



# GETTING DOWN — TO FACTS II —

Technical Report

## Investments in Student Health and Mental Health in California's Public Schools

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**About:** The *Getting Down to Facts* project seeks to create a common evidence base for understanding the current state of California school systems and lay the foundation for substantive conversations about what education policies should be sustained and what might be improved to ensure increased opportunity and success for all students in California in the decades ahead. *Getting Down to Facts II* follows approximately a decade after the first *Getting Down to Facts* effort in 2007. This technical report is one of 36 in the set of *Getting Down to Facts II* studies that cover four main areas related to state education policy: student success, governance, personnel, and funding.

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## **Investments in Student Health and Mental Health in California's Public Schools**

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### **Acknowledgements**

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## Key Findings

- School-based healthcare programs substantially increase children’s access to care, even for children covered by Medicaid or by private health insurance. Prior research studies have linked school-based healthcare and mental health services to better child behavior in school, reduced emergency department usage by children, higher rates of educational success, and lower rates of teen births. While it is unclear which specific school-based health programs are most cost effective, the benefits of having at least some type of healthcare at every public school are typically far greater than the costs.
- California ranks at or near the bottom of all states in terms of the percentage of K-12 public students with access to various types of healthcare or mental health care inside their schools. California ranks 39<sup>th</sup> for school nurses per student and 50<sup>th</sup> for school counselors per student. California ranks 43<sup>rd</sup> for Medicaid spending per student on school-based health and mental health services. Yet California’s youth do not have low needs; for example, California ranks 28<sup>th</sup> among states in terms of the estimated percent of children with a serious emotional disturbance.
- Less than half of California’s public school students have regular access to physical health care in their schools (Figure 2), less than half of California’s elementary school students have access to mental health care in their schools (Figure 3), and more than 5 percent of California’s high school seniors do not have access to a school counselor (Figure 3).
- Gaps in school-based health coverage are present throughout the state. Only 16 percent of school districts provide mental health coverage for all elementary school students. More than one quarter of school districts have at least one high school not offering any counselors. School-based health care coverage for the general student population is especially low in rural areas and in schools with high rates of special education classifications.
- Non-profit organizations and other government agencies (local health districts, county departments of health, local police departments) help to increase student access to school-based healthcare and especially mental health care, but these efforts are sporadic.
- Despite current gaps in California’s school-based health programs, for less than \$100 of additional annual spending per student the state could provide basic health and mental health coverage at all public schools:
  - The annual additional staffing costs per K-12 public school student for bringing California’s mental health services up to a *basic minimum* level for public school students statewide could be roughly \$31: \$20 for elementary school mental health, \$4 for middle school mental health, and \$7 for high school counselors. The only substantial additional costs would be creating adequate space for the additional staff members to work in their schools.
  - Expanding mobile health clinic coverage to schools without existing physical healthcare programs would represent an increased annual cost to the state of

about \$374 million, equivalent to \$59 per K-12 public school student, based on mobile clinics visiting schools for at least three to four hours per week.

- By reprioritizing school-based programs and clarifying guidelines for school districts' Medicaid billings, the California Department of Health Care Services could encourage and facilitate greater school district use of federal dollars for providing much-needed healthcare to children. Increasing child mental health screenings would also require better alignment of incentives, access, funding, and responsibilities; county behavioral health offices currently have access to state and federal revenues to conduct early childhood mental health screenings, but these county offices are neither required nor incentivized to conduct school-based screenings.

## Introduction

California makes large financial commitments to health care, and the economic returns to its residents' health improvements are extraordinarily high. Billions of dollars are on the line for California's quest to find the right mix of health services and health screening programs. The California Department of Health and Human Services composes more than 28 percent of the state's total budget expenditures. Costs of the Medi-Cal program, California's Medicaid program, were estimated at \$102 billion for the most recent fiscal year, with almost one-third of the state's population covered by Medi-Cal; the majority of those costs were funded by federal dollars, but California's state and local governments still covered more than \$33 billion (McConville, 2017). Nationally, public and private health care expenditures combined exceed \$3 trillion per year, equivalent to more than 17 percent of annual Gross Domestic Product (G.D.P.).

As the U.S. population distribution becomes older, and as effective yet expensive new health care technologies become available, the country's total health care expenditures should increase to an even larger share of G.D.P. Even with attempts to keep health care prices and fees in check, the social return on investment for many types of health care expenditures will remain very high. For adult populations, some of the greatest returns to investment will be improved detection of heart disease and improved treatment of various forms of cancer (Murphy & Topel, 2006; Lakdawall, Sun, Jena, Reyes, Goldman, & Philipson, 2010). Even a one percent reduction in mortality rates due to cancer could be worth half of a trillion dollars (Murphy & Topel, 2006). For children, the greatest returns to investment might be in early treatment and prevention of mental health problems, as well as early treatment of chronic physical health problems such as asthma, poor vision, diabetes, dental problems, and obesity.

Children's physical health and mental health play critical roles in their development. Poor health in childhood adversely affects future success (Currie et al. 2010; Case, Fertig & Paxson 2005; Case, Lubotsky & Paxson 2002), and children in lower income households are more likely to suffer various types of health problems (Currie, 2009). Improvements in child health can lead to higher future economic growth and can improve the upward mobility of children from low income families. Disparities in child health in the United States have been a serious impediment to reducing the persistence of poverty across generations.

Expanding health insurance has reduced health gaps and their consequences. Greater access to Medicaid is associated with better outcomes for health (Currie and Gruber, 1996; Finkelstein et al., 2012; Kaestner, Joyce and Racine 2001; Currie et al., 2008), as well as for educational attainment and earnings (Cohodes et al, 2017; Gross & Notowidigdo, 2011). Yet insurance coverage alone has not eliminated these gaps. Insurance coverage alone does not ensure access to high-quality care due to supply constraints, families' time constraints, and families' limited information. Some families do not live close to high-quality providers accepting their insurance, some may find it difficult to take time off from work to seek care for themselves or their children, and some might lack the necessary information to seek out appropriate care.

This report explores access to school-site health and mental health services among the general population of K-12 public school students in California. Public schools may be a relatively desirable location for efficient and widespread distribution of health and mental health services to children. In terms of schools' health and psychiatric services, readers may be most familiar with schools' special education programs; special education programs are designed to target services and learning accommodations to a small fraction of students who are formally diagnosed with disabilities. This report does not focus on special education programs; special education programs are enormously important for student health but have received ample attention elsewhere.<sup>1</sup> This report instead examines health and mental health programs available to the general student population. These general health services are a major part of some schools' operations, yet they often "fly under the radar" of both education policy and health policy discussions (Lear, 2007).

Prior research studies have linked school-based healthcare and mental health services to numerous benefits—better child behavior in school (Carrell & Carrell, 2006; Reback, 2010a, Reback, 2010b), lower rates of depression (Paschall & Bersamin, 2018), reduced emergency department usage (Santelli et al., 1996), fewer teen births (Lovenheim et al., 2016), higher rates of school attendance (Swain, 2018), and higher rates of educational success (Carrell & Hoekstra, 2014; Reback & Cox, 2017). Advocates for school-based mental health services have hypothesized that they may also reduce bullying, violence, and criminal behavior. While it is unclear which specific school-based health programs are most cost effective, the benefits of having at least some type of healthcare at every public school are typically far greater than the costs.

Across California, some public schools offer universal access to health and mental health services through one or more of six mechanisms:

### **1. Staff Employed by School Districts**

School districts may employ nurses, counselors, and social workers who work inside their schools. California school districts have discretion for deciding how many of these workers to employ. Salaries and benefits offered to these workers vary across districts.

### **2. Fee-for-Service Providers via Medi-Cal Funding**

School districts, charter schools, and county departments of education may apply for reimbursement via Medi-Cal funds, federal Medicaid funds distributed by California's Department of Health Care Services. School districts are reimbursed for 50 percent of the allowable billable rate for the services they provide. School districts may provide services via district staff or fee-for-service outside providers and can apply for reimbursement for

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<sup>1</sup> The Legislative Analyst's Office (2013) summarizes special education classification rates and policies in California, and Paul Warren and Laura Hill (2018) provide a report on special education finance in California as part of this "Getting Down to Facts" project. Dhuey & Lipscomb (2011) and earlier work by Rodman, Weill, & Driscoll (1999) provide comparisons of states' special education finance policies.

eligible expenses via one of two programs. Through the School-based Medi-Cal Administrative Activities (SMAA) program, school districts may be reimbursed for coordinating Medicaid-eligible services from outside providers—eligible administrative cost categories include outreach, transportation, claims administration, and translation services. Through the Local Educational Agency Medi-Cal Billing Option Program (LEA BOP), school districts may be reimbursed for serving as healthcare providers, with services provided by either district employees or outside providers working at the school under contract. The majority of students receiving these services are Medicaid-eligible students, and the vast majority are students who already have Individualized Education Plans (IEPs). Several exceptions also make these services relevant to the general student population: students without IEPs may receive screenings, initial treatment for issues revealed during screenings, general nursing services, and psychological services. But California’s school districts may be reluctant to bill for these non-IEP services because there has been a recent history of numerous disputes with CDHCS over Medi-Cal billings and reimbursements (see Section 3 for further discussion).

### **3. School-Based Health Centers**

Some schools host health clinics inside their buildings, called “school-based health centers.” Outside agencies, such as local hospitals, operate these centers. Staffing varies, but most centers have staff that can prescribe medication, have periodic visits from some specialists, and refer children to see other specialists off campus. School-based health centers thus provide a wider range of services and referrals than offered by school nurses. A typical center might operate during weekdays—including hours immediately before and after the school is open—with a nurse practitioner there three to five days a week, a nurse there every day, and a psychologist there once per week. Centers only treat a student if the student’s parents have granted annual blanket permission for the student to utilize health center services. The public schools do not contribute resources to the centers, other than providing the space for the center to operate. Some centers bill students’ insurance programs for services received, and many also rely on grants, donations, and in-kind donation of staff time and equipment from the operating agency.

### **4. Mobile Health Clinics**

Mobile health clinics are health centers on wheels; they range in size from small vans to large towed trailers. Some schools’ mobile health clinics visit them only a few times per year and provide immunizations, sports physicals, and basic screenings. Other mobile clinics provide more extensive weekly services to the same one to ten schools each week, operating similarly to a school-based health center. Dental vans are mobile health clinics offering dental health care only.

### **5. Other Partnerships with Non-Profit Organizations**

Non-profit organizations visit some schools, either donating services or billing children’s insurance directly for these services. For California’s elementary schools, dental exams for

very young children are the most widespread health interventions led by non-profit organizations. Denti-Cal is a service funded by Medi-Cal that provides statewide Kindergarten Oral Health assessments (California Dental Association, 2018). In California's high schools, the most common type of interventions are counseling programs, with several large programs aiming to reduce rates of teen drug use, gang participation, and depression.

## 6. Partnerships with Government Agencies

Three types of local government agencies are occasionally involved with school-based health services in select geographic regions: county offices, local health district offices, and local police departments. Some county offices of health play an active role in school health programs, either directly funding interventions (in addition to the Medi-Cal reimbursements described above) or helping to coordinate non-profit organizations' work with schools. Some areas of California have "local health districts," which are distinct tax jurisdictions funded by dedicated voter-approved supplemental taxes on real estate. Some local health districts simply fund a regional hospital, whereas others fund a broader array of services, such as community health clinics and school-based health programs. Local police departments also occasionally sponsor healthcare or counseling programs inside schools.

This report investigates the following questions about these services in California:

- (1) How does California compare to other states in terms of policies and the rates of service provision?
- (2) What fraction of California's public school students have access to the various types of care described above? How does access vary by student characteristics? How does access vary by school and community characteristics?
- (3) Given the inconsistent supply of health and mental health provision across California's public schools, what policy options are available to ensure that students do not "fall through the cracks"? What are the cost of these options?

Unless otherwise noted, all statistics in this report apply to the 2014-15 school year, the most recent year for which relevant information is consistently available.

### California's In-school Provision of Health and Mental Health Services

#### Compared to Other States

California ranks near the bottom of states in terms of the amount of school-based health and mental health services offered. Rates are especially low for school districts' direct employment of school nurses and school counselors. For school nurses, California ranks 39th, with approximately 1 nurse per 2240 public school students (NEA, 2012). For school counselors, California ranks last among the 50 states, with approximately 1 counselor for every



1,000 public school students.<sup>2</sup> California does not offset this low supply of school nurses and counselors via high rates of employment of special education staff—California ranks 44<sup>th</sup> for the fraction of students designated with IEPs, with a 10.8% classification rate, and ranks 33<sup>rd</sup> in expenditures per pupil for special education teachers and staff salaries.<sup>3</sup> California also ranks only 39<sup>th</sup> in terms of Medicaid reimbursements for school-based healthcare per K-12 student (CDHCS, 2018).

While California ranks near the bottom in the provision of services, it does not rank near the bottom in terms of children’s needs. California’s unmet child mental health needs may be contributing to devastating trends during the past decade: increases in school shootings, teen hospitalizations for self-inflicted harm, and teen suicides (Everytown for Gun Safety Support Fund, 2018; kidsdata.org, 2018). Rates of suicidal ideation among California teens are above the national average, with more than one in five female high school students reporting “seriously considering attempting suicide during the past 12 months.” (Austin et al., 2016). California ranks 28<sup>th</sup> among states in terms of the estimated percent of the population under the age of 17 with a serious emotional disturbance (Technical Assistance Collaborative & Human Services Research Institute, 2012). Psychologists use the term “serious emotional disturbance” specifically for children, and it describes a variety of disorders (excluding developmental disorders) leading to substantial impairment. More than 7.4 percent of children in California have a serious emotional disturbance. In fact, California’s mental health issues are skewed towards children: California ranks just 41<sup>st</sup> among states for the prevalence of serious mental illness among *adults* even though it ranks 28<sup>th</sup> for the prevalence of serious emotional disturbances among *children* (Technical Assistance Collaborative & Human Services Research Institute, 2012).

