Covariates were drawn from the U.S. Census Bureau American Community Survey data and the U.S. Centers for Disease Control and Prevention multiple causes of death data.

Measures

Measures were constructed at the state-year level. Because some states expanded Medicaid mid-year, the independent variable of interest, Medicaid expansion, was coded as beginning in the first calendar year encompassing ≥ 6 months of expanded Medicaid. The outcomes of interest were measured as the rate of screened-in neglect or physical abuse reports per 100,000 children aged 0–5, 6–12, or 13–17 years per state per year. Because the measures of the rates of child neglect and physical abuse were right skewed, the authors used natural log-transformed rates in analyses, allowing interpretation of results as the percentage change in rates attributable to Medicaid expansion.⁵¹ Reports coded as involving neglect and physical abuse were counted in both categories. Of the total sample of 25,893,201 reported child neglect or abuse incidents, 18,009,277 involved neglect only, 5,205,945 involved physical abuse only, and 2,677,979 involved both.

Covariates included measures of the annual percentage of each state's population who identified as Black, who lived below the federal poverty line, and who did not graduate from high school as well as the age-adjusted rate of drug overdose deaths per state per year. Following best practices for difference-in-differences models,^{43,52,53} covariates were included that differed in Medicaid expansion states versus in control states in the pre-expansion period (2008–2013) and that previous evidence suggests could cause variation in outcome trends over time.^{54–60}

Statistical Analysis

Traditional difference-in-differences models compare changes in outcomes before and after policy enactment in a treatment group with changes in outcomes over the same time period in a control group. When the data include multiple geographic units and time points, these models typically include unit and time fixed effects or TWFE.⁴³ Recent work shows that in scenarios where states implement a treatment at different periods in time, these TWFE difference-in-differences models can produce biased estimates stemming from variation in the composition and size of the treated and control groups at different time points and varying lengths of exposure to treatment in different cohorts of treatment states (e.g., states expanding Medicaid in 2014, 2015,...).^{43,61-65}

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An adapted difference-in-differences approach developed by Callaway and Sant'Anna⁴³ was used, which overcomes the issues associated with canonical TWFE difference-in-differences models with staggered policy adoption using a design-based approach that employs causal parameters, allowing for treatment effect heterogeneity and dynamic treatment effects in settings with variation in policy timing. Briefly, a traditional difference-indifferences model estimates the average effect of a policy on outcomes across all treated units over the entire post-policy periodeven though in the staggered policy adoption scenario, the duration of the post-policy period differs for specific units, and the composition of the treated and control groups varies at different time points. This adapted approach estimates cohort-time average treatment effects, defined as the average treatment effect for cohort *c* (with cohort defined by the policy implementation date) at time t and then averages those cohort-time average treatment effects across the cohort and by the length of exposure to the treatment.⁶⁶ Detailed model specifications for the traditional TWFE differencein-differences and adapted difference-in-differences models are described by Callaway and Sant'Anna.43

Following Callaway and Sant'Anna,⁴³ tests were conducted for differences in preperiod trends in the rates of child neglect and physical abuse within each cohort of expansion states versus within the 18 control states that did not expand Medicaid during the study period. Cohort-specific impacts of Medicaid expansion averaged across the entire post-expansion study period and cohort-specific impacts of Medicaid expansion at different lengths of exposure (e.g., 1 year, 2 years,...) after expansion were then estimated. Unadjusted models as well as models adjusted for all the covariates mentioned earlier were estimated. All models clustered SEs by state. Using the did package developed by Callaway and Sant'Anna in R, version 4.0.3, the authors implemented this approach using ordinary least squares regression models. Analyses were conducted in 2020–2021.

