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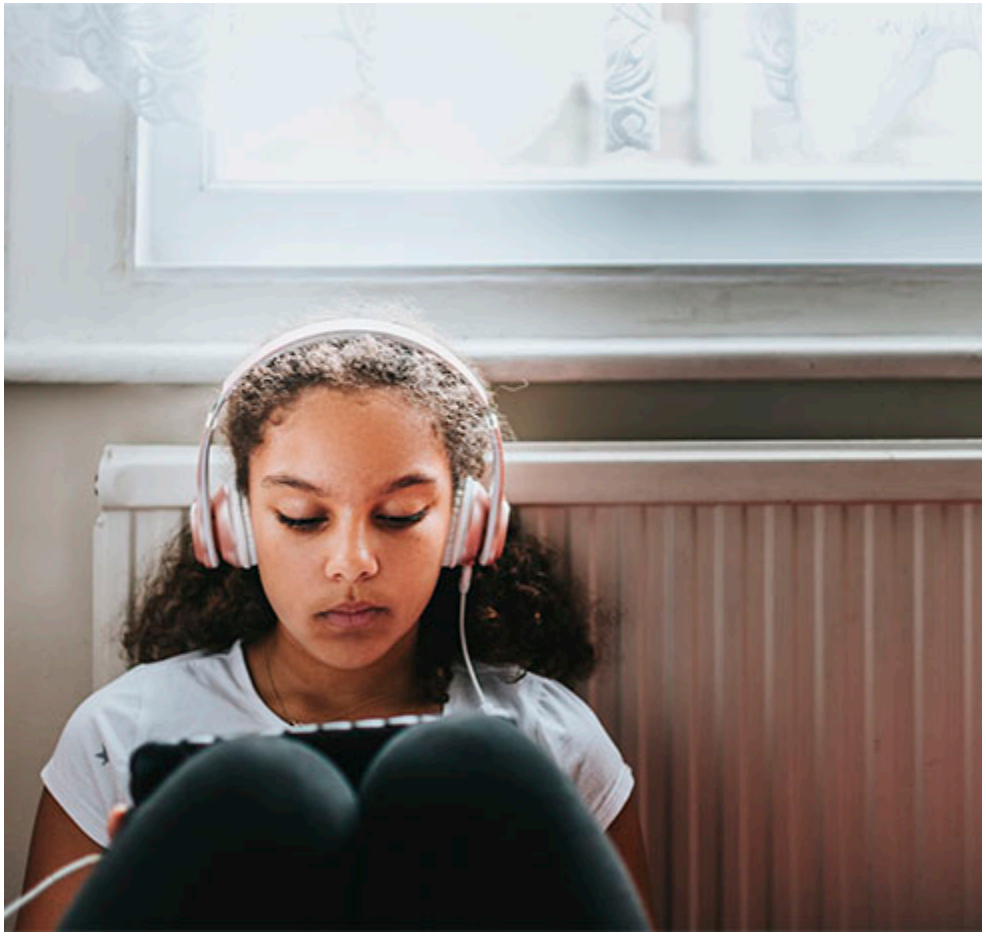
Assessing Teen Well-Being and Mental Health after the Medi-Cal Expansion



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Technical appendices to this report are available on the PPIC website.

The 2014 Medi-Cal expansion under the Affordable Care Act has increased health insurance coverage among low-income adults in California. Along with reducing uninsured rates and providing access to care, Medi-Cal also improves financial stability and mental health—changes that can make children's home lives better. Adolescents, who are at a key developmental stage, stand to benefit from the stronger finances and positive parenting the expansion may provide.

Medi-Cal's reach has been uneven, with coverage disparities related to race/ethnicity, citizenship, and nativity. This report analyzes whether disparities in mental health and child maltreatment for California's adolescents improved after the Medi-Cal expansion. Moreover, concerns about teen mental health and maltreatment have escalated during COVID-19, a crisis characterized by high uncertainty, economic difficulties, and more time at home for teens due to school closures and social distancing.

This report examines teen well-being before and after the Medi-Cal expansion and presents the following key findings:

- **There were no racial disparities in serious mental health issues for teens.** The odds of severe psychological distress and suicidal thoughts were similar across Asian, Black, Latino, and white adolescents.
- **Noncitizen and foreign-born teens had better mental health than US citizens and US-born teens.** Though there is much overlap between Latinos and immigrants in California, being an immigrant is what matters for teen mental health disparities.
- **Over time, adolescent mental health has been worsening.** Mental health disparities did not change after the Medi-Cal expansion. Either the policy change did not help teens in underserved communities, or perhaps disparities would have worsened without a Medi-Cal expansion.
- **Racial/ethnic disparities in substantiated abuse and neglect were notable both before and after Medi-Cal expansion.** There are higher substantiated rates of teen maltreatment among Asian, Black, and Native American adolescents relative to white adolescents, while Latinos are similar to white teens. Though these rates of maltreatment are troubling, the overwhelming majority of teens are not maltreated, and maltreatment statewide has fallen in recent years.
- **Despite positive changes within low-income households, large disparities remain.** There was little change to racial/ethnic, citizenship, or nativity differences in teen mental health or maltreatment after Medi-Cal expansion.

Adolescent mental health in California has worsened in recent years, which raises concerns about how the current crisis is affecting mental health for teens in households hit hard by COVID-19. Moreover, racial disparities persist in the rates of maltreatment among teens, and during economic downturns the risk of maltreatment tends to rise. Analyzing patterns of teen mental health and maltreatment since the Medi-Cal expansion can help us better understand the need for additional resources—and targeting of resources—to pull through this crisis, a crisis that marks the first test of the Medi-Cal expansion as a safety net program in an economic downturn.

Introduction

Medi-Cal is California's Medicaid program, which provides health coverage to many of the state's low-income residents. In 2014, the state expanded eligibility for Medi-Cal to a broad swath of low-income adults as part of the Patient Protection and Affordable Care Act (ACA) Medicaid expansion. This action substantially altered the group of people Medi-Cal served, which had been mostly low-income children and their parents, disabled individuals, and elderly adults. The ACA expansion increased the role of Medi-Cal in California, but not all groups benefitted to the same degree. Among Latino, foreign-born, and noncitizen Californians, gains in coverage were less than for other groups (Cha and McConville 2019a).

The state uses federal waivers to support innovation in the form of pilots such as Whole Person Care, which coordinates health services with a range of social supports. These pilots and the ACA expansion receive substantial federal funds, but California also invests in Medi-Cal policies ineligible for federal support. Using state funds, Medi-Cal expanded to low-income undocumented children in 2016 and young adults in 2020.[1]

The goal of this report is to examine adolescent well-being against the backdrop of the Medi-Cal expansion. Adolescents are at an important stage of life that is often stressful. By analyzing how mental health and abuse or neglect of teens differs along the lines of race—and nativity and citizenship when possible—we can assess changes teens may have experienced since the Medi-Cal expansion. Though this study focuses on the periods immediately before and after Medi-Cal expansion, it also analyzes trends in mental health, abuse, and neglect for a period including the Great Recession to gain insights on adolescents most affected by the COVID-19-related economic downturn.

Evidence is growing around how Medi-Cal improves finances and behavioral health for adults, which includes mental health and substance use disorder. These changes also may benefit adolescents' well-being: better financial resources may lead to better home environments and more positive parenting. However, disparities in baseline outcomes for teens and the limited reach of the Medi-Cal expansion may produce unequal outcomes. By studying how the expansion affects those beyond its adult target population, we can understand what California is getting from its investments and where the state may need to do more.