California does partially compensate for its low supply of school district nurses and counselors via other programs. The counselor and nurse coverage described above might be conservative due to California’s use of local health districts; depending on how school administrators responded to the surveys used to construct those statistics, they may not have included staff whose positions are funded by a local health district rather than by the school district. These programs could put California in just a slightly better position of coverage than implied by the ranks above, since only a few local health districts sponsor health staff in schools.

California also offers a moderate number of school-based health centers and mobile health clinics visiting schools. For school-based health centers, California ranks near the middle of the pack (24<sup>th</sup> among the 50 states), offering one center for every 26,636 public school students.<sup>4</sup> In 2016, at least 19 mobile health clinic programs provided basic medical care to

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<sup>2</sup> Calculated using NCEs (2016a) data.

<sup>3</sup> Calculated using NCEs (2016b) data. California spent about \$467 per every K-12 student on salaries for special education teachers and staff salaries. The relatively high expenditures *per special education student* in California, (with relatively few students designated), reflects higher labor costs in California and greater commitment to funding for students with severe disabilities (Dhuey& Lipscomb, 2011).

<sup>4</sup> Calculated using data from School-Based Health Alliance (2017).

California public school students—including screenings, vaccinations, and treatment of minor infections and illnesses. Eleven of those programs also offered dental examinations and cleanings (during some hours of operation).<sup>5</sup> Eight of the programs offered reproductive health care, eight offered health education programs, and only two offered mental health care onsite. (California School-Based Health Alliance, 2016)

Aside from these mobile health clinics, outside organizations working in schools more frequently provide mental health care than physical care. In a recent survey of California public school principals (RAND, 2018), only 11 percent of principals reported that an outside organization provided physical healthcare services at their schools at least once per month; 36 percent of principals reported that an outside organization provided mental health services at their schools at least once per month.<sup>6</sup> Involvement of non-profit organizations and of non-educational government organizations is scattered across the state. As discussed below, schools without their own programs are no more likely to receive help from outside organizations than schools that do offer counselors, nurses, or health centers. Outside efforts are too sporadic to bring California close to the median state in terms of the percentage of students with access to school-based healthcare.

Inconsistent provision of school-based health services in California is unsurprising given the lack of a state-level policy on this matter. Figure 1 shows states' policies for school nurses. Like most states, California does not require that schools employ a minimum number of nurses per student. California does not allocate any state funding specifically for school nursing programs, nor does it formally recommend minimum ratios. California does not require schools to offer counselors, nor does it offer targeted funding programs for counselors.<sup>7</sup> For 2012-13, the state adopted a Middle and High School Supplemental School Counseling Program intended to increase the provision of counselors. But, after that first year, the state pooled program funds into the general school aid formula; the state no longer required districts to use additional funds to supplement their provision of counselors. Without any strings attached, the program ultimately did little to boost the provision of counselors.

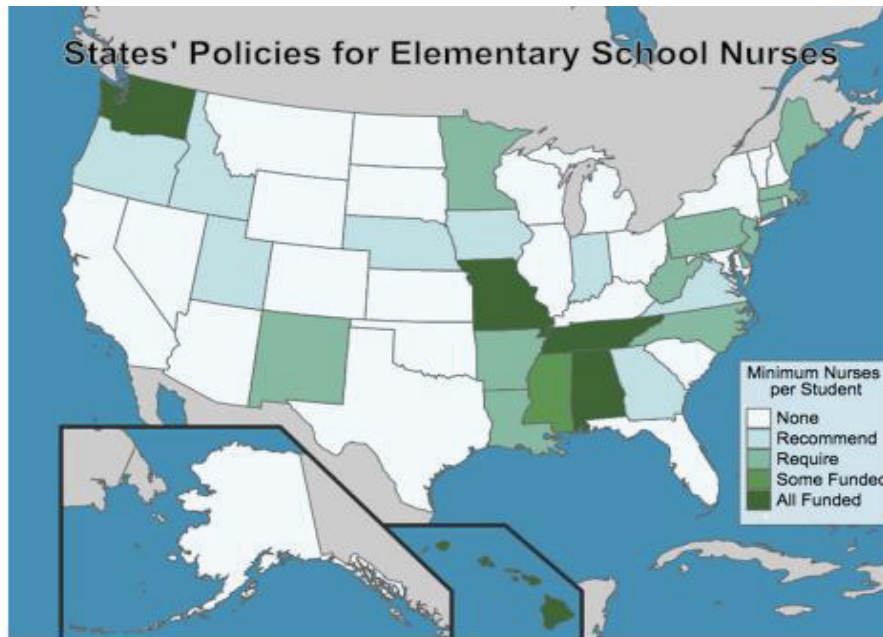
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<sup>5</sup> Additional mobile care programs (beyond these 19) offered dental vans, providing only dental services.

<sup>6</sup> These rates should be interpreted with caution, because the survey response rate was very low: only 30.7 percent. If one weights the principals' responses to try to make them more representative of public schools across the state, then these estimated rates increase from 11 to 12 percent and from 36 to 44 percent. The actual survey question asked principals to describe the work of the three outside organizations that are most important to their schools; I categorized organizations as providing mental health services if the principal reported that they do any work in at least one of the following areas: substance abuse prevention, violence/bullying prevention, mental health care and/or counseling, and crisis intervention.

<sup>7</sup> See Reback (2010b) for a comparison of states' policies concerning elementary school counselors.

**Figure 1.** States' Policies for Elementary School Nurses



**Notes:** Only one state (Mississippi) that does not require elementary nurses does require high school nurses. Sources consulted include Oregon Health Authority (2010), Pearce (2017), and ECS (2017).

### Percent of Students with Access

This section describes rates of California’s public schools’ provision of school-based health and mental health services for the general student population. In all cases, provision refers to students’ access to care, regardless of whether they actually utilized the health services. (Due to confidentiality concerns, it is difficult for researchers to obtain data on health care utilization rates.) I combine data from various sources: school staffing data from the California Department of Education (2016), school-based health center and mobile health clinic data from the California School-Based Health Alliance (2016), and Medi-Cal billing data from the California Department of Health Care Services (CDHCS, 2017). Where information was incomplete, these data were supplemented with information from organizations’ websites or from communications with clinics’ staff members. The reported overlap between health centers and other services may be slightly off because our health clinic data are based on 2015-16 whereas all other data are from 2014-15. Appendix A contains tables displaying all of the specific rates displayed in the bar charts below.

Figures 2 and 3 display rates of physical health and mental health care access for students in first, eighth, and twelfth grade in California public schools. These figures use the full sample of California public school students, so all percentages should be interpreted as student-level rates. Appendix B shows similar figures limiting the sample to students in public schools designated by the National Center for Education Statistics (2017) as “regular” public

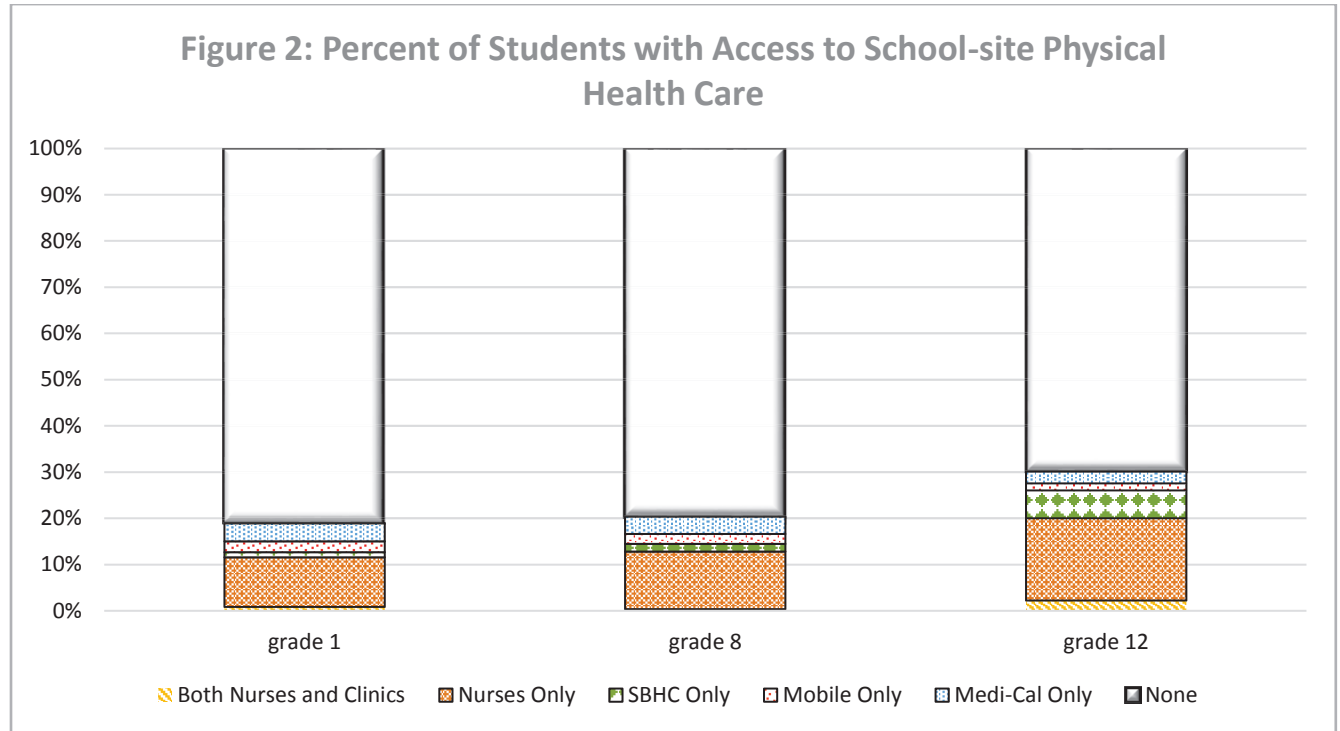
schools—those that do not “focus primarily on vocational, special, or alternative education— and limiting the sample to schools with at least 200 students enrolled. The figures focus on regular access to care via the first four types of school-based health care: staff employed by school districts, services via Medi-Cal billing, school-based health centers, and mobile health clinics. I limit the Medi-Cal coverage category to cases where the schools’ district billed for health treatment services that were not part of special education services.<sup>8</sup> These Medi-Cal coverage rates are overstated because, due to data limitations, I count a school as offering services if any school in that district billed for treatment of students and I count students as having access regardless of whether they themselves were Medicaid eligible. Total health coverage rates may still be understated because, aside from Medi-Cal billings and health centers and mobile clinics, they do not include outside organizations’ efforts to visit schools.

Figure 2 reveals that only 19.0%, 20.3%, and 30.0% of California public school students in 1<sup>st</sup>, 8<sup>th</sup>, and 12<sup>th</sup> grade, respectively, have regular access to physical health services in their schools. School nurses are the most common type of service offered, with more than 11% of 1<sup>st</sup> grade students and more than 20% of 12<sup>th</sup> grade students having access to a school nurse. The second most common type of service for elementary and middle school students is Medi-Cal billing: 5.7% of 1<sup>st</sup> grade students are in school districts using Medi-Cal billings for treatments and this is the *only* form of school-based health access for 3.9% of 1<sup>st</sup> grade students statewide. Similarly, 5.2% of 8<sup>th</sup> grade students attend a school in a district using Medi-Cal billings for treatment, and this is the *only* form of school-based health access for 3.7% of 9<sup>th</sup> grade students. The second most common type of service for high school students is school-based health centers (SBHCs). Nearly 8% of high school students have health centers inside their schools, whereas only 1.2% of elementary school students and 2.0% of middle school students attend a school with a center.

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<sup>8</sup> I do not count schools that offered screenings but not treatment, since those screenings are typically used to determine whether students should receive an IEP. The rates do not change much if screenings are also included: the percentages of 1<sup>st</sup>, 8<sup>th</sup>, and 12<sup>th</sup> grade students with access to physical health care increases from 19.0% to 19.8%, 20.3% to 21.3%, and 30.0% to 31.3%.

**Figure 2.** Percent of students with access to school-site physical health care



Notes: “SBHC Only” and “Mobile Only” respectively refer to schools served by school-based health centers and mobile health clinics, excluding schools also offering traditional school nurses. “Medi-Cal only” refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed treatment in spite of the student not having an IEP. These Medi-Cal coverage rates are overstated because, due to data limitations, I count a school as offering services if any school in that district billed for treatment of students and I count students as having access regardless of whether they themselves were Medicaid eligible. Data sources include CDE (2016), CCD (2016), California School-Based Health Alliance (2016), and CDHCS (2017).

Figure 3 reveals that middle and high school students are far more likely than elementary school students to have regular access to mental health services. Unlike the previous figure, Figure 3 includes SBHCs only if they offered mental health services, and it excludes mobile health clinics because only two mobile clinics reported providing any mental health services. Medi-Cal services in Figure 3 are limited to psychological services.<sup>9</sup> Coverage rates increase from 37.6% in grade 1 to 83.8% in grade 8 to 93.2% in grade 12.