A total of 3 sensitivity analyses were conducted. First, the main adjusted models were estimated using an alternative sample, excluding 5 states (CA, CT, MN, NJ, WA). These states used the ACA's early expansion option to partially expand Medicaid between 2010 and 2013,67-69 although most Medicaid enrollment attributable to the ACA expansion in these states occurred in 2014.⁷⁰⁻⁷² Second, adjusted models using an alternative TWFE event-study specification were estimated. Although TWFE event studies are subject to some of the same biases as standard TWFE difference-in-differences, they are less problematic in scenarios, such as this one, with a large group of never-treated units.⁷² Where the Callaway and Sant'Anna⁴³ adapted difference-in-differences approach only accounts for baseline covariates, the event study specification accounts for time-varying covariates. Third, a second set of TWFE event study models were modeled, adding an additional covariate indicating changes during the study period in state mandatory child maltreatment laws, which delineate the classes of individuals who must report and the types of maltreatment that must be reported. Because the Callaway and Sant'Anna approach only accounts for baseline covariates, the main models did not control for changes to these laws.

RESULTS

Pre-expansion trends in outcomes were parallel for the 2014 expansion cohort but nonparallel in the 2015,

Table 1. [escriptive Characteristics of the Stud	y Sample Before Roll Out of the Affordable Care Act Medicaid Ex	pansion to Low-Income Adults, 2008–2013
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Characteristics	States that expanded Medicaid in 2014 (<i>n</i> =20 ^a)			States that did not expand Medicaid during the study period (<i>n</i> =18 ^b)		
	All incidents	First-time incidents	Repeat incidents	All incidents	First-time incidents	Repeat incidents
State demographics, % of state population						
Black		11.7			17.6	
Below federal poverty level		14.1			15.4	
Did not graduate high school		7.2			8.1	
Mean drug overdose rate per 100,000 population		14.1			12.9	
Mean rates of neglect and physical abuse incidents per 100,000 children						
Neglect						
Age 0–5 years	4,225	2,730	1,640	3,526	2,319	1,207
Age 6–12 years	3,005	1,682	1,429	2,442	1,408	1,034
Age 13–17 years	1,990	1,174	865	1,538	948	589
Physical abuse						
Age 0–5 years	1,091	680	385	1,052	709	343
Age 6–12 years	1,143	662	456	1,000	623	377
Age 13–17 years	986	617	342	796	542	253

Note: Boldface indicates statistical significance (p < 0.05).

Statistical significance was assessed using *t*-tests comparing expansion and nonexpansion states.

^aThe Medicaid expansion group includes 20 states that expanded Medicaid in 2014: AZ, AR, CA, CO, CT, HI, IL, IA, KY, MD, MN, NV, NJ, NM, ND, OH, OR, RI, WA, and MI. A total of 5 other jurisdictions (DE, MA, NY, VT, and ME) and DC that expanded Medicaid in 2014 were excluded from the analyses because they provided Medicaid or similar state-based insurance coverage for low-income adults before the Affordable Care Act Medicaid expansion (DE, MA, NY, VT, DC) or expanded Medicaid in the latter half of the final year of the study period (ME). West Virginia expanded Medicaid in 2014 but was dropped from the analysis owing to unreliable data reporting. ^bThe control group included 18 states that did not adopt Medicaid expansion during the study period: AL, FL, GA, ID, KS, MS, MO, NE, NC, OK, SC, SD, TN, TX, UT, VA, WI, and WY. AL, Alabama; AR, Arkansas; AZ, Arizona; CA, California; CO, Colorado; CT, Connecticut; DC, District of Columbia; DE, Delaware; FL, Florida; GA, Georgia; HI, Hawaii; IA, Iowa; ID, Idaho; IL, Illinois; KS, Kan-ene VK/ terreteive MD. Meaceaburght MD. Meinteret MD. Microarching MD. Microarching in the Materia MD. Alexander MD. Microarching MD. Meaceaburght MD. Meaceaburght MD. Meaceaburght MD. Mean MD. Alexander MD. Microarching MD. Microarching MD. Microarching MD. Microarching MD. Microarching MD. Mean MD. Alexander MD. Microarching MD. Microarching MD. Mean MD. Alexander MD. Microarching MD. M

sas; KY, Kentucky; MA, Massachusetts; MD, Maryland; ME, Maine; MI, Michigan; MN, Minnesota; MO, Missouri; MS, Mississippi; NC, North Carolina; ND, North Dakota; NE, Nebraska; NJ, New Jersey; NM, New Mexico; NV, Nevada; NY, New York; OH, Ohio; OK, Oklahoma; OR, Oregon; RI, Rhode Island; SC, South Carolina; SD, South Dakota; TN, Tennessee; TX, Texas; UT, Utah; VA, Virginia; VT, Vermont; 🖧 WA, Washington; WI, Wisconsin; WY, Wyoming.