The global pandemic of 2020 has highlighted how some individuals fall between the cracks without health insurance. Job loss led to loss of employer-based insurance and income even as health was at risk (Centers for Disease Control and Prevention 2020b; Claxton and Damico 2020). This unstable environment elevates the importance of Medi-Cal, and California is likely to be in a better position to support its residents through the COVID-19 crisis because of its commitment to the program.[2]

This recession is the first test of the Medi-Cal expansion as a countercyclical safety net program. By providing access to health care, Medi-Cal is likely to improve the finances and mental health of low-income adults at a time of intense need, and these benefits may affect the lives of their children.

[1] Senate Bill 75 expanded Medi-Cal to children up to age 19 beginning in May 2016, and Senate Bill 104 did the same for young adults up to age 25 beginning in January 2020 (California Department of Health Care Services 2020a; 2020b).

[2] Oklahoma and Missouri, states that had rejected participating in the ACA Medicaid expansion, will now join California and 36 others in offering Medicaid broadly to low-income adults.

Medi-Cal is a Major Component of the Social Safety Net

In 2014, California expanded Medi-Cal under the ACA to adults with incomes under 138 percent of the federal poverty level (FPL);[3] the program now covers one-third of residents. Under California's relatively generous pre-ACA policies, many low-income parents were already eligible for the program, but not all of them were participating.

In addition to enrolling newly eligible adults, the high visibility and outreach efforts of the ACA drew in already eligible children and adults, a phenomenon known as the "welcome-mat effect" (Hudson and Moriya 2017; Frean, Gruber, and Sommers 2017). Together, these changes greatly improved insurance coverage for low-income children and the adults who most affect their lives. Uninsured rates among low-income children fell by more than 60 percent since the expansions (Cha and McConville 2019a). The share of teens living with uninsured parents or other adults in their household also dropped sharply (Figure 1).

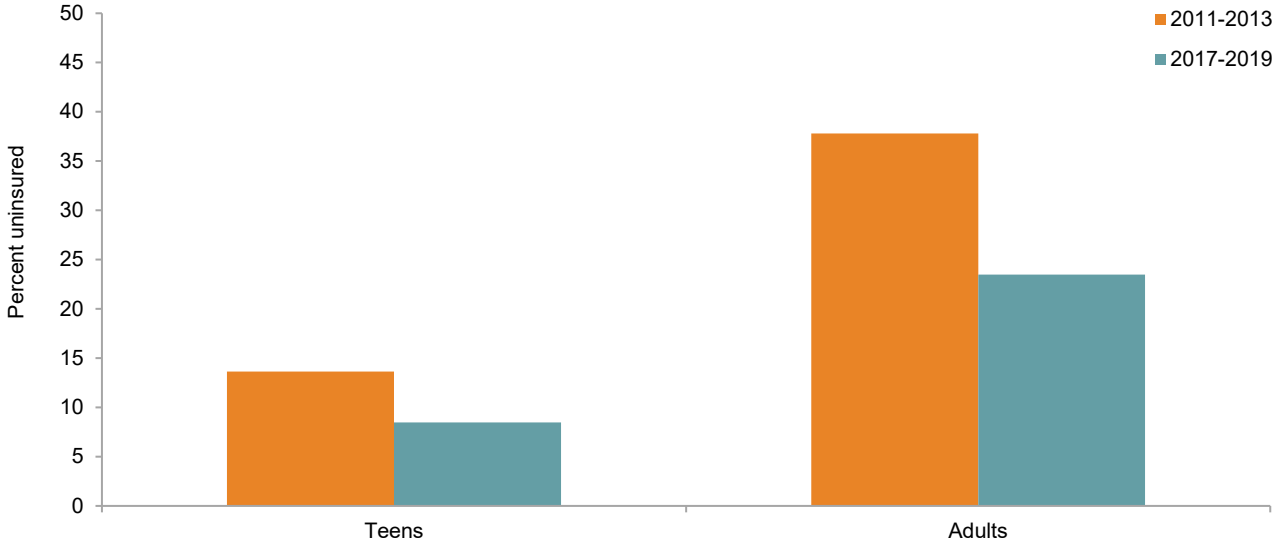
Medi-Cal is a safety net program with effects beyond access to health care. Because an accident could result in expensive hospital care, health insurance protects individuals from continuous uncertainty and risk of financial ruin. In the US, unpaid medical bills are a leading cause of financial hardship, including personal bankruptcies (Gross and Notowidigdo 2011). The ACA expansion reduced debt in collections, averted an estimated 50,000 bankruptcy filings nationally in the years immediately following the policy, and improved credit scores by small but statistically significant amounts (Brevoort, Grodzicki, and Hackmann 2020; Caswell and Waidmann 2017). The expansion also reduced worries about medical costs (McMorrow et al. 2017).

The link between financial and mental health is a recurring theme in the research on Medicaid for adults. In an earlier Medicaid expansion, untreated depression fell for adults and self-reported mental health improved (Finkelstein et al. 2012; Baicker et al. 2017; 2018). Technical Appendix Table A1 summarizes research in these areas. Having health insurance does not eliminate risk, but for many adults, it goes a long way to reducing worry and uncertainty while connecting people to care. Medicaid improves both finances and mental health.

[3] For a family of four in 2020, this translates to an income less than $36,156.

FIGURE 1

Uninsured rates among California's low-income teens and adults have dropped since Medi-Cal expansion



SOURCE: American Community Survey, 1-year Public Use Microdata Sample, 2011–2013 and 2017–2019.

NOTES: Teens include ages 12–17, and adults include ages up to 64. Uninsured rates are averaged for the three-year period just prior to Medi-Cal expansion (2011–2013) and for the most recent three years of data (2017–2019). Uninsured rate in the ACS refers to whether the person had any insurance coverage at the time of the survey. Low-income is defined as family income below 200 percent of the official federal poverty level.

Medi-Cal Policy May Affect Adolescent Well-Being

Teen mental health is a growing concern in California. About a third of high school students showed signs of depression, with higher rates among girls than boys (42% vs. 22%); 13 percent of Californians aged 12 to 17 reported having had a major depressive episode in the past 12 months (US Department of Health and Human Services 2018).[4]

Adolescence is the most common time of onset for major depression (Weissman et al. 2016), and mental health difficulties can have grave consequences. Signs of depression and hopelessness predict teen suicidal behavior like suicidal thoughts, threats, or attempts (Thompson et al. 2005). Teen suicides in California increased 15 percent between 2009 and 2018 (Howle 2020).

There is a growing, urgent need to dedicate more attention and resources to teen mental health. Medi-Cal has played a role in alleviating adult depression; it could also help prevent teen mental health issues, since parental depression and negative parenting behaviors are documented risk factors for adolescent depression (Armsden et al. 1990; Marmorstein and Iacono 2004; Weissman et al. 2016). Stronger family finances due to Medi-Cal coverage may also help support teen mental health. In fact, adolescents show fewer psychiatric symptoms when their families get financial windfalls (Costello et al. 2003).

[4] The definition used for a major depressive episode was having five or more of the following symptoms nearly every day in the same two-week period, where at least one of the symptoms is a depressed mood or loss of interest or pleasure in daily activities: (a) depressed mood most of the day; (b) markedly diminished interest or pleasure in all or almost all activities most of the day; (c) significant weight loss when not sick or dieting, or weight gain when not pregnant or growing, or decrease or increase in appetite; (d) insomnia or hypersomnia; (e) psychomotor agitation or retardation; (6) fatigue or loss of energy; f) feelings of worthlessness; (g) diminished ability to think or concentrate or indecisiveness; and (f) recurrent thoughts of death or suicidal ideation.