High school mental health coverage rates are overstated, because the data do not allow us to accurately distinguish counselors who primarily focus on mental health from guidance counselors who primarily assist students with course selection, college applications, and career decisions. National estimates of high school counselors’ weekly time-use reveal that the majority of counselors focus on academic advising rather than on mental health; 61 percent

<sup>9</sup> I include services coded as mental health treatments (Non-IEP/IFSP Psychology Counseling, Individual Treatment - Initial, Non-IEP/IFSP Psychology Counseling, Individual Treatment - Additional, Non-IEP/IFSP Psychology Counseling, Group Treatment - Initial, Non-IEP/IFSP Psychology Counseling, Group Treatment – Additional).

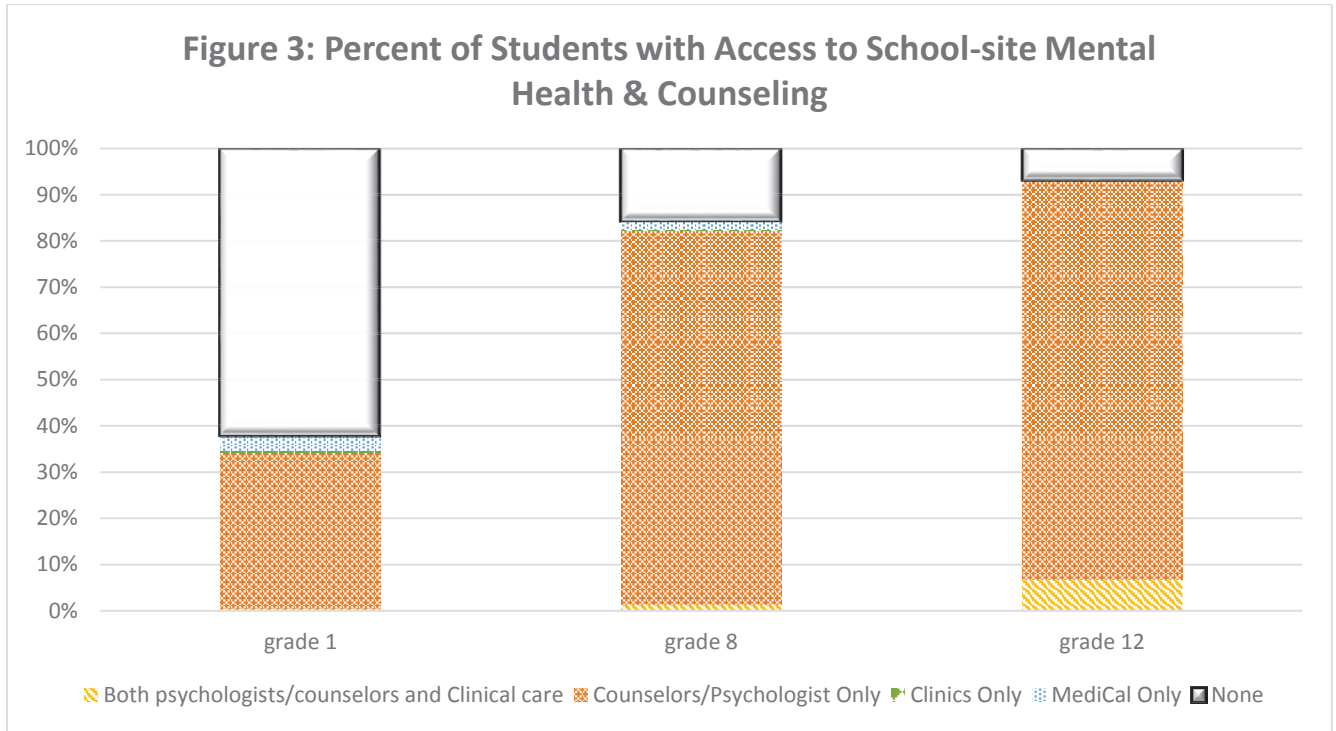
spend no more than a few hours on students’ personal development, whereas only 16 percent spend no more than a few hours assisting with course selection (Radford et al., 2017).<sup>10</sup> Though this report focuses on mental health, effective academic advising of high school students may also provide large benefits to society via increases in rates of college enrollment (Hurwitz and Howel, 2014) and better student–college matches leading to higher college graduation rates (Castleman and Goodman, 2018).

SBHCs offer mental health services to 6.7% of high school students but only to 0.7% and 1.6% of elementary and middle school students, respectively. Reliance on Medi-Cal mental health services is more common in the lower grades: 2.6%, 1.3%, and 0.2% of 1<sup>st</sup>, 8<sup>th</sup>, and 12<sup>th</sup> grade students attend schools where the *only* regular access to mental health services comes from Medi-Cal billings. The overall rates of access to Medi-Cal mental health services for the general population of students in those grades are 4.1%, 3.7%, and 2.3% respectively.

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<sup>10</sup> “No more than a few hours” refers to counselors reporting spending at most ten percent of their time on that activity. While there was not a catch-all category for “mental health issues,” estimates were above 50 percent for low intensity in related categories: 52 percent of high school counselors spend no more than ten percent of their time on “school/personal problems” and 69 percent spend no more than ten percent of their time on “social development” (Radford et al., 2017).

**Figure 3.** Percent of students with access to school-site mental health and counseling



Notes: “Counselors/psychologist” refers to school-employed counselors and psychologists who serve the general student population and do not exclusively serve students with disabilities. “Clinics Only” refers to schools offering neither a district-employed counselor nor psychologist but offering mental health services through a school-based health center or a school-based mental health clinic. (These rates are so low that they are not visible; see Table A.3 in the Appendix for exact rates.) “Medi-Cal Only” refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed psychological services without the student having an IEP. Data sources include CDE (2016), CCD (2016), California School-Based Health Alliance (2016), and CDHCS (2017).

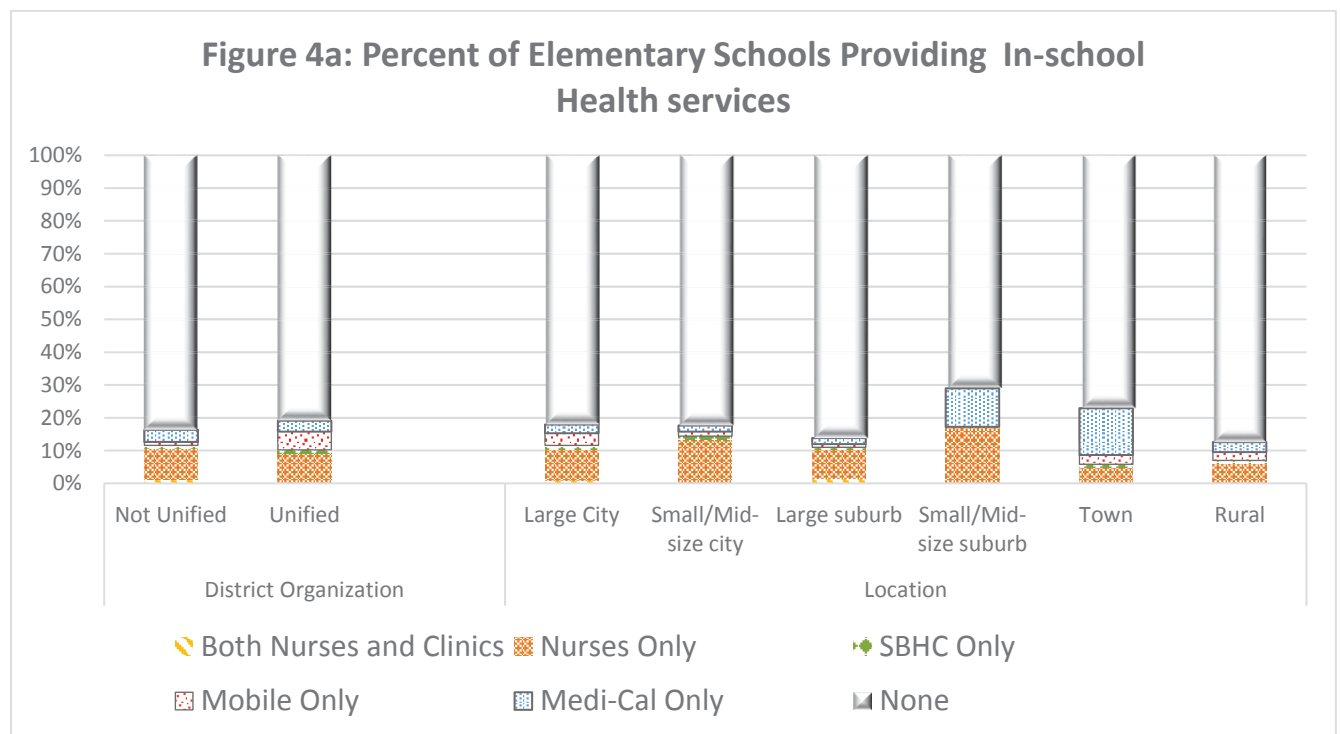
### School Characteristics and the Provision of School-Based Health Services

Unlike the prior figures, which displayed student-level rates, the figures below display the *fraction of schools* offering health services. I use school characteristic data from the National Center for Education Statistics (2017) and restrict the sample to schools designated there as “regular” public schools—those that do not “focus primarily on vocational, special, or alternative education.” Charter schools are included, as long as they fit this “regular” school definition.

The first set of figures display how the fraction of schools offering health services is correlated with school district organization and with location type (rural, urban, etc.). For school district organization, many of California’s districts specialize by either only serving students up until 8<sup>th</sup> grade or only serving high school students. The first panel of Figure 4a (first two bars on the left) displays rates by whether the elementary schools are part of a unified school district, a district that includes both elementary and high schools. The second

panel displays rates by schools' location type. Regardless of the locale or the district's organization, the majority of California public elementary school students do not have access to any physical health services at school. Only 19% of elementary students in Unified districts and 16% of students in Non-Unified districts offer any type of physical health services to some of their general (non-special education) population. Health services are most common in small non-rural communities (towns and small/medium-sized suburbs), where school districts are relatively likely to use Medi-Cal funds to provide health services to the general population. Health services are least common in schools in rural areas (13%) or in large suburbs (14%). Schools located in urban and suburban areas are more likely to employ nurses than schools in less densely populated areas. Schools located at either end of the population density spectrum—in large cities or rural areas—are relatively likely to rely solely on mobile health clinics.

**Figure 4a.** Percent of elementary schools providing in-school health services



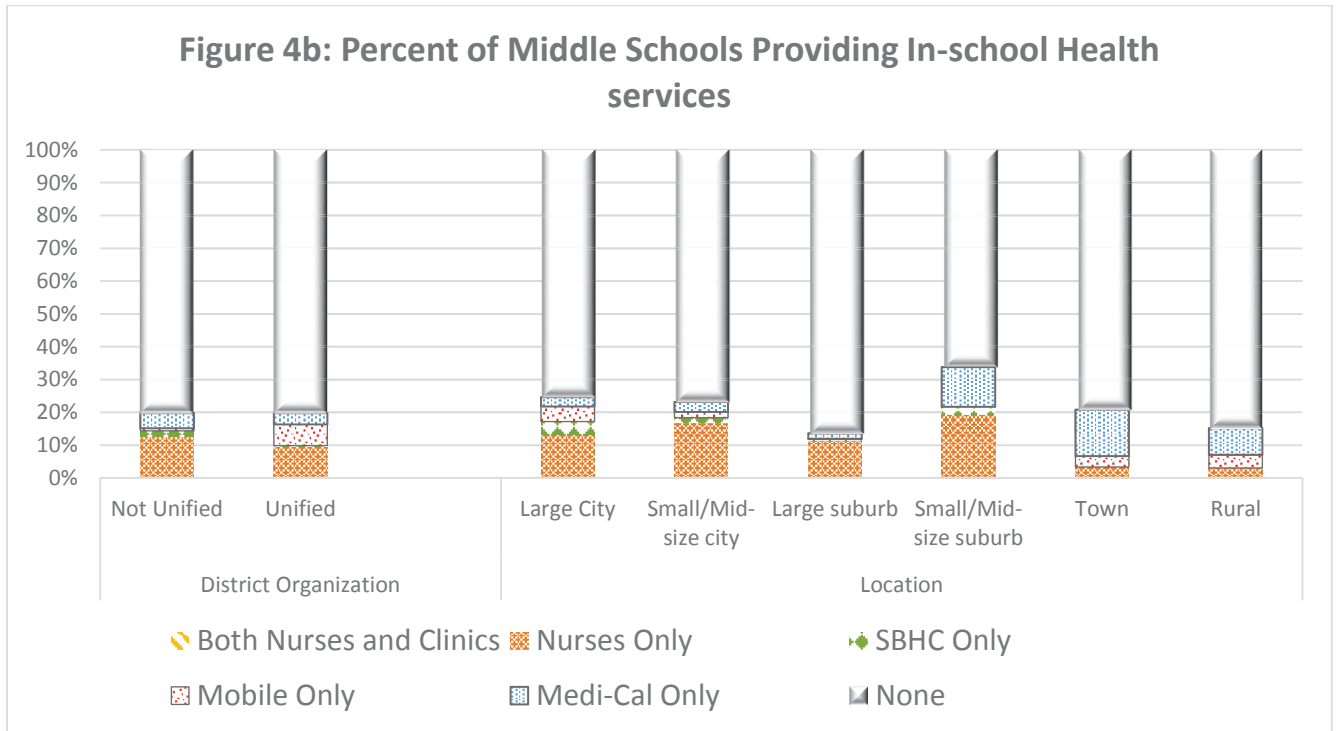
*Notes: "SBHC Only" and "Mobile Only" respectively refer to schools served by school-based health centers and mobile health clinics, excluding schools also offering traditional school nurses. "Medi-Cal only" refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed treatment in spite of the student not having an IEP. These Medi-Cal coverage rates are overstated because, due to data limitations, I count a school as offering services if any school in that district billed for treatment of students and I count students as having access regardless of whether they themselves were Medicaid eligible. Data sources include CDE (2016), CCD (2016), California School-Based Health Alliance (2016), and CDHCS (2017).*