2016, and 2017 Medicaid expansion cohorts relative to control states (Appendix A, available online). Because nonparallel pretrends indicate likely violation of a key assumption of difference-in-differences analyses, all subsequent analyses were limited to the 2014 cohort and control states.

Table 1 compares the characteristics of the 20 states in the study sample that expanded Medicaid in 2014 with those of the 18 states that did not expand Medicaid from 2008 to 2013. Control states had a higher proportion of residents who were Black, who were living below the federal poverty level, and who did not graduate from high school than states that expanded Medicaid. States that expanded Medicaid had a higher mean drug overdose rate from 2008 to 2013 than control states. From 2008 to 2013, the rates of child neglect and physical abuse were higher in expansion states than in nonexpansion states.

Using the modeling approach of Callaway and Sant'Anna,⁴³ Medicaid expansion states were associated with reductions of 13.4% (95% CI= -24.2, -1.0), 14.8% (95% CI= -26.4, -1.4), and 16.0% (95% CI= -27.6, -2.6) in the average rate of overall child neglect reports per 100,000 children aged 0–5, 6–12, and 13–17 years, per state-year (Figure 1, Panel 1) relative to nonexpansion states. Medicaid expansion states were was associated with a statistically significant 17.3% (95% CI= -28.9, -3.8) reduction in first-time neglect reports among children aged 0-5 years and 16.6% (95% CI= -29.3, -1.6) and 18.7% (95% CI= -32.5, -2.1) reductions in the rates of repeat neglect reports among children aged 6-12 and 13-17 years relative to nonexpansion states (Figure 1, Panels 2-3). There were no statistically significant associations between Medicaid expansion and the rate of overall child physical abuse reports among children 0-5 years (-4.5%, 95% CI= -28.0, 26.7), 6-12 years (-9.0%, 95% CI= -28.6, 16.0),or 13-17 years (-7.6%, 95% CI=-26.2, 15.7) (Figure 2). There were also no significant associations between Medicaid expansion and the rates of first-time or repeat reports of physical abuse (Appendix B, available online). Among all the 3 age groups of children, reductions in child neglect reports attributable to Medicaid expansion were concentrated in the first 2 years of policy implementation (Figure 3).

The results of unadjusted models (Appendix C, available online) were consistent with adjusted model results. Results of all sensitivity analyses were also consistent with the main results (Appendix D, available online). Adjusted models excluding the 5 states that partially expanded Medicaid between 2010 and 2013 showed magnitude, direction, and statistical significance of treatment effects consistent with those of the primary





Note: Boldface indicates statistical significance (p<0.05).

^aFigure 1 depicts the results of Callaway and Sant'Anna's adapted difference-in-differences models analyzing data from the NCANDS from 2008 to 2018. OLS models were adjusted for the baseline (2008) percentage of the state population that was Black, had income below the federal poverty level, and did not graduate from high school and baseline rate of drug overdose deaths in the 20 Medicaid expansion and 18 control states included in the analytic sample. The 95% Cls depicted in the figure, are as follows. Panel 1: ages 0–5, -13.4 (-24.2, -1.0); ages 6–12, -14.8 (-26.4, -1.4); and ages 13–17, -16.0 (-27.6, -2.6). Panel 2: ages 0–5, -17.3 (-28.9, -3.8); ages 6–12, -11.7 (-27.0, 6.9); and ages 13–17, -11.2 (-25.0, 5.2). Panel 3: ages 0–5, -11.6 (-26.0, 5.5); ages 6–12, -16.6 (-29.3, -1.6); and ages 13–17: -18.7 (-32.5, -2.1). NCANDS, National Child Abuse and Neglect Reporting System; OLS, ordinary least square.