Child maltreatment, which includes abuse or neglect, affects adolescent well-being. Between July 2019 and June 2020, about 172,000 reports were filed for 3.6 million California adolescents over concerns of alleged abuse or neglect (Webster et al. 2019).[5] Fortunately, less than 6 percent of reports were substantiated; that is, for a small share of reports, an investigation by child welfare authorities confirmed abuse or neglect. Additionally, mental health issues are both a risk factor for, and a possible outcome of, involvement in the child welfare system.

When family resources improve, child well-being also improves in a range of ways; more income can lift children out of poverty, allow families to live in better neighborhoods, and lead to spending more on food, education, and health care (Gennetian, Castells, and Morris 2010). In fact, poverty is the dominant risk factor for maltreatment (Sedlak et al. 2010), and higher income is associated with reduced risk (Jonson-Reid, Drake, and Kohl 2009; Pelton 2015; Cancian, Yang, and Slack 2013; Raissian and Bullinger 2017; Sedlak et al. 2010). The tendency for adult depression to improve under Medicaid also likely reduces maltreatment risk for teens since parental depression is associated with child physical discipline or abuse (Dubowitz et al. 2011; Shay and Knutson 2008). As a result, the Medi-Cal expansion could reduce teens' risk of abuse or neglect.

Large Racial and Ethnic Disparities around Teen Well-Being Continue

Disparities in access to mental health services are prevalent across race/ethnicity and immigration background. African American and Latino teens receive fewer mental health services, even though they have similar underlying prevalence of mental health disorders as white teens (Elster et al. 2003). Even when African American and Latino teens display suicidal behavior, these disparities persist (Freedenthal 2007). The patterns for adolescent children of immigrants are similar; they are less likely to get mental health services than teenage children of US-born caretakers (Dettlaff and Cardoso 2010).

In terms of abuse and neglect, the highest rates of reports occur for Native American children, and the second highest rates occur for African American children (US Department of Health and Human Services 2020). Bias features strongly in the history of Native American children in the child welfare system, which once included policies to remove children from tribes and assimilate them to mainstream society through boarding schools and out-of-culture fostering and adoption (Crofoot and Harris 2012). The high rates of involvement African American children have with the child welfare system are usually attributed to poverty (Boyd 2014; Drake et al. 2011; Sedlak, McPherson, and Das 2010). However, evidence suggests racial bias against African American families may explain why some households have more contact with the system (Boyd 2014; Dettlaff et al. 2011).

Most rounds of the National Incidence Study, which estimates underlying rates of child maltreatment rather than reporting rates, have not found evidence of more maltreatment in families of color. The most recent iteration of the study did find higher rates of maltreatment in Black families, which additional analyses found were due to widening economic inequality between African American and white families (Sedlak et al. 2010). This report, like most child welfare research, faces limitations in quantifying bias in reporting, but makes analytic attempts to address issues within the limits of data feasibility.

[5] Allegation and population numbers include ages 11–17.

Teens in Underserved Communities Face Greater Risks from the COVID-19 Crisis

The COVID-19 pandemic has caused at least three distinct crises—the spread of a highly contagious virus, the economic downturn, and the replacement of in-person schools with virtual learning. All of these crises have hit African American, Latino, Native American, undocumented immigrant, and low-income groups hardest (Azar et al. 2020; Gao, Lafortune, and Hill 2020; Kaiser Family Foundation 2020; Page et al. 2020).[6]

The disparities around coronavirus case and death rates stem from worker status, living arrangements, health conditions, and systemic issues such as residential segregation (Centers for Disease Control and Prevention 2020a). Additionally, compared to other races, African American children and adolescents are experiencing disproportionate hardships such as high rates of food insufficiency during the pandemic, and low-income parents have less time to provide support for virtual learning (Gao, Lafortune, and Hill 2020).

No research consensus yet exists on how COVID-19 is affecting individual mental health by race or ethnicity, and most of what is known concerns adults. African American and Latino adults are being hardest hit by mental health conditions including anxiety, depression, pandemic-related trauma, and suicidal thoughts (Czeisler et al. 2020); however, low-income African American adults are more resilient in dealing with the pandemic and optimistic about what their futures would hold, compared to low-income white adults (Graham et al. 2020). Tracking teen mental health will be essential ongoing work during the COVID-19 era.

Child welfare reporting, on the other hand, is likely to drop sharply because teens have much less contact with teachers and physicians. Although maltreatment reflects a combination of reporting abuse or neglect and actual abuse or neglect, during the pandemic, those two components can diverge greatly. Teens may live in a home where a family member lost a job, or became ill, or faced financial troubles. During this crisis, the risk of child abuse and neglect is growing even as teens see medical providers and educators less.

[6] COVID-19 seems to be disproportionately affecting Native American groups, but data quality and completeness remain issues for this demographic (Hatcher et al. 2020).

About the data

This project uses several data sources. The California Health Interview Survey (CHIS) is a state-representative survey of health, demographics, and related measures. The survey is fielded continuously by the Center for Health Policy Research at UCLA. Fielding in six languages—Chinese, English, Korean, Spanish, Tagalog (Filipino), and Vietnamese—and oversampling of small demographic groups make the CHIS a valuable resource for comparing outcomes by race/ethnicity.

CHIS includes measures of health insurance coverage by type, financial and demographic information, and mental health. Adolescents 12 to 17 respond directly to the survey questions, making their responses more likely to be accurate than information gained through adult proxies. Much of the CHIS is public, but sensitive content such as adolescent mental health variables were accessed under a data use agreement with UCLA.

The National Child Abuse and Neglect Data Systems (NCANDS) Child File data include administrative data on reports, investigations, and confirmations of child abuse or neglect. The data include only information about children who are potential victims of abuse. California's NCANDS data are submitted by the California Department of Social Services to the Children's Bureau of the national Health and Human Services Administration for Children and Families, and made available to researchers through Cornell University. NCANDS includes the universe of alleged child abuse reports.

The Surveillance, Epidemiology, and End Results Program (SEER) database is a cancer surveillance resource at the National Cancer Institute (part of the National Institutes of Health). SEER includes public estimates of the child population by age, county, year, and race. Sources for other variables include the US Bureau of Labor Statistics Local Area Unemployment Statistics for unemployment rates by county and month, and Health Resources and Services Administration designations of rural counties.

Teen Mental Health Has Worsened Despite Investments

Adolescents in the mental health portion of the California Health Interview Survey come from a range of races/ethnicities and their backgrounds vary in terms of citizenship and nativity. About 11 percent are Asian, 5 percent African American, 49 percent Latino, and 30 percent are white (see Technical Appendix A). About 4 percent of the teens are immigrants with no green card, about 3 percent are immigrants with green cards, and 93 percent are US citizens (by birth or through naturalization). About 12 percent are foreign-born, and the remaining 88 percent are born in the US. Study members are on average about 14 and a half years old, slightly under half of the sample is female, and about 2 percent live in a rural California county (Technical Appendix Table B1).

The average measure of mental health was in the healthy range (a Kessler 6 score of 4.4). However, about 5 percent of adolescents report severe psychological distress, while over 5 percent report suicidal ideation. In a worrying trend, both of these indicators have worsened in recent years (Figure 2). After the expansion, Medi-Cal coverage for teens is higher, which is in keeping with research on the welcome-mat effect, and periods of being uninsured are lower. Although the Medi-Cal expansion was a major investment in the health of state residents, it was not enough to counteract deteriorating mental health among teens.