Figures 4b and 4c display the percentages of middle and high schools offering universal access to physical health services. Only 19.7% of middle schools in Unified districts and 19.8% of middle schools in Non-Unified districts offer any type of physical health services to some of

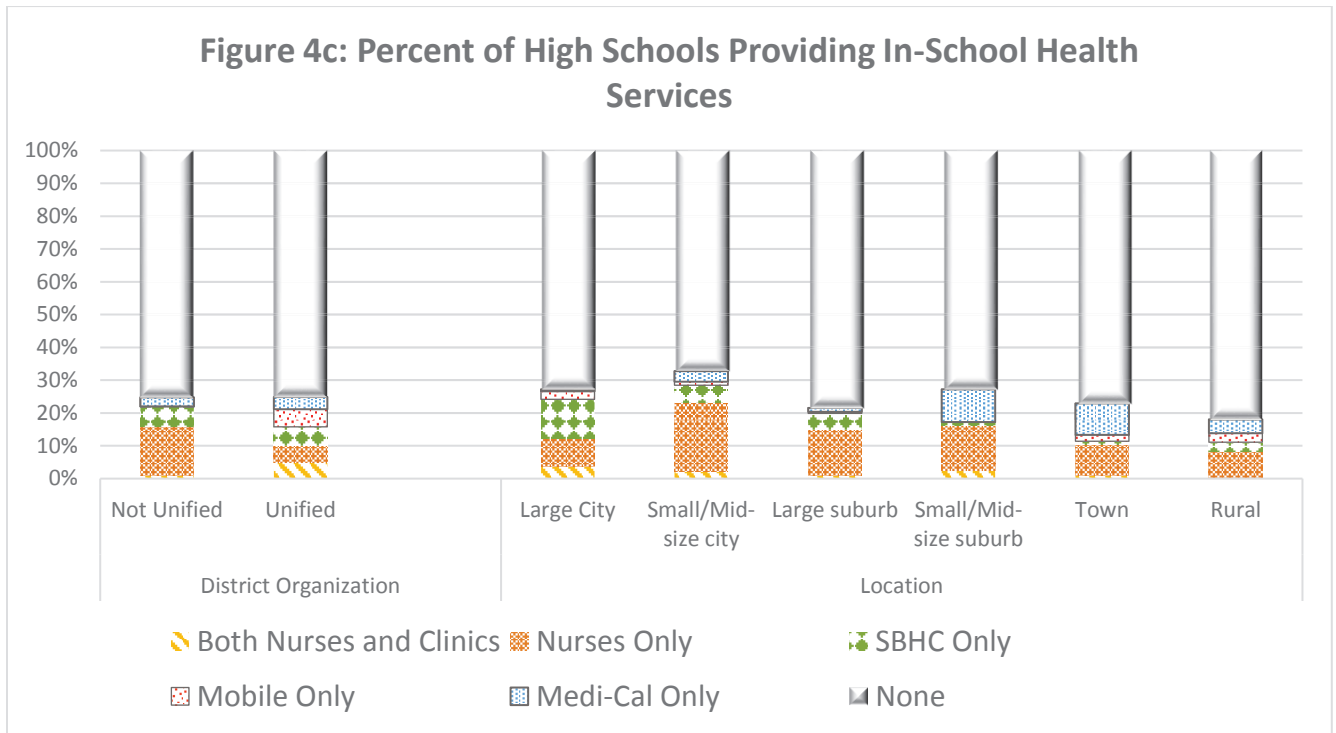


their general (non-special education) population. For high schools, these rates are 24.7% and 24.8% respectively. The most notable difference across grade levels is the greater frequency of health centers serving high schools, especially in large cities. High schools in large cities are the only setting where students are more likely to have access to a school-based health center than to a traditional school nurse.

**Figure 4b.** Percent of middle schools providing in-school health services



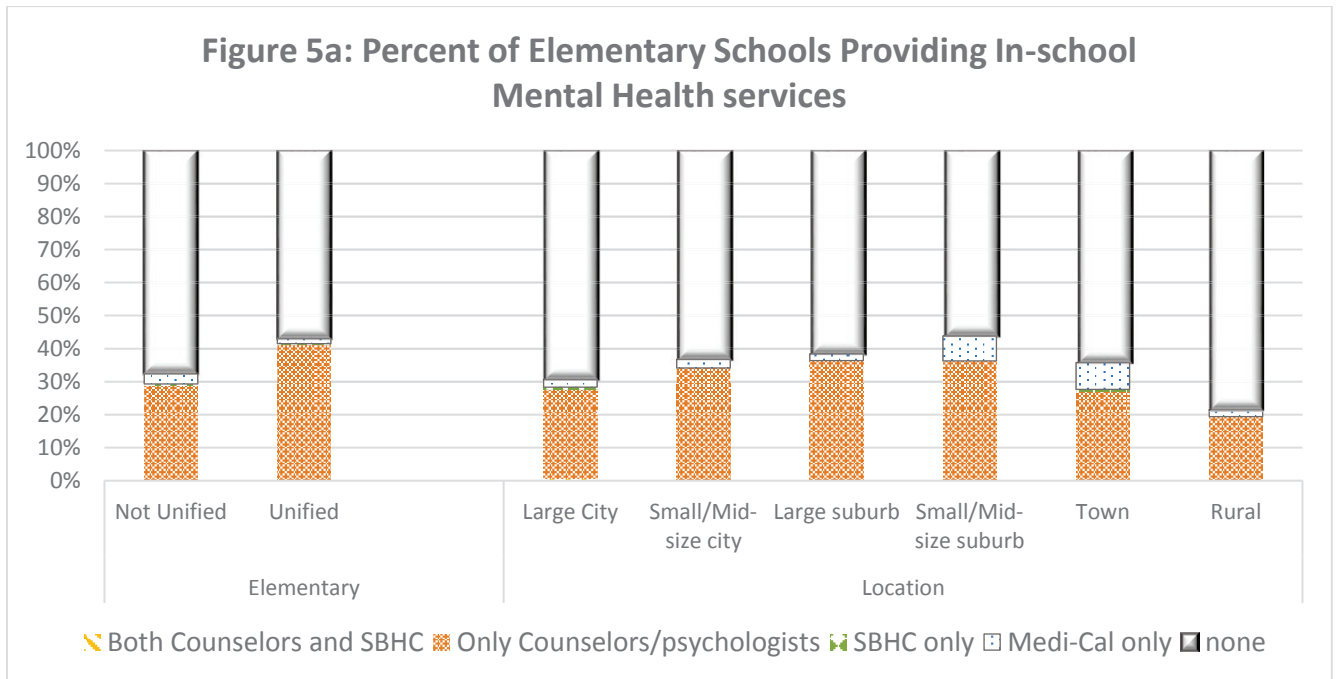
**Figure 4c.** Percent of high schools providing in-school health services



Notes: See notes to Figure 4a.

Figures 5a, 5b, and 5c display rates of schools offering mental health care services inside their buildings. The majority of elementary schools do not offer any form of mental health service to the general student population. Health centers offering mental health services are extremely rare in the states' elementary schools. Provision of elementary level mental health services is lower in schools that are elementary-only districts (31.8%) than in unified districts (43.1%). Elementary schools in elementary-only districts and in small towns are able to partially offset their lower provision of counselors and psychologists by billing more mental health services to Medi-Cal. Mental health services in schools in rural areas are relatively rare at all grade levels.

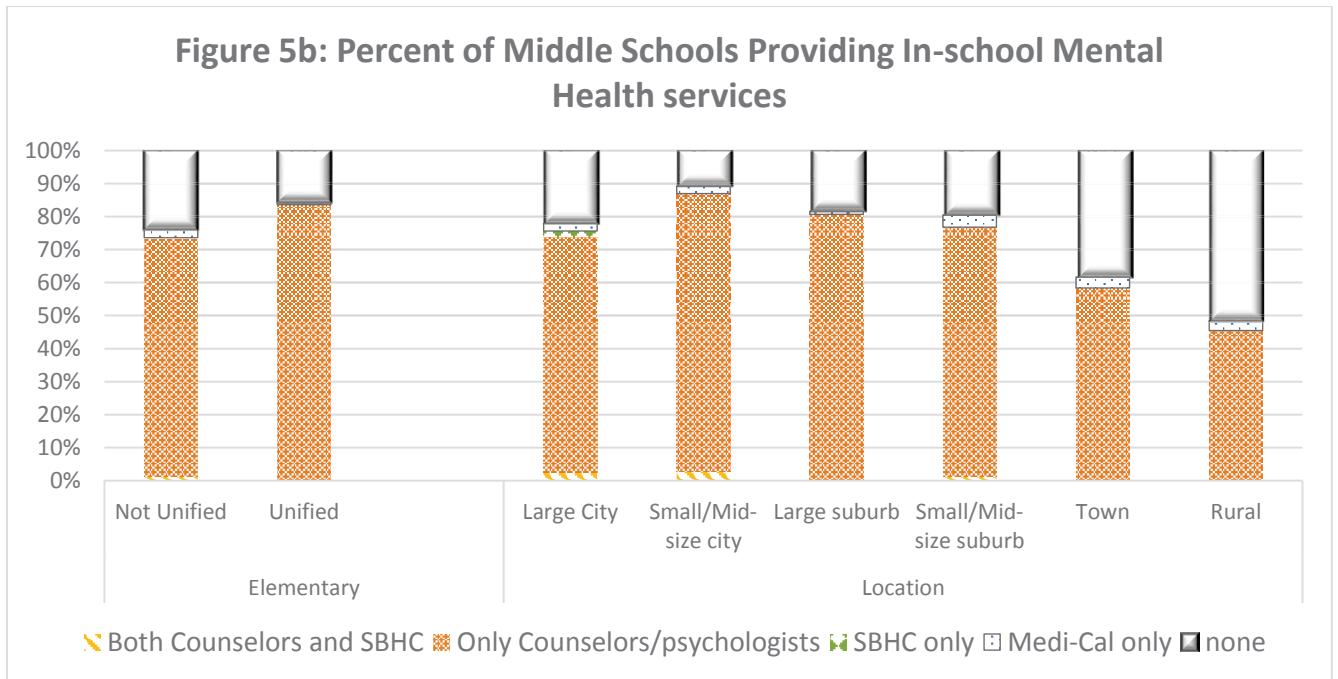
**Figure 5a.** Percent of elementary schools providing in-school mental health services



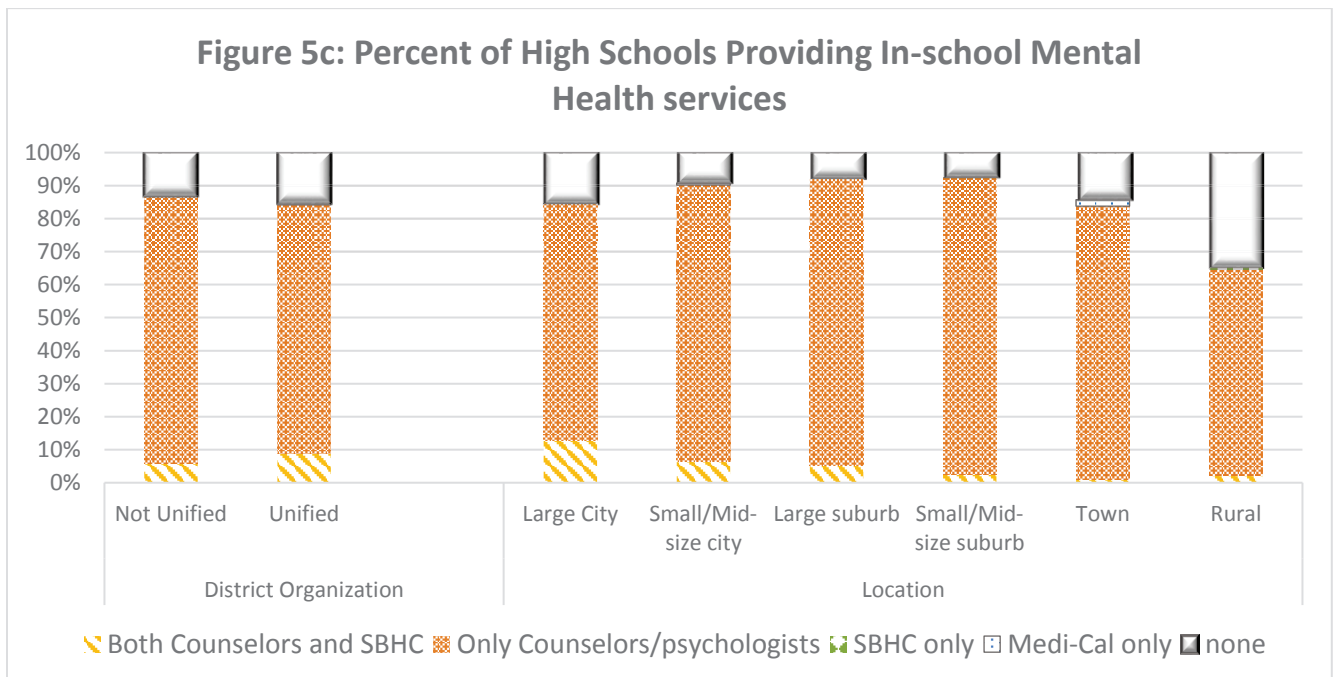
Notes to Figure 5a: “Counselors/psychologist” refers to school-employed counselors and psychologists who serve the general student population and do not exclusively serve students with disabilities. “Clinics Only” refers to schools offering neither a district-employed counselor nor psychologist but offering mental health services through a school-based health center or a school-based mental health clinic. “Medi-Cal Only” refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed psychological services without the student having an IEP. Data sources include CDE (2016), CCD (2016), and CDHCS (2017).