Child Physical Abuse

Figure 2. Average percentage change in the rate of reported child physical abuse incidents per state per year from 2014 to 2018 attributable to Medicaid expansion, among 20 U.S. states that expanded Medicaid in 2014.

Note: Boldface indicates statistical significance (p < 0.05).

^aFigure 2 depicts the results of Callaway and Sant'Anna's adapted difference-in-differences models analyzing data from the NCANDS from 2008 to 2018. OLS models were adjusted for the baseline (2008) percentage of the state population that was Black, had income below the federal poverty level, and did not graduate from high school and baseline rate of drug overdose deaths in the 20 Medicaid expansion and 18 control states included in the analytic sample. The 95% Cls depicted in the figure are as follows: ages 0–5, -4.5 (-28.0, 26.7); ages 6–12: -9.0 (-28.6, -16.0); and ages 13–17 -7.6 (-26.2, 15.7).

NCANDS, National Child Abuse and Neglect Reporting System; OLS, ordinary least square.

models. TWFE event study models showed that Medicaid expansion was associated with statistically significant reductions in neglect reports in the first 2–3 years of policy implementation and showed no statistically significant impacts of Medicaid expansion on the rates of physical abuse. The addition of mandatory child maltreatment law indicators to adjusted TWFE event study models did not meaningfully alter the results.

DISCUSSION

Results suggest that the ACA Medicaid expansion may be associated with reduced rates of reported child neglect. The 13.4%, 14.8%, and 16.0% reductions in neglect attributable to Medicaid expansion among children aged 0-5, 6-12, 13-17 years translate into an average per state, per-year reduction of 2,999, 2,820, and 1,174, respectively, reported neglect incidents in the 20 U.S. states that expanded Medicaid. This study builds on previous research suggesting a protective impact of Medicaid expansion on reported neglect incidents among children aged 0-5 years³⁸ to also suggest an association between Medicaid expansion and reduced rates of neglect among older children aged 6-17 years. Furthermore, these findings suggest that Medicaid expansion may reduce both first-time and repeat reported incidents of child neglect. Results suggest protective impacts of Medicaid expansion on first-time child neglect reports among children aged 0-5 years and repeat neglect reports among children aged 6-12 and 13 -17 years. These findings may be explained by the fact that young children have had less time to accrue reported repeat incidents than older children. The statistically significant protective impacts of Medicaid expansion on the rates of reported child neglect were concentrated in the first 2 years of policy implementation. This finding may be explained by a low-hanging fruit effect, in which ACA expansion quickly benefited families most amenable to prevention of child neglect by way of insurance coverage, for example, those for whom the risk of neglect was directly driven by financial hardship stemming from healthcare costs.

Model results suggested possible small reductions in the rates of physical abuse attributable to Medicaid expansion in all age groups, but CIs were wide, and none of the reductions were statistically significant. Neglect and physical abuse share some commonalities but are distinct types of harm.⁷⁴ Relative to physical abuse, the etiology of neglect is more closely tied to poverty and therefore may be more sensitive to policies that reduce family financial hardship⁷⁵; Medicaid expansion has been associated with improved credit scores, reduced payday borrowing, and decreased evictions.^{30,31,33,34} In addition, the rates of child physical abuse but not of neglect have declined steeply since the early 1990s,⁷⁶⁻⁷⁸ perhaps making it unlikely that Medicaid expansion would prompt further declines in physical abuse large enough to be detected in these analyses.

Limitations

The degree to which the results are generalizable to states that expanded Medicaid after 2014 is unclear. The NCANDS does not include information on household income. Thus, the sample could not be limited to child neglect and physical abuse reports occurring in households where ≥ 1 adults met income eligibility criteria for Medicaid expansion, an issue that should bias the results toward the null given that some of the reported incidents



Figure 3. Average percentage change in the rate of reported child neglect incidents per 100,000 children attributable to Medicaid expansion by year, among 20 U.S. states that expanded Medicaid in 2014.