The Kessler 6 scale

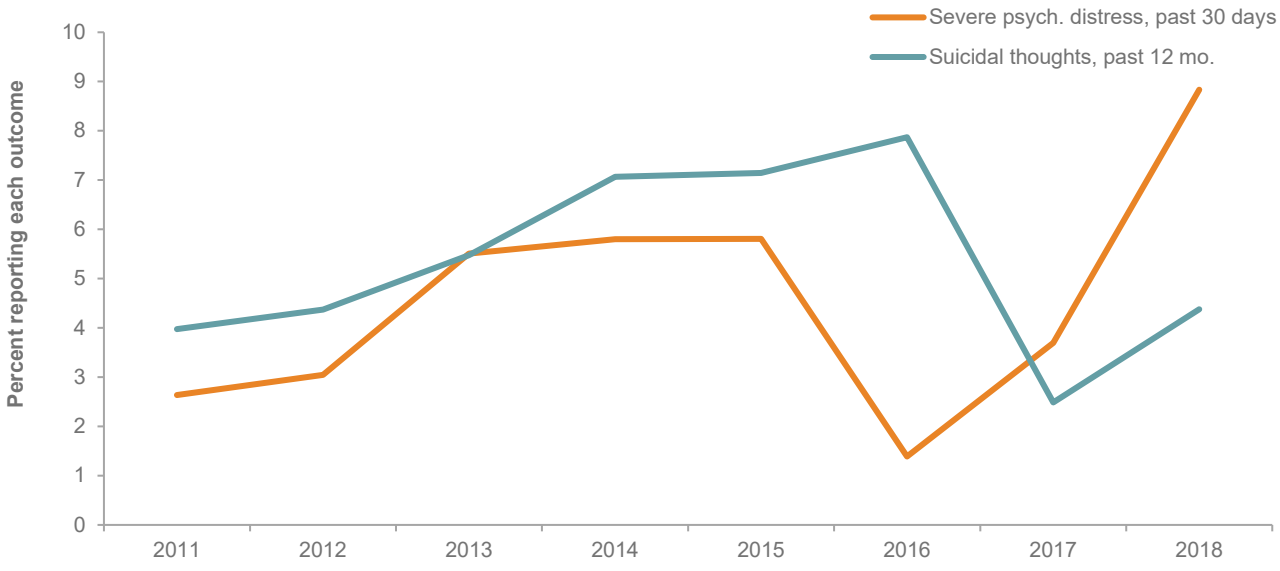
The Kessler 6 is a screening tool for identifying severe psychological distress for an individual in the past 30 days. The K6 is frequently used in surveys for its brevity and validity. It consists of the following six questions about the frequency of experiencing poor mental health (wording reprinted from the CHIS 2017 teen questionnaire).

1. About how often during the past 30 days did you feel nervous?
2. During the past 30 days, about how often did you feel hopeless?
3. During the past 30 days, about how often did you feel restless or fidgety?
4. How often did you feel so depressed that nothing could cheer you up?
5. During the past 30 days, about how often did you feel that everything was an effort?
6. During the past 30 days, about how often did you feel worthless?

Possible responses are all of the time (4 points), most of the time (3), some of the time (2), a little of the time (1), or none of the time (0). The Kessler 6 score is the sum of the points across the six questions. Total scores range from 0 to 24, with higher numbers corresponding to greater distress. A score of 13 or higher indicates severe psychological distress; this threshold is one of the binary measures of mental health used in this report.

FIGURE 2

Average mental health for California teens has worsened in recent years



SOURCE: California Health Interview Survey 2011–2018.

NOTES: Includes adolescents ages 12–17. Severe psychological distress in past 30 days measured using Kessler 6 scale. Suicidal thoughts in past 12 months measured using responses to survey questions about ever having had suicidal thoughts and having had them in the past 12 months.

Of the demographic groups studied, Asian teens have the lowest prevalence of severe psychological distress, and Latino teens have the highest. Severe psychological distress is not a specific diagnosis, but a measure of psychological symptoms that correlate with severe mental illnesses such as major depression (Pratt, Dey, and Cohen 2007). On average, the prevalence of severe psychological distress in the past 30 days was over 1 percent for Asian teens, over 4 percent for Black teens, over 5 percent for Latino teens, and over 4 percent for white teens, who are the baseline group in the race/ethnicity analysis. The prevalence of severe psychological distress was 1 percent among immigrant teens with no green card, over 2 percent for green card holders, and close to 5 percent for US-citizen teens, who are the baseline group for the citizenship analysis. Foreign-born teens had a 2 percent prevalence of severe psychological distress, and US-born teens, who are the baseline group for the nativity analysis, had a prevalence of just under 5 percent.

The second measure of adolescent mental health is having considered suicide in the past 12 months. Immigrant teens with no green card have the lowest prevalence of suicidal thoughts, and white teens have the highest, of the groups studied. On average, the prevalence of suicidal thoughts is below 3 percent for Asian teens, over 4 percent for Black teens, about 5 percent for Latino teens, and over 6 percent for white teens, the baseline group. The prevalence was about 2 percent for immigrant teens with no green card, less than 1 percent for teens with a green card, and over 5 percent for the US citizen baseline group. Less than 2 percent of foreign-born teens had suicidal thoughts, while nearly 6 percent of US-born teens, the baseline group, did.

Teen mental health did not improve following the Medi-Cal expansion—and after other variables were controlled, differences by demographics disappeared (see Technical Appendix Tables B5, B6, and B7 for details). That is, poor mental health outcomes do not change much by race/ethnicity, citizenship, or nativity.[7] The most notable finding is that overall teen mental health has deteriorated recently.

After the Medi-Cal expansion, the level of severe psychological distress and thoughts of suicide do not change much between people of color, noncitizen, and foreign-born teens and their respective comparison groups. The exception is for green card holders, who have lower odds of suicidal thoughts in the post–Medi-Cal period relative to US citizens (see Technical Appendix Table B6). The odds that Asian, Black, and Latino teens experienced severe psychological distress or considered suicide were indistinguishable from the odds among white teens.[8] It is not possible to know whether adolescent mental health would have declined further without the Medi-Cal expansion, but the program alone was not enough to produce an improvement over time.

Though the Latino and immigrant populations in California may have much overlap, the two communities are not synonymous. The odds of poor mental health for Latino teens was statistically the same as for white teens; but noncitizen and foreign-born teens had lower odds of reporting poor mental health compared to US citizen and US-born teens. This was true for those with and without green cards. Similarly, noncitizens express better mental health outcomes in relation to suicidal thoughts. Teens with green cards were similar to US citizens before Medi-Cal expansion, but they have lower odds of reporting suicidal thoughts after the expansion. The pattern is reversed for teens without green cards; they had lower odds of reporting suicidal thoughts compared to US citizens.

[7] Additional tests supported these findings. Because it is possible that using the standard cutoff score for severe psychological distress in a binary analysis hides subtle differences in mental health by race/ethnicity, citizenship, or nativity, I also modeled the raw psychological distress score (see Technical Appendix Tables B8, B9, and B10). While estimates for Black and Latino teens were statistically significant, the effect sizes were quite small (less than one point on the K6 scale) and would not have been meaningful changes for a typical teen since the average K6 score was less than 4.5. Foreign-born teens still had a mental health advantage on average, but there were no significant mental health changes for noncitizen or foreign-born teens following Medi-Cal expansion.

[8] The small Native American teen sample, combined with low variation in the outcome variables for this group, prevented an analysis of Native American disparities in mental health.

Foreign-born teens had a mental health advantage over the full study period. They have about a quarter the odds of reporting severe psychological distress or suicidal thoughts compared to US-born teens before the expansion, with no significant change after. In summary, citizenship and nativity matter much more than race in predicting mental health disparities among adolescents, and there was no clear improvement for any group following Medi-Cal expansion.

Although the Medi-Cal expansion to adults did not correlate to improvements in teen severe psychological distress or suicidal thoughts, it is possible that the additional support to low-income households prevented steeper declines in teen mental health. Whether or not the expansion is helping, the overall trends imply that adolescent mental health needs targeted intervention and investment.