Unlike elementary schools, the majority of middle and high schools do offer mental health care to the general student population. Middle schools in rural areas and small towns are less likely than other middle schools to offer counselors. Fewer than 65 percent of rural high schools employ any counselors; in all other settings, more than 80 percent of high schools employ counselors.

**Figure 5b.** Percent of middle schools providing in-school mental health services



**Figure 5c.** Percent of high schools providing in-school mental health services



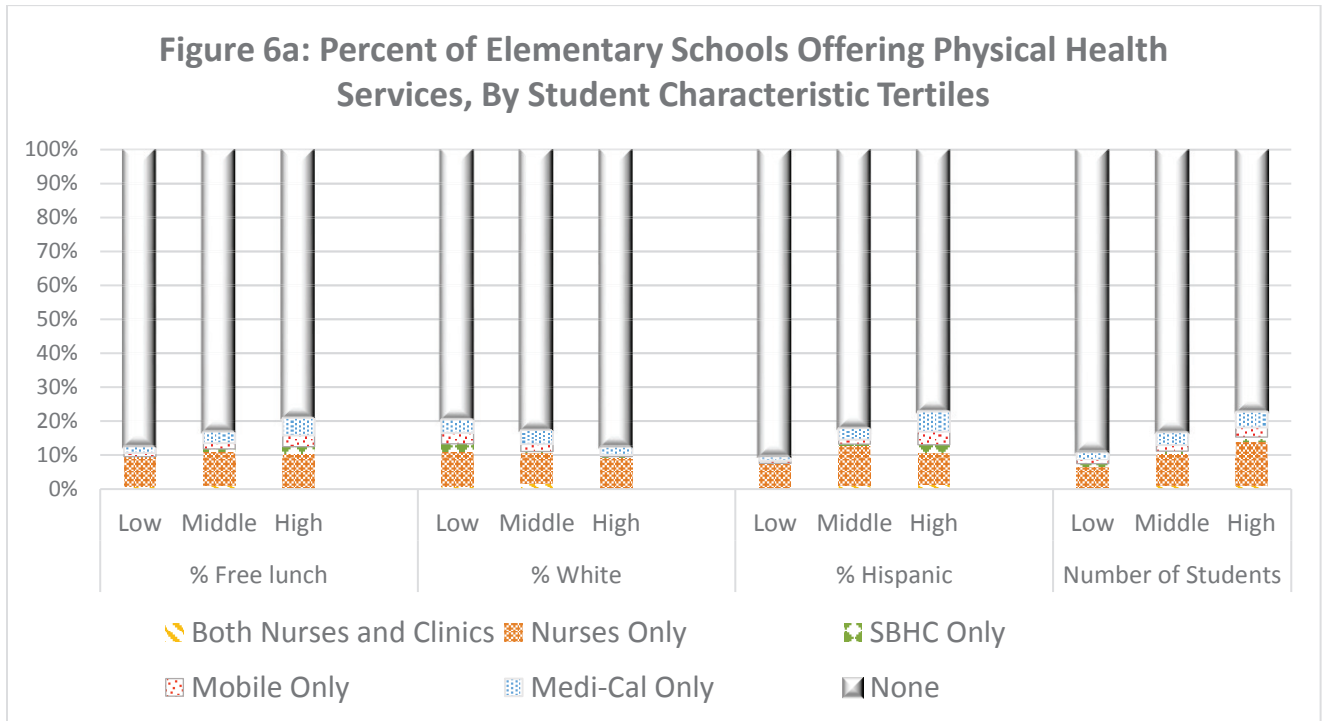
Notes: See notes to Figure 5a.

Figures 4 and 5 depict variation in service coverage rates across various types of locations, yet there is also substantial variation across schools *within the same school districts*. Ignoring Medi-Cal billings, the percentage of districts providing health coverage at all of their schools of a given grade level is only 6.2%, 9.1%, and 10.5% for the elementary, middle, and high school levels, respectively. For counselors and mental health care, these rates are 16.0%, 61.9%, and 74.4%.

The next set of figures provides comparisons of health services across schools with different types of enrolled students. For each category describing students, schools are divided into three equally-sized groups: highest third, middle third, and lowest third. Figures 6a, 6b, and 6c summarize physical health services by group. The four categories are: (i) the percent of students receiving free or reduced-priced lunch (a proxy for the percent of students from low-income families), (ii) the percent of students whose ethnicity is classified as White, (iii) the percent of students whose ethnicity is classified as Hispanic, and (iv) the total number of students enrolled at the school.

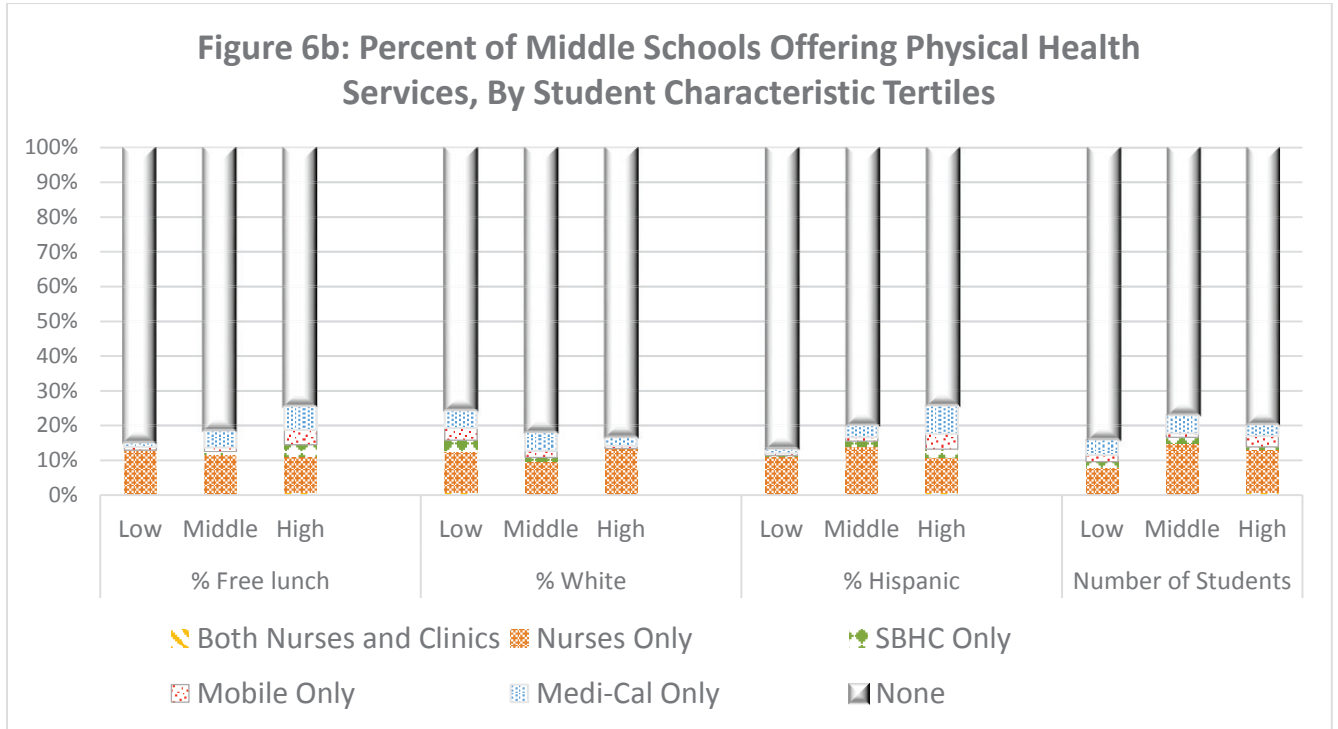
Elementary and middle schools serving a high proportion of students from low-income families are more likely to offer health services. High schools with high proportions of students from low-income families are less likely to offer health services; they are relatively likely to host school-based health centers but relatively unlikely to employ school nurses. Schools serving greater shares of Hispanic students are slightly more likely to offer health services, a pattern driven by their districts' greater use of Medi-Cal funds for health screenings and treatment. Schools with larger enrollments are more likely than smaller schools to offer health services. For elementary schools, schools in the top tertile are twice as likely as those in bottom tertile to offer any physical health services (see Figure 6a), and the differences are even more stark for high schools (see Figure 6c).

**Figure 6a.** Percent of elementary schools offering physical health services, by student characteristic tertiles



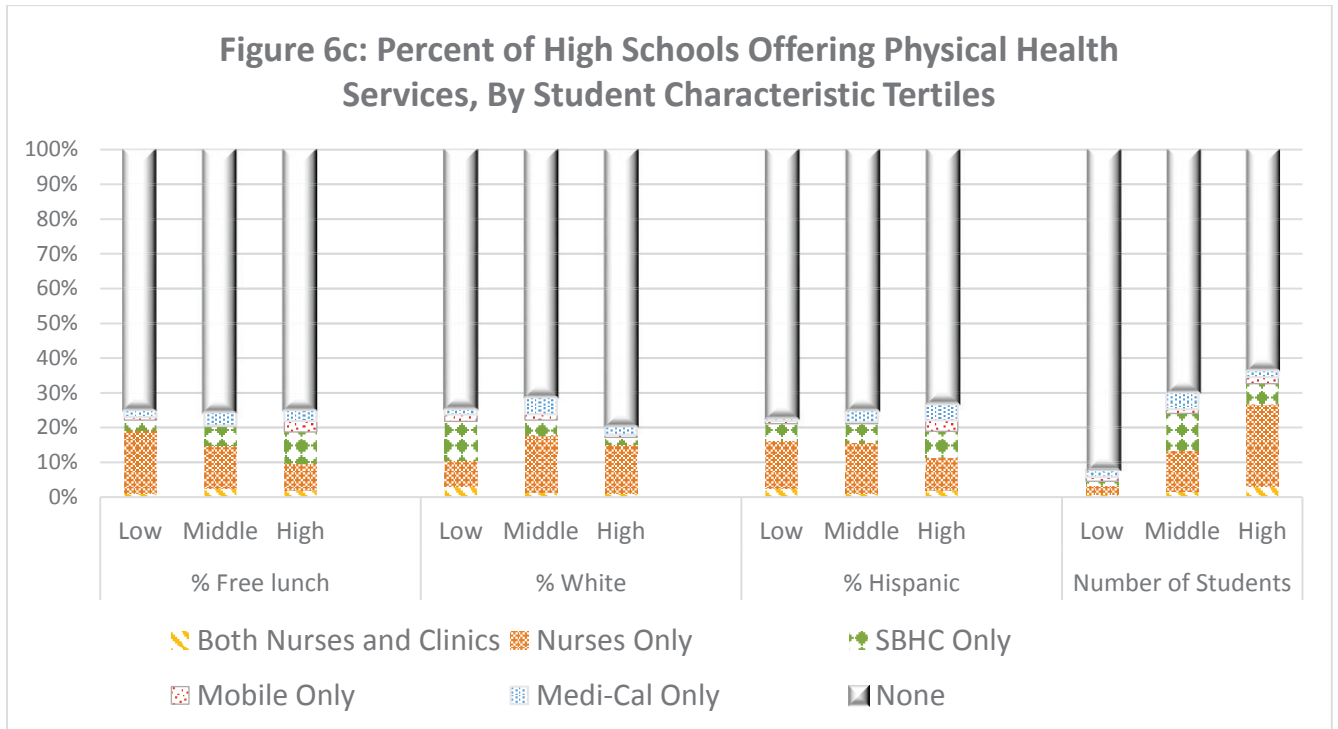
Notes for Figure 6a: “SBHC Only” and “Mobile Only” respectively refer to schools served by school-based health centers and mobile health clinics, excluding schools also offering traditional school nurses. “Medi-Cal only” refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed treatment in spite of the student not having an IEP. These Medi-Cal coverage rates are overstated because, due to data limitations, I count a school as offering services if any school in that district billed for treatment of students and I count students as having access regardless of whether they themselves were Medicaid eligible. Data sources include CDE (2016), CCD (2016), California School-Based Health Alliance (2016), and CDHCS (2017).

**Figure 6b.** Percent of middle schools offering physical health services, by student characteristic tertile



Notes: See notes to Figure 6a.