Note: Boldface indicates statistical significance (p<0.05).

^aFigure 3 depicts the results of Callaway and Sant'Anna's adapted difference-in-differences models analyzing data from the NCANDS from 2008 to 2018. OLS models were adjusted for the baseline (2008) percentage of the state population that was Black, had income below the federal poverty level, and did not graduate from high school and baseline rate of drug overdose deaths in the 20 Medicaid expansion and 18 control states included in the analytic sample. Each year-specific estimate uses the previous year as the ref group, for example, lead -5 compares changes in the expansion with those in the control groups from 2008 to 2009. The 95% Cls depicted in the figure are as follows. Panel 1: lead-5, 3.0 (-5.3, 11.9); lead-4, -2.0 (-10.5, 7.3); lead-3, 6.8 (-3.2, 17.7); lead-2, 6.4 (-9.8, 25.4); lead-1, -1.2, (-11.0, 9.7); lag 0, -15.1 (-23.8, -5.6); lag 1, -17.4 (-27.5, -5.8); lag 2-11.5 (-27.2, 7.6); lag 3, -10.3 (-27.9, 11.6); and lag 4, -12.3 (-31.9, 12.8). Panel 2: lead-5, 3.9 (-5.2, 14.0); lead-4, -1.7 (-12.5, 10.3); lead-3, 4.3 (-6.2, 16.0); lead-2, 6.7 (-10.2, 26.7); lead-1, 1.8 (-10.3, 15.6); lag 0, -15.7 (-26.8, -2.8); lag 1, -18.4 (-30.4, -4.4); lag 2, -13.7 (-29.2, 5.2); lag 3, -13.4 (-33.4, 12.6); and lag 4, -12.8 (-32.5, 12.8). Panel 3: lead-5, 3.7 (-6.8, 15.5); lead-4, -1.7 (-12.0, 9.9); lead-3, 5.5 (-5.2, 17.5); lead-2, 2.7 (-11.1, 18.7); lead-1, 2.8 (-8.3, 15.3); lead 0, -14.0 (-25.5, -0.7); lead 1, -19.3 (-31.7, -4.6); lead 2, -16.2 (-31.2, 2.0); lead 3, -15.1 (-33.1, 7.8); and lead 4, -15.2 (-34.6, 9.9).

NCANDS, National Child Abuse and Neglect Reporting System; OLS, ordinary least square.

in the sample were likely perpetrated by adults unaffected by the policy. The NCANDS data only include the subset of all child neglect and physical abuse incidents in the U.S. that are reported to CPS. Because the NCANDS data are at the maltreatment report level, the unit of analysis was the state-year rate of reports per 100,000 children; this data set precludes the measurement of within-child or within-family changes in maltreatment before and after Medicaid expansion. This analysis did not account for levels of penetration of evidence-based maltreatment prevention and intervention programs in Medicaid expansion and control states. Understanding how such programs complement the expanded healthcare access conferred by Medicaid expansion is an important avenue for future research.

CONCLUSIONS

The ACA Medicaid expansion was designed to increase access to healthcare services among low-income U.S. adults. Our results suggest that Medicaid expansion may have had the unintended beneficial effect of reducing the rates of reported child neglect incidents.

CREDIT AUTHOR STATEMENT

Emma E. McGinty: Conceptualization, Formal Analysis, Funding Acquisition, Methodology, Resources, Writing - Original Draft. Reshmi Nair: Conceptualization, Project Administration, Resources, Writing - Review & Editing. Luciana C. Assini-Meytin: Conceptualization, Resources, Writing - Review & Editing. Elizabeth A. Stuart: Conceptualization, Methodology, Writing - Review & Editing. Elizabeth J. Letourneau: Conceptualization, Funding Acquisition, Resources, Writing - Review & Editing.

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SUPPLEMENTAL MATERIAL

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