Maltreatment is Lower but Disparities Persist

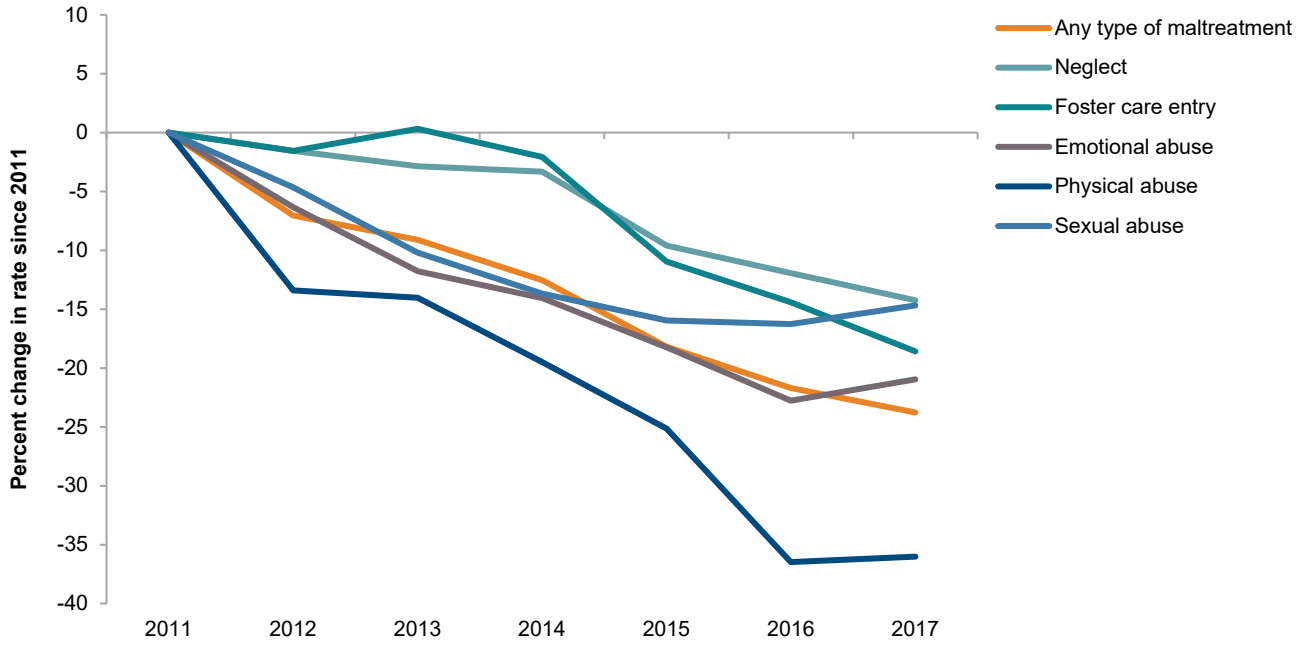
Maltreatment, which includes abuse and neglect, declined for adolescents (Figure 3). Annually, about 640 teens per 100,000 were victims of substantiated abuse or neglect in 2011. That number fell to about 490 teens per 100,000 in 2017. Neglect is the most common maltreatment type, and makes up two-thirds to three-quarters of maltreatment numbers.[9] Neglect decreased in this time from about 424 reports to 363 victims per 100,000. Despite the declines over time, more teens were victims of neglect during the post-expansion period across race/ethnicity (Technical Appendix Table C2).

Also despite the statewide improvement in maltreatment rates, African American, Latino, and Native American teens are overrepresented (Table 1). Black adolescents were 13.8 percent of victims while making up 6.7 percent of the adolescent population, followed by Native Americans (0.74% of victims vs. 0.54% of adolescents) and then Latinos (60.3% vs. 50.4%). In contrast, Asian teens were the most underrepresented (3.3% vs. 12.6%), followed by white adolescents (21.8% vs. 29.8%).[10]

[9] Neglect is the negligent failure of a parent/guardian/caretaker to provide adequate food, clothing, shelter, or supervision to a child.
[10] Despite these findings being over- or underrepresentations of groups in California, nationally there are well-documented racial/ethnic disparities in reporting and disproportionality in other stages of engagement with the child welfare system (see, for example, Boyd 2014).

FIGURE 3

Statewide, rates of substantiated adolescent maltreatment and abuse have fallen



SOURCE: National Child Abuse and Neglect Data System Child Files 2011–2017 (2018 excluded due to partial data).

NOTES: Percent change in rates of adolescents (ages 12– 17) per 100,000 with substantiated maltreatment displayed. Teens with multiple substantiated reports in a year are counted once. Less-frequently reported categories not shown separately are sex trafficking, medical neglect, and other abuse, though they contribute to "Any type of maltreatment" counts.

TABLE 1

Racial and ethnic characteristics for maltreatment victims ages 12–17

	Number of victims	Percent of victims	Percent of teens in California
Asian	4,180	3.25	12.56
Black	17,774	13.83	6.68
Latino	77,537	60.31	50.41
Native American	955	0.74	0.54
White	28,112	21.87	29.80
Total victims	128,558		

SOURCE: National Child Abuse and Neglect Data System Child File, January 2011–August 2018 and Surveillance, Epidemiology, and End Results Program (SEER) database, 2011–2018.

NOTES: This table represents the teens in the individual-level child welfare data. Included are substantiated victims ages 12–17 of any maltreatment with California county of report and race coded to Asian, Black, Latino, Native American, or white.

The state trends provide an overview of teen maltreatment, but California's counties are different in many ways, including demographic makeup and poverty rates. A county analysis prevents increases in maltreatment for a given race in some counties from canceling out decreases in others, and moving to monthly rather than yearly rates captures changes within years. Focusing on the county-month level—that is, treating each calendar month in each county as an observation—and controlling for multiple factors paints a different story: rates of maltreatment are higher among Asian, Black, and Native American adolescents compared to white teens, while Latino and

white teens have comparable rates. While this finding may be unexpected based on the overall state numbers, some of it is due to the shift from state-level trends to county-month rates. The remaining difference is from controlling for county stable characteristics (e.g., geography) and changing racial compositions over time. (See Technical Appendix A for details on research design).[11]

Furthermore, most forms of maltreatment decreased for Latino adolescents after the Medi-Cal expansion, and Latino teens remain the only racial/ethnic group without disparities relative to whites. This is true for any substantiated report of maltreatment and foster care entry (Technical Appendix Table C4), and also for neglect, the most common form of maltreatment (Technical Appendix Table C3). These shrinking gaps associated with the Medi-Cal expansion are limited to Latino teens relative to white teens.

The main challenge in using child welfare administrative data to analyze disparities is that the reporting data conflates reporting rates with underlying maltreatment rates. That is, what look like disparities in maltreatment by race could be partially or wholly due to disparities in reporting. It is not possible to address this concern fully within the administrative data, but rates of substantiated reports can provide some insight. If Black and Latino families are more likely to be surveilled and reported to child welfare authorities because of bias, we might expect rates of substantiation to be lower with teens of color than with white teens.[12] However, substantiated reports are significantly more likely with Black, Latino, and Native American teens, but not with Asian teens (Technical Appendix Table C5).