**Figure 6c.** Percent of high schools offering physical health services, by student characteristic tertiles

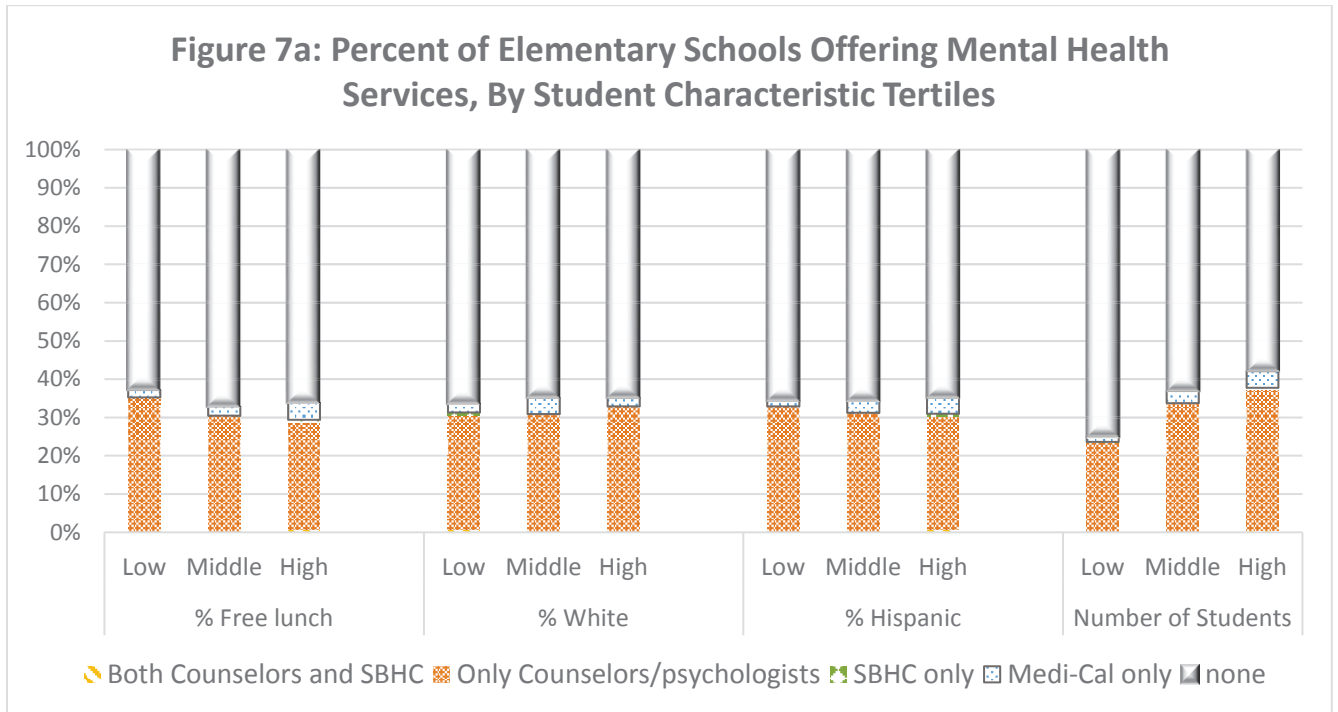


Notes: See notes to Figure 6a.

Figures 7a, 7b, and 7c summarize mental health services by the same tertiles as above. The middle schools and high schools failing to provide any mental health services are smallest schools—those in the bottom tertile for student enrollments. Only 51.2% of small middle schools and 63.1% of high schools provide mental health services, whereas the rates for medium-sized middle schools and high schools are 86.7% and 97.3% respectively. Aside from the size of student enrollments, student characteristics are not strong predictors of variation in the overall rates of mental health services across schools. Schools with low proportions of white students or high proportions of students from low-income families are relatively likely to host school-based health centers with mental health services but not much more likely to employ school counselors or psychologists.

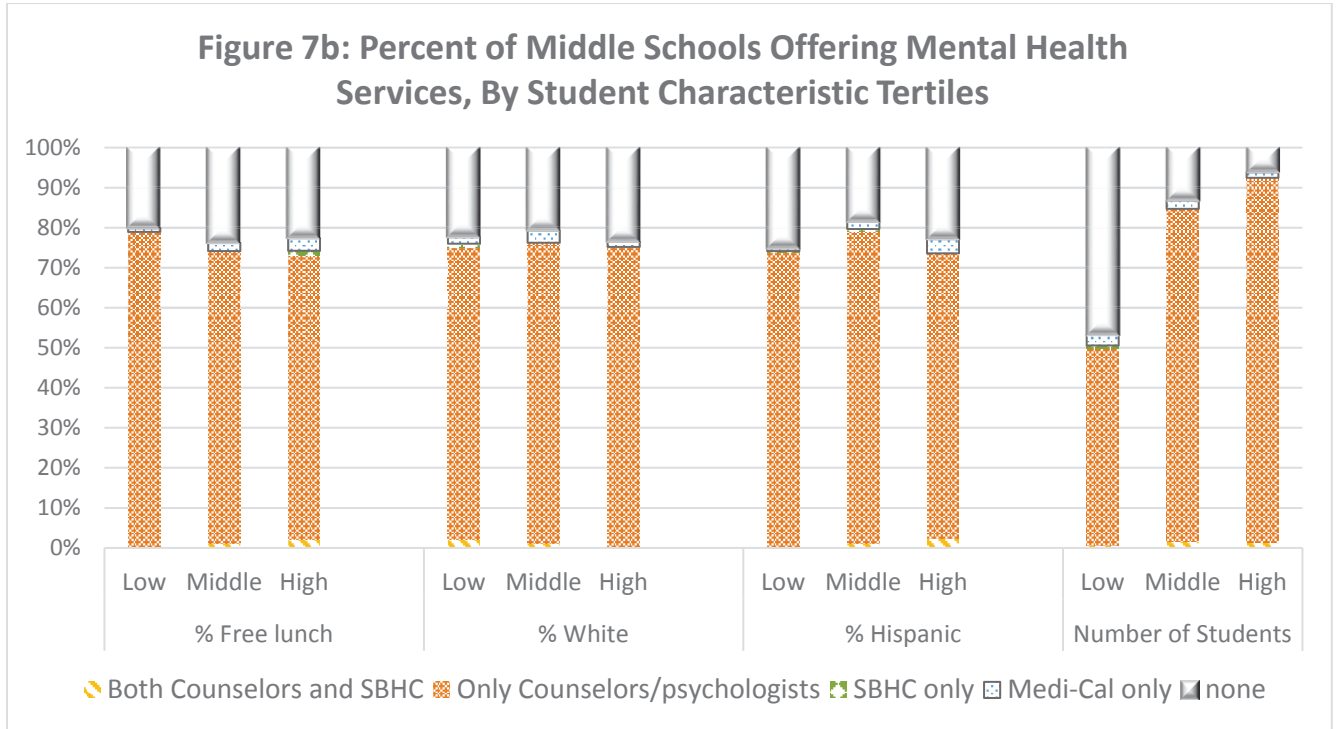


**Figure 7a.** Percent of elementary schools offering mental health services, by student characteristic tertiles



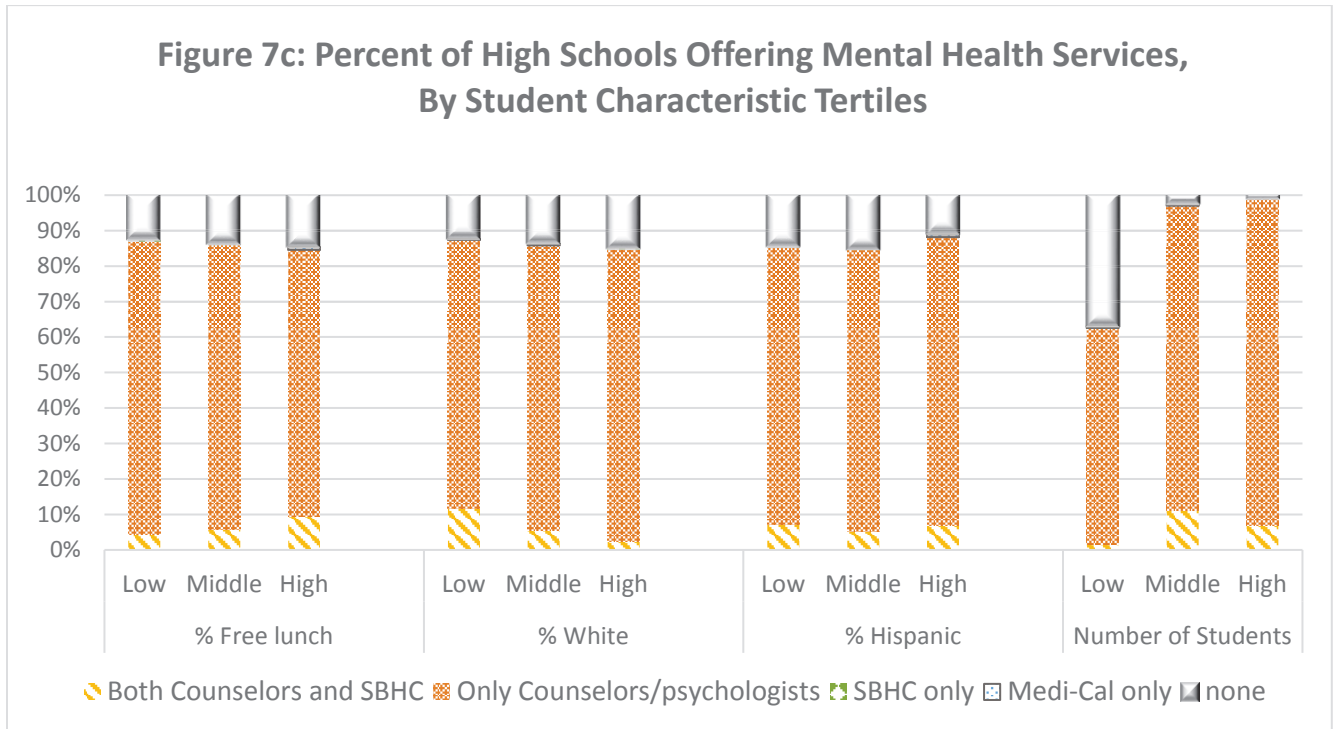
Notes for Figure 7a: “Counselors/psychologist” refers to school-employed counselors and psychologists who serve the general student population and do not exclusively serve students with disabilities. “Clinics Only” refers to schools offering neither a district-employed counselor nor psychologist but offering mental health services through a school-based health center or a school-based mental health clinic. “Medi-Cal Only” refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed psychological services without the student having an IEP. Data sources include CDE (2016), CCD (2016), and CDHCS (2017).

**Figure 7b.** Percent of middle schools offering mental health services, by student characteristic tertiles



Notes: See notes to Figure 7a.

**Figure 7c.** Percent of high schools offering mental health services, by student characteristic tertiles



Notes: See notes to Figure 7a.

### Rates of School-Based Health Services by Schools' Other Resources

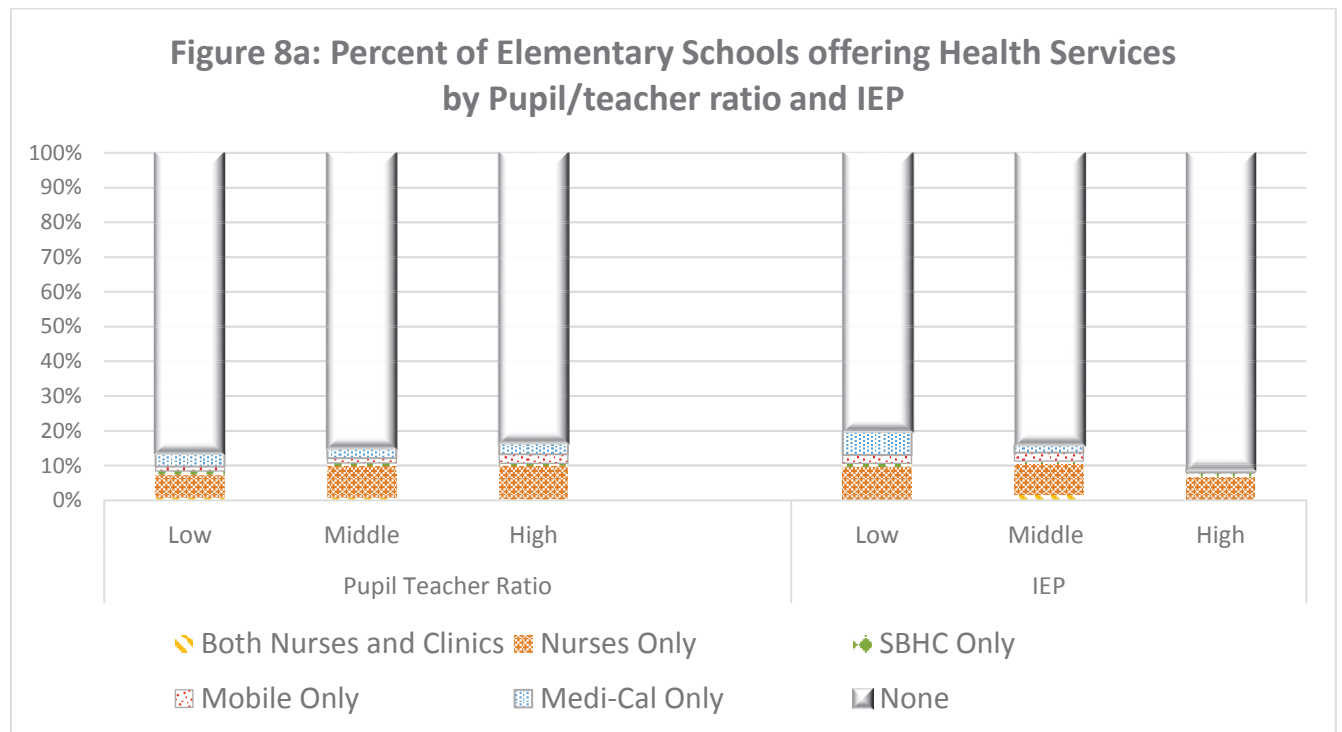
The decision to offer school-based health services might be related to provision of other, related resources. The next sets of figures reveal whether physical health or mental health service rates differ based on schools' provision of teachers or on schools' provision of special education services. Schools are divided into tertiles based on either pupil-teacher ratio (a high ratio implying larger class sizes) or on the proportion of students who have been designated with an Individualized Education Plan for special education services.

Schools with smaller class sizes (low pupil-teacher ratios) are less likely to employ school nurses, perhaps due to explicit decisions to devote resources to hire an additional teacher rather than a nurse. Among schools in the tertile associated with the smallest class sizes, only 7.3% of elementary schools, 9.1% of middle schools, and 5.1% of high schools employ a school nurse; they are also unlikely to offer any type of school-based physical health service (only 14.8% of elementary schools with small class sizes, 16.0% of middle schools, and 20.0% of high schools).

Some schools may make another tradeoff—greater special education classifications versus greater provision of health services to the general student population. Only 9.6%, 13.7%, and 17.8% of elementary, middle, and high schools in their highest tertiles for IEP

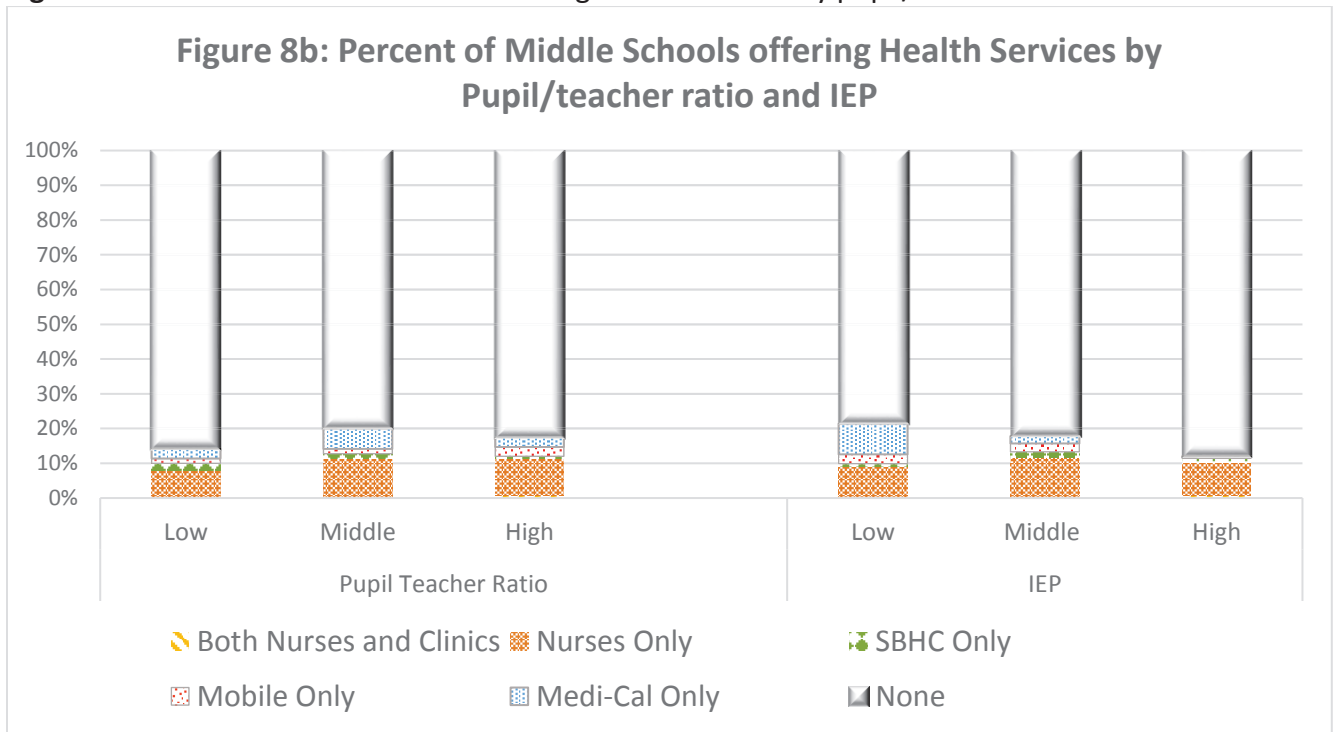
classifications offer physical health services, whereas 22.6%, 24.5%, and 31.1%, respectively, do in the lowest tertiles. One mechanism for this tradeoff is apparent in these figures—districts where schools have relatively low rates of special education classifications are more likely to use Medi-Cal funds to provide some health services to students who have not received IEP designations.

**Figure 8a.** Percent of elementary schools offering health services by pupil/teacher ratio and IEP



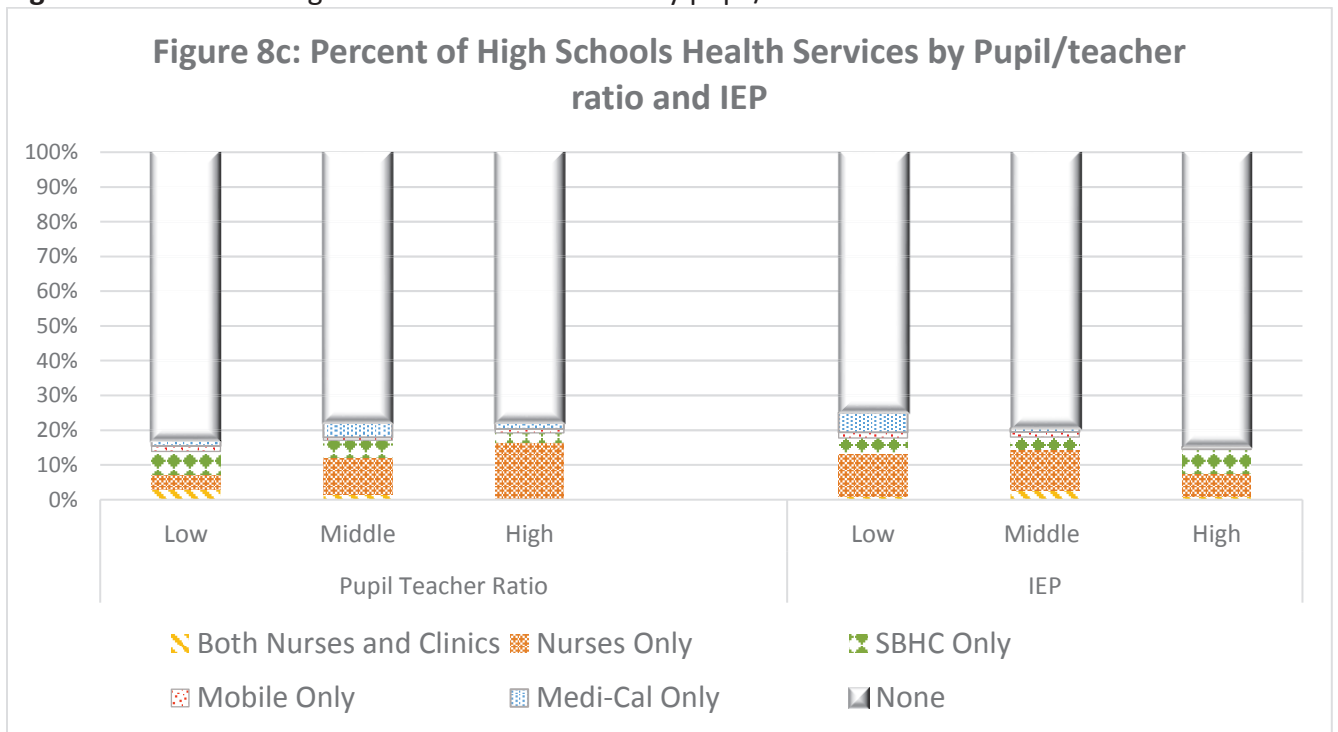
Notes for Figure 8a: “SBHC Only” and “Mobile Only” respectively refer to schools served by school-based health centers and mobile health clinics, excluding schools also offering traditional school nurses. “Medi-Cal only” refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed treatment in spite of the student not having an IEP. These Medi-Cal coverage rates are overstated because, due to data limitations, I count a school as offering services if any school in that district billed for treatment of students and I count students as having access regardless of whether they themselves were Medicaid eligible. Data sources include CDE (2016), CCD (2016), California School-Based Health Alliance (2016), and CDHCS (2017).

**Figure 8b.** Percent of middle schools offering health services by pupil/teacher ratio and IEP



Notes: See notes to Figure 8a.

**Figure 8c.** Percent of high schools health services by pupil/teacher ratio and IEP

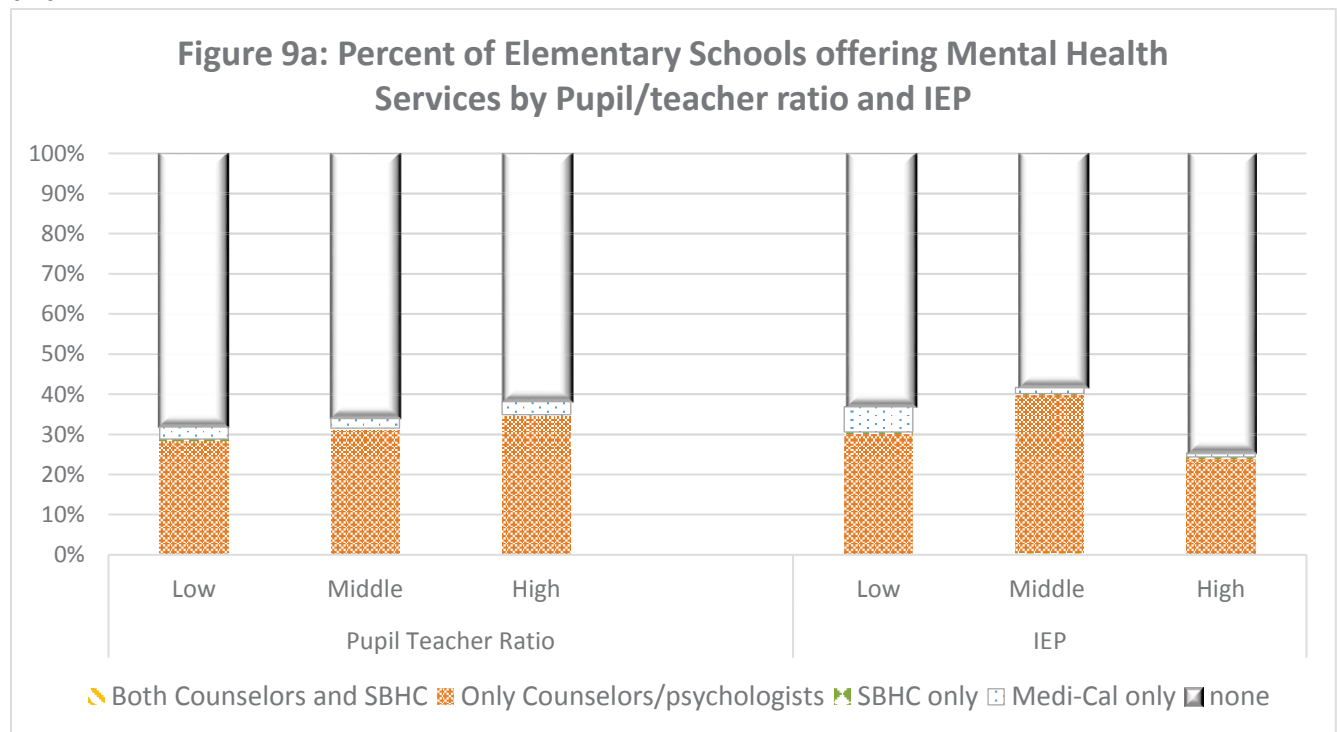


Notes: See notes to Figure 8a.

Figures 9a, 9b, and 9c reveal how schools' mental health services vary based on schools' other resources. Schools with smaller class sizes, especially high schools with smaller class sizes, are less likely to employ counselors. This pattern is not simply a result of smaller high schools tending to have smaller class sizes; class sizes are statistically significant predictors of high schools' mental health services even if one controls for schools' total student enrollments.

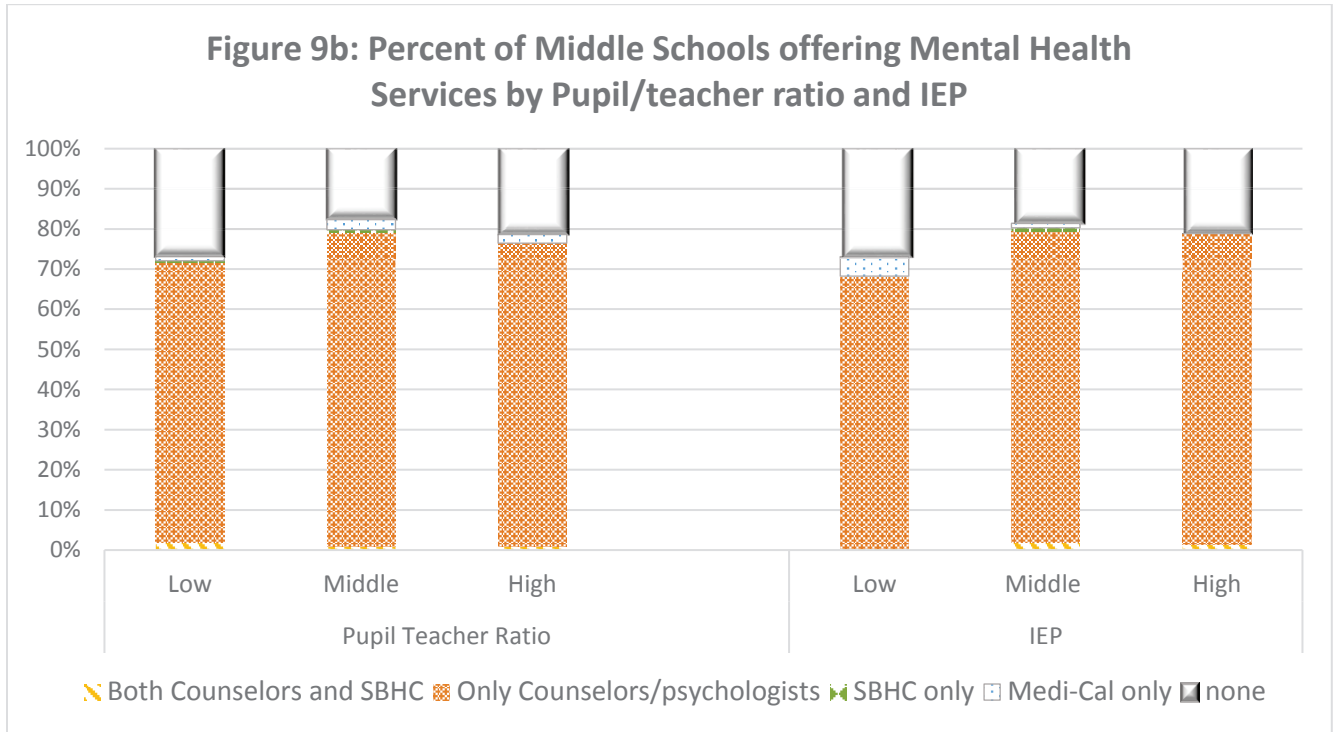
Some substitution between special education services and broader mental health services seems to occur at the elementary level but not necessarily at other levels. Only 25.4% of elementary schools in the highest tertile for IEP classifications offer mental health services, whereas 35.2% do in the lowest tertile. The mechanism here is once again greater district use of Medi-Cal funds for the general population in districts where elementary schools' special education classification rates are low. Middle schools with low special education rates are also more likely to have their districts use Medi-Cal funds for the general population, but these middle schools are relatively unlikely to employ counselors.

**Figure 9a.** Percent of elementary schools offering mental health services by pupil/teacher ratio and IEP



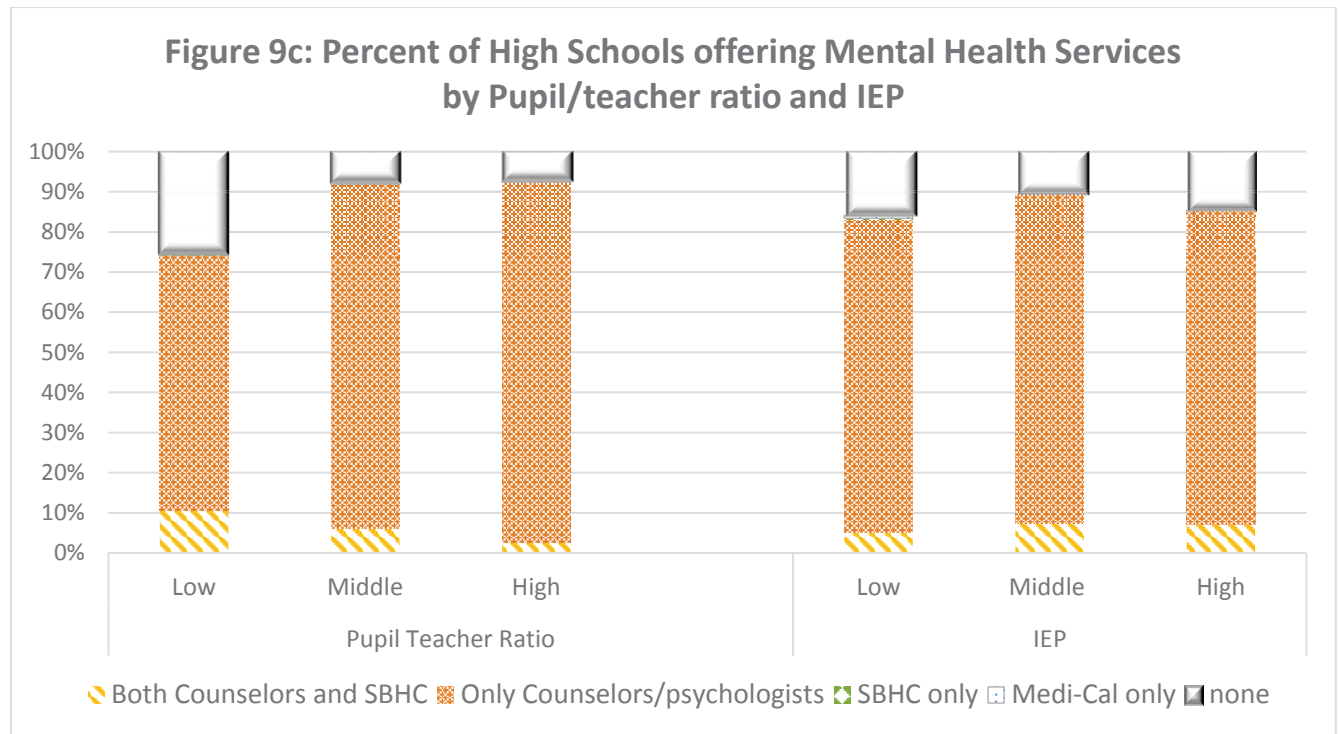
Notes: "Counselors/psychologist" refers to school-employed counselors and psychologists who serve the general student population and do not exclusively serve students with disabilities. "Clinics Only" refers to schools offering neither a district-employed counselor nor psychologist but offering mental health services through a school-based health center or a school-based mental health clinic. "Medi-Cal Only" refers to schools that offer none of the other services above but are located in districts where at least one student received Medicaid-billed psychological services without the student having an IEP. Data sources include CDE (2016), CCD (2016), and CDHCS (2017).

**Figure 9b.** Percent of middle schools offering mental health services by pupil/teacher ratio and IEP



Notes: See notes to Figure 9a.

**Figure 9c.** Percent of high schools offering mental health services by pupil/teacher ratio and IEP



Notes: See notes to Figure 9a.

### Additional School-Based Health Services via Non-Profit Organizations and Intergovernmental Partnerships

As mentioned earlier, the rates of health and mental health services presented in Figures 2 through 9 slightly underestimate coverage because they ignore the occasional services volunteered by outside governmental agencies and by non-profit organizations. This underestimation is mild for physical health services and more significant for mental health services. My analysis of a recent survey of school principals (RAND, 2018) suggests that fewer than 12 percent of schools that I coded as not offering their own physical health services may have offered some physical health services via outside organizations' work at least partly funded from outside sources. My analysis of the same survey suggests that more than 28 percent of schools that I coded as not offering their own mental health services may have offered these services via outside organizations' work at least partly funded from outside sources. While some of these organizations only work in the school occasionally, principals report that more than 60 percent of them visit the school at least once per week. Schools not offering school-based health services are actually *less* likely to host outside health organizations; the differences are statistically significant ( $p < .05$ ) for physical health services but insignificant ( $p > .10$ ) for mental health services. One possibility is that outside organizations may be more likely to target high-needs schools regardless of those schools' pre-existing services. Another possibility is that schools with principals who are unusually committed to



health services may be able to offer multiple forms of services. Given the small sample size and high non-response rate in the survey (see footnote 6), these patterns are merely suggestive rather than conclusive.

In addition to outside organizations assisting with health and mental health care, a relatively high number of organizations assist with students' "career placement," perhaps reflecting a perceived need in light of California's relatively low employment of school counselors. But once again, schools without counselors are no more likely than other schools to host outside organizations offering career placement services.

As for mental health services from outside organizations, one of the most common goals is violence prevention. A non-profit organization called California Youth Outreach provides services at select public schools across the state aiming to reduce student suspensions, student truancy, and youth gang violence. Some communities have their own targeted programs, such as Sonoma County's "CAPE" Crisis Assessment, Prevention, and Education Team for Transitional Youth ages 16-25; that program serves nine high schools. Oakland has a "community schools" program which partners with organizations such as "Alameda County Our Kids Program" for universal mental health services at a limited number of schools. The "Our Children, Our Families" program in San Francisco enlists many non-profit organizations, including 23 organizations that do work related to health, mental health, or health education. Only a few of those 23 organizations, however, do work inside of school buildings; most notably, a group called SF Wellness works with 15 high schools in San Francisco.

Outside organizations providing health education or nutritional programs are less common. The El Monte school district has a Coordinated School Health Team providing nutrition and health education to its elementary and middle schools. The presence of a "School Wellness Council" there demonstrates their desire to mobilize attention toward these issues.

Dental screenings for Kindergarteners are one of the few types of services that have gained statewide traction. Denti-Cal is a service funded by Medi-Cal that provides statewide Kindergarten Oral Health assessments (California Dental Association, 2018). Parents are asked to provide a record of a dental examination for their children when they register their children for Kindergarten. Denti-Cal programs attempt to fill in the gaps for Kindergarten students who have not had these prior exams. For example, San Francisco's Children's Oral Health Collaborative provides dental screenings for all San Francisco public school Kindergarten students.

Most of California's in-school nonprofit activity is highly localized and not part of larger networks. Communities in Schools is a national organization that pairs nonprofit organizations with public schools that could benefit from their services. Communities in Schools works directly in more than 2,000 schools across the country yet has only two local affiliates in California—one serving Los Angeles specifically and another serving the San Fernando Valley. The former works in ten middle/high schools and the latter works in only three charter schools.

As mentioned earlier, California is somewhat unique among states in that some of its school districts collaborate with up to three types of outside governmental organizations for healthcare: county departments of health, local health districts, and local police departments. County departments of health involvement in schools varies widely, with some counties heavily involved through mobile health centers or through wellness initiatives. The wellness initiatives are often temporary programs funded through special grants. For example, San Diego County's Department of Health assists the San Diego County Office of Education in administering mental health and violence prevention services through Project Cal-Well, a five year federal grant administered by the California Department of Education. Most local health districts exclusively serve children outside of schools, through hospitals and community health clinics. But some are more focused on schools; for example, the Sequoia Health District funds a wellness coordinator in each of the school districts located within its borders, and it also funds nurses, counselors, and even Physical Education programs in some of the schools in these districts. In other communities, local community police department funding for school-based health, mental health, and counseling ties in with the idea that broad school-based interventions may help produce academic success and decrease rates of future criminal behavior. Police-sponsored activities include counseling, violence prevention, and substance abuse prevention programs.

### **Some Policy Options and Their Costs**

Recent changes to federal tax law have increased California's burden for local investments, including investments in school-based health. The elimination of federal income tax deductions for state and local tax payments effectively raised the price many households face for an additional dollar of state or local government spending. A greater share of California's households will no longer take itemized deductions on their federal income taxes, which means they will no longer receive a tax break from their charitable contributions and may choose to donate less. Local governments and nonprofit organizations are the primary providers of school-based health services, and both will face greater challenges for raising revenues.

Given these challenges, the policy options below describe ways of providing a *basic minimum* level of services across the state without large changes in public spending. While more aggressive policies might be worthwhile, the policy options below would each produce substantial economic returns to the state without requiring major tax increases or substantial cuts to other public programs. Cost estimates presented for each policy option are the total cost to California residents, regardless of the funding source. This report does not take a position on how to best fund these "costs to the state"; if funded through state-level tax dollars, the policies would need to be designed to ensure that districts use the designated dollars appropriately rather than shifting them to other types of expenditures. Costs per student refer to costs divided by the total number of K-12 public school students, regardless of the grade levels that the policy would target.

The first three policy options cover expansions of counseling and mental health programs:

## 1. Offer a basic minimum level of high school counselors.

- a) Require at least a 0.5 FTE (full-time equivalent) counselor at every high school, and
- b) Require all high schools to offer a student–counselor ratio of no more than 600 students per counselor by requiring a 0.5 FTE counselor for every 300 students enrolled.

The first part of this plan, requiring at least a 0.5 FTE counselor at every high school, would require funding for at least 150 additional full-time high school counselors.<sup>11</sup> The average salary for these additional counselors would likely need to be between \$54,000 and \$62,000 per year during the first few years, depending on the average experience-level of hired and retained counselors.<sup>12</sup> There would be substantial additional annual costs for benefits (pension contributions, health insurance, payroll taxes, etc.), as well as one-time search costs for school districts needing to hire them.<sup>13</sup> All in, the annual staffing cost of this program to the state would likely be in the range of 11.6 to 13.3 million dollars, equivalent to about \$2 of additional spending per California K-12 public school student. Schools would also need appropriate space for the additional counselors to work. The cost of space will be close to zero for schools that have suitable rooms that would have otherwise been vacant. The cost of space will be moderate for schools that can invest in a one-time redesign of space that does not impose much of a sacrifice of other resources, such as dividing a meeting