Teen mental health worsened over the study period, and the Medi-Cal expansion did not correlate with a change in race or immigration-related disparities. Maltreatment outcomes, however, improved over the study period, and the Medi-Cal expansion was associated with a decline in disparities for Latino teens. These seemingly contradictory mental health and maltreatment results can coexist for several reasons. While the maltreatment data focus only on substantiated reports, which affect a small percentage of California's adolescents, the mental health data are drawn from a broad swath of the state's teens. Additionally, if bias exists in the reporting or investigation of maltreatment reports, significant disparities may appear in these analyses even if underlying maltreatment rates are even across race/ethnicity. Without an updated incidence study such as the National Incidence Study, we cannot know the underlying rates of teen maltreatment. Finally, level of analysis can produce different findings—recall, for example, how the state maltreatment averages declined over time while the county-month rates had more nuanced changes. The analysis of child welfare was conducted at the county-month level because using teen-level data would include only victims of maltreatment; the mental health analyses were at the individual level since the survey did not focus solely on teens with severe psychological distress or suicidal thoughts.

[11] The regressions of child welfare outcomes analyze rates of maltreatment or foster care entry on a monthly basis; Technical Appendix Table C1 describes the characteristics of the county-month-race rates. One consequence is that the average monthly rates in a year are not necessarily one-twelfth of the annual rate. At this level, the average rate of maltreatment is about 38 per 100,000 over the study period. Since counties contribute equally to these statistics, small and large counties have the same weight.

[12] This does not address the possibility of bias in investigation by authorities, and data limitations unfortunately make it impossible to do so.

The Pandemic Increases Concerns around Mental Health and Maltreatment

There are good reasons to be especially on guard about teen mental health and maltreatment during the COVID-19 pandemic. While past economic downturns do not systematically predict worse teen mental health (Technical Appendix Table B11) or most forms of maltreatment, higher unemployment is associated with more physical abuse of teens (Technical Appendix Table C6).[13] In the Great Recession, for example, the risk of child maltreatment increased in tandem with economic difficulties (Schneider, Waldfogel, and Brooks-Gunn 2017), and poverty is a known risk factor for abuse and neglect (Jonson-Reid, Drake, and Kohl 2009; Sedlak et al. 2010).

The current recession differs from the past in that COVID-19 mitigation policies like school closures and social distancing, and the tendency for individuals to avoid health care, have given adolescents less contact with adults outside their households. In particular, teachers and medical professionals are mandated reporters, meaning that they must report suspected maltreatment to child welfare authorities. Reducing teens' interactions with mandated reporters could mean that reported maltreatment diverges greatly from true underlying abuse and neglect.

The Medi-Cal Expansion Is Being Tested as a Safety Net Program

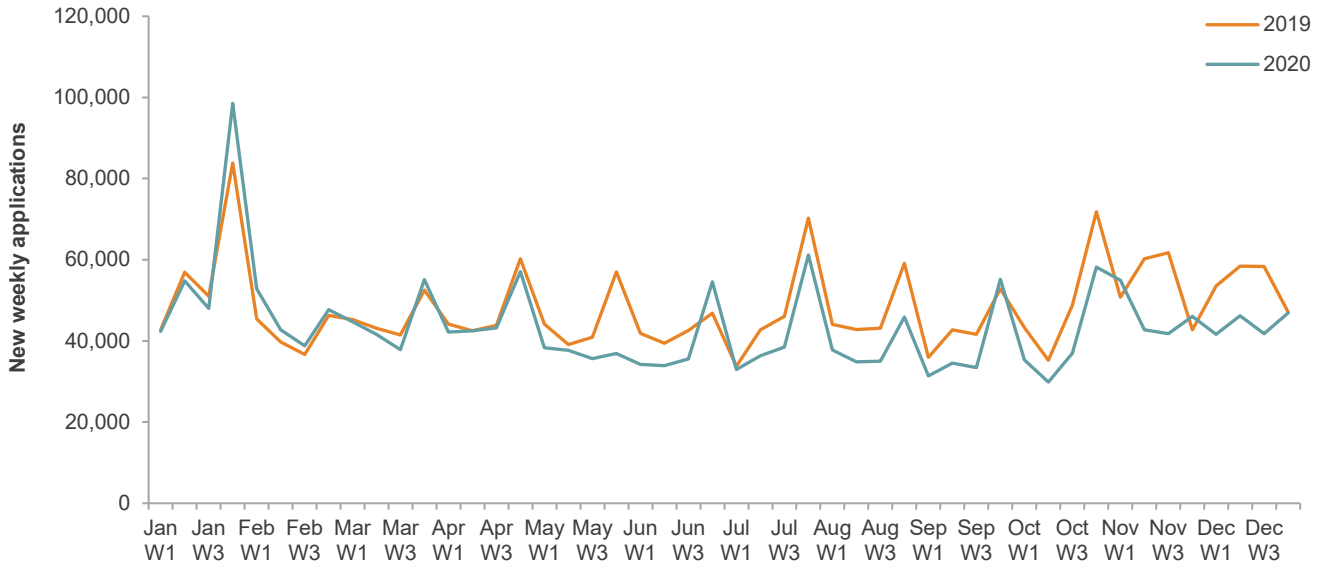
Since the 2014 ACA expansion, this is California's first major recession—it is therefore an unusual test of Medi-Cal as a safety net program. Unlike the Great Recession, which started with a housing market crash, a pandemic disease launched the current downturn—and it has made individuals fear interacting with the health care system. People now associate hospitals and their emergency departments with virus spread, and many Californians may opt to stay home, putting off primary care appointments.

Unlike other types of insurance, individuals tend to enroll in Medi-Cal at the point of service. Many would-be enrollees are not joining the program as they might have in an economic crisis not associated with a public health crisis. For most weeks in March through December, the number of new applications for Medi-Cal in 2020 was about the same or lower than comparable weeks in 2019 (Figure 4).

[13] Overall substantiated maltreatment rates increase by about the same amount as physical abuse with an increase in the unemployment rate, but are less precisely measured than physical abuse specifically.

FIGURE 4

New weekly applications for Medi-Cal do not reflect a COVID-19-related surge in 2020



SOURCE: CalSAWS & CalWIN systems. Last updated on 1/4/21.

NOTES: W1 and W3 indicate the first and third weeks of each month. Medi-Cal applications received include those received via categorical eligibility in other programs such as CalWORKs for the counties of Alameda, Contra Costa, Fresno, Orange, Placer, Sacramento, San Diego, San Francisco, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, Solano, Sonoma, Tulare, Ventura, and Yolo. For all other counties, applications received do not include those received via categorical eligibility in other programs.

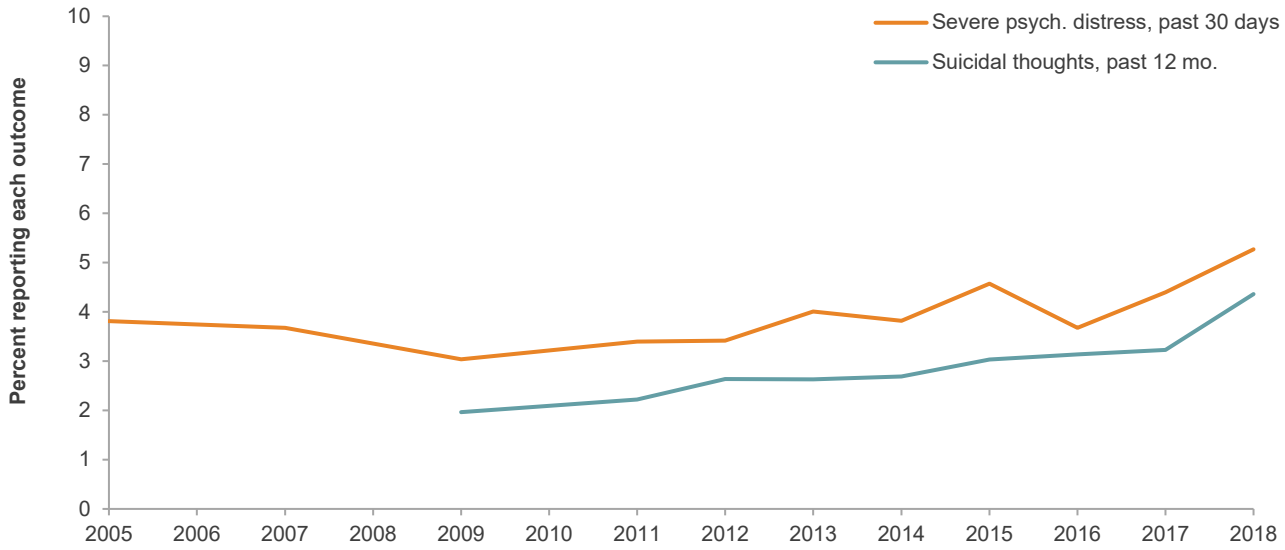
Resources for Teen Mental Health Are Insufficient

Although the mental health findings across teen demographic groups were neutral or positive, teen mental health overall has been worsening in recent years even as the economy was strengthening (Figure 5). Rates of severe psychological distress and suicidal thoughts have increased steadily, with especially large increases occurring between 2016 and 2018. This lower baseline raises questions about how adolescent mental health is faring during the crisis.

The rise in serious mental health issues for this age group is not being met with sufficient resources in school districts (Howle 2020), and distance learning is likely to make it even harder for schools to monitor teens' mental health. Research is underway on adult mental health during the pandemic, with inconsistent findings about people of color (Czeisler et al. 2020; Graham et al. 2020); similar research efforts are needed for adolescents.

FIGURE 5

Adolescent mental health has worsened since the Great Recession ended



SOURCE: California Health Interview Survey 2005, 2007, 2009, 2011–2018 (data on suicidal thoughts not available prior to 2009).

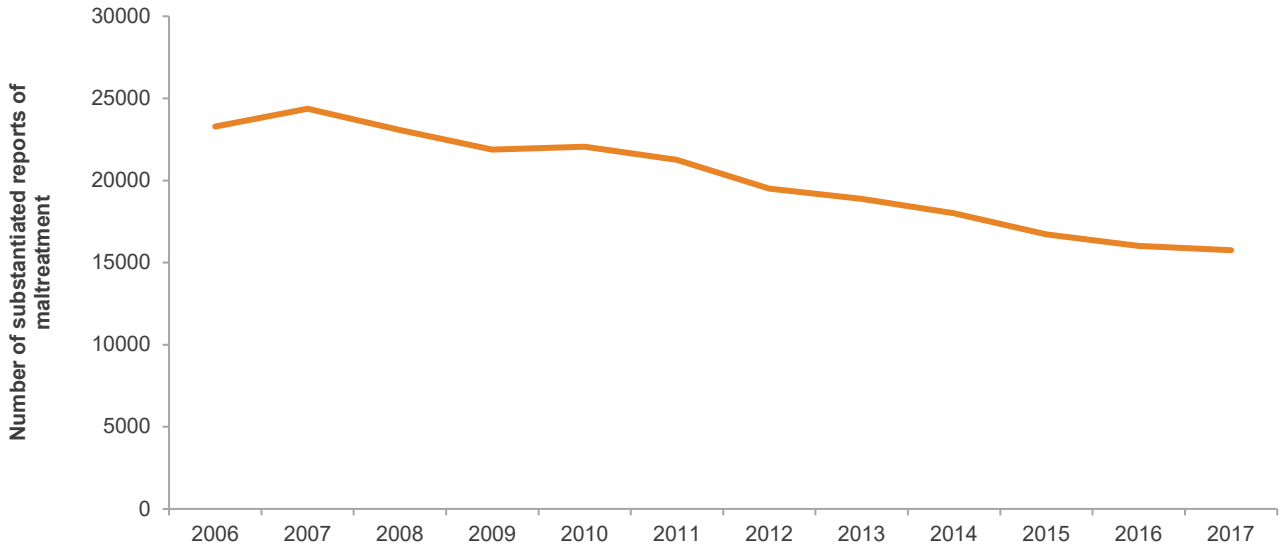
NOTES: Severe psychological distress in past 30 days measured using Kessler 6 scale. Suicidal thoughts in past 12 months measured using responses to survey questions about ever having had suicidal thoughts and having had them in the past 12 months. The Great Recession occurred December 2007–June 2009.

Maltreatment Is Difficult to Track in the Current Crisis

In the pandemic recession, reported maltreatment numbers are likely to fall due to lower reporting, masking any real changes to the underlying prevalence of abuse and neglect. Substantiated maltreatment fell during the Great Recession as part of a long downward trend (Figure 6), but this measure counts only reports investigated and substantiated by child welfare authorities. Contrast this, for example, with a measure of underlying maltreatment that does not depend on reporting.

FIGURE 6

Substantiated reports of maltreatment declined during the Great Recession and beyond



SOURCE: National Child Abuse and Neglect Data System Child Files 2011–2017 (2018 excluded due to partial data).

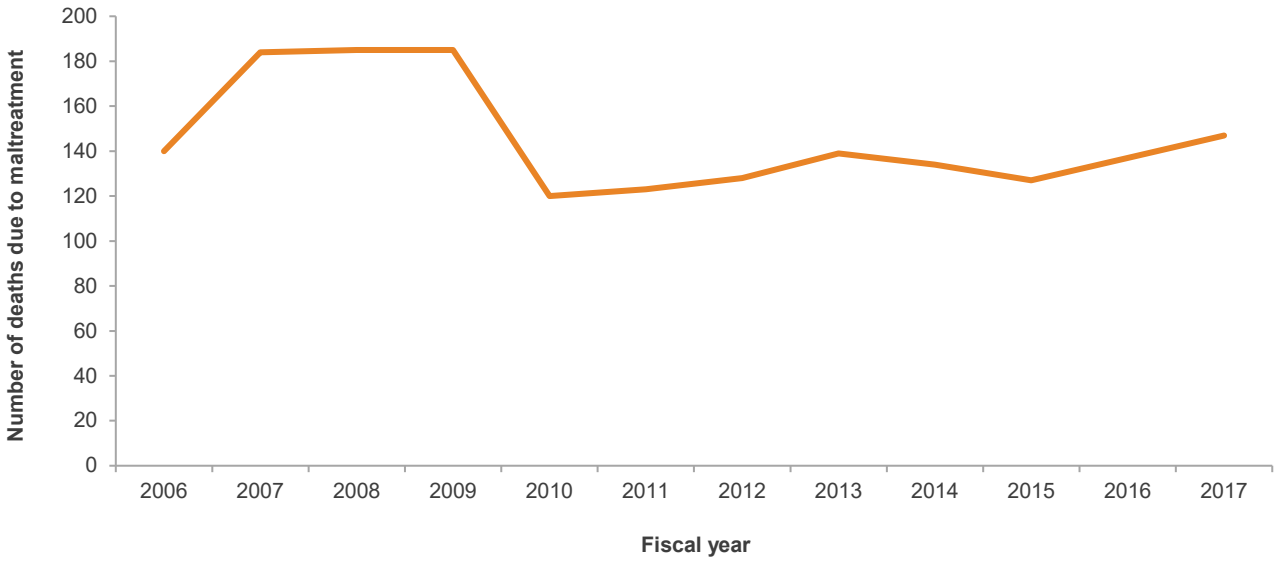
NOTES: Includes substantiated reports of any type of maltreatment of adolescents (ages 12– 17) in California per year. Children with multiple substantiated reports in a year are counted once. The Great Recession occurred December 2007–June 2009.

The number of deaths due to maltreatment—which includes victims known to the state as well as children who were never reported while alive—was high during the Great Recession, and declined in the aftermath (Figure 7).[14] This means that the most tragic cases of maltreatment were not declining during the recession—even though substantiated reports fell—and suggests that factors like reporting and investigation could play roles in the substantiation numbers. Agency data show that the Great Recession was associated with a drop in child welfare staff who work in screening, intake, and investigation/assessment, followed by a slow rebound (Figure 8). It is plausible that staffing constraints led to fewer substantiations than would otherwise have been the case.

[14] It is not possible to identify age of children who died due to maltreatment in this agency data source, so this trend reflects children of all ages, not just adolescents. Child race, county, and other characteristics are similarly not available for analysis.

FIGURE 7

More children died from maltreatment during the Great Recession than after

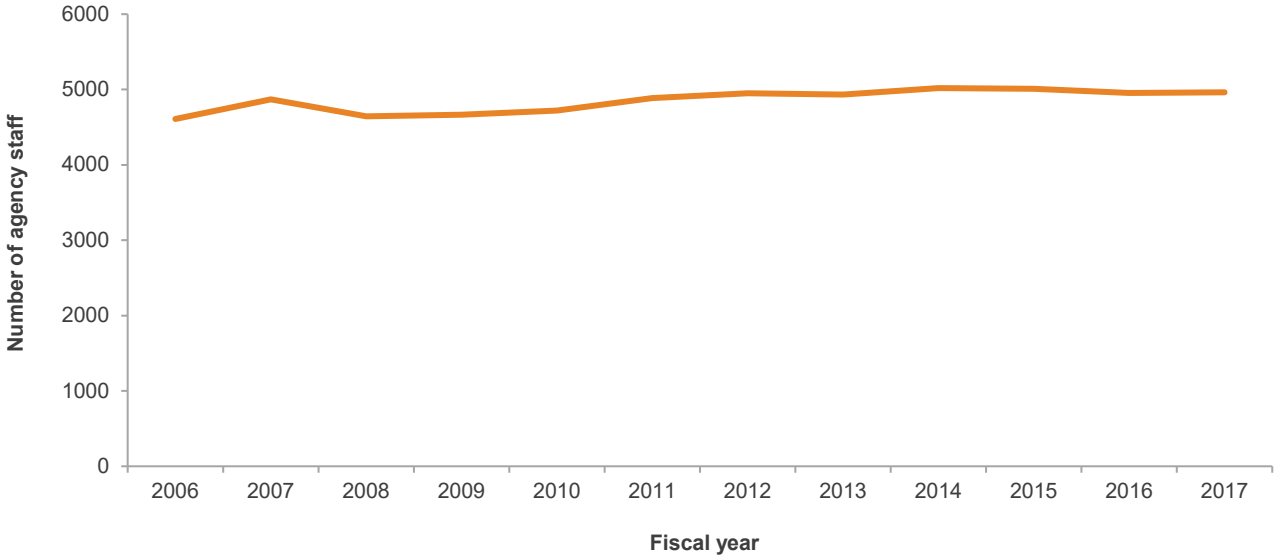


SOURCE: National Child Abuse and Neglect Data System Agency Files 2006–2017.

NOTES: California children of all ages included. The fiscal year runs from October 1 to September 30. The Great Recession (December 2007–June 2009) therefore occurred during fiscal years 2008–2009.

FIGURE 8

Staffing at child welfare agencies fell in the Great Recession and took years to recover



SOURCE: National Child Abuse and Neglect Data System Agency Files 2006–2017.

NOTES: The staff numbers reflect the number of screening, intake, and investigation/assessment staff in California. The fiscal year runs from October 1 to September 30. The Great Recession (December 2007–June 2009) therefore occurred during fiscal years 2008–2009.

With teens interacting less often with trusted adults outside their homes and amid potential cuts at agencies maltreatment reports may fall, even if real rates of abuse and neglect rise. Because teens meet less often with health care providers during the pandemic, these professionals are less likely to identify and report victims of maltreatment. Unfortunately, this is also at a time when most schools in California are virtual, meaning that students have little live contact with teachers (Gao, Lafortune, and Hill 2020), who are another important source of child welfare reports (Danielson and Cha 2020). Together with tracking Medi-Cal enrollments, officials must closely track gaps in adolescent mental health and maltreatment through this period and beyond.

Conclusion

The expansion of Medi-Cal to a broad segment of low-income Californians broadened the safety net in a way that improved adults' finances and mental health adults' lives in far-reaching ways. With stronger financial resources and positive parenting, the benefits of the expansion might bring a more stable home environment for teens, which could lead to better mental health and maltreatment outcomes. However, simple pre versus post analyses did not show large changes in teen mental health or maltreatment. This could mean that the benefits to adults did not help adolescents, or that things could have been worse without the expansion; without a control group, it is impossible to say which interpretation is true.

The expansion of Medi-Cal greatly increased coverage among low-income adults, but not all groups benefitted equally. The benefits beyond coverage, such as better adult mental health and finances, are also likely to be unequally distributed. Consequently, the question of whether the program helped teens warrants investigation through the lens of disparities. Among teens, severe psychological distress and suicidal thoughts were similar across demographics groups, although noncitizens and foreign-born teens showed lower odds of poor mental health compared to US citizens and US-born teens. Despite likely positive changes in low-income households affected by the Medi-Cal expansion, disparities remained unchanged after the policy. The expansion also did not change persistent disparities around maltreatment; however, maltreatment outcomes did improve for Latino and white teens. Black, Latino, Native American, low-income, and undocumented adolescents are disproportionately likely to be in households most affected by COVID-19, suggesting that mental health issues and maltreatment could be growing even as teens interact with doctors and teachers less.

Medi-Cal expansion was a large investment in low-income Californians, but it was not associated with many improvements to adolescent mental health and maltreatment, with the exception of reduced maltreatment disparities for Latino teens. Though this may be disappointing, it is important to note that mental health and maltreatment are large challenges that need more than indirect investments.

Supporting families with a robust safety net, including Medi-Cal outreach, is an important way to help teens during the COVID-19 crisis. Some of this work is already underway. The state and a number of private foundations funded a $125M disaster relief fund that distributed up to $1,000 per household to undocumented Californians ineligible for federal COVID-19 relief funds (Office of Governor Gavin Newsom 2020). Assembly Bill 1826 also recently went into effect, making working undocumented parents eligible for the California Earned Income Tax Credit (California Legislative Information 2020a).

New policies to expand monitoring and intervention of adolescent well-being are needed. Here again, state policymakers are already working to make child abuse and neglect reporting more accessible. Assembly Bill 1929 went into effect in January 2021, making internet-based reporting a permanent feature of the child welfare system

(California Legislative Information 2020b). And a state auditor's report on school districts' insufficient capacity to handle adolescents' serious mental health issues is bringing attention to an issue that is more important than ever during the pandemic (Howle 2020). However, this is a time of critical need, and more work is needed.

Enforcing vaccination schedules during times of distance learning is a way that schools can keep teens connected to medical providers. As of January 2021, official exemptions for vaccination have become harder to come by due to Senate Bill 276 (California Legislative Information 2019), but the pandemic makes it hard to predict whether vaccination rates will increase, as intended by the bill, or decline as individuals continue to avoid health care settings. Getting teens to the doctor ensures they are connecting with trusted adults who can monitor their well-being. It can also push newly eligible families to sign up for Medi-Cal and get preventive care rather than holding out and later visiting an emergency room.

The COVID-19 crisis is a complex situation affecting teens' health, education, and economic lives. The state's response must similarly be complex, affecting multiple dimensions of well-being. Adolescent mental health and maltreatment outcomes have the potential to worsen. Deploying multiple policy and community solutions to underserved communities is a way to support teens in this time.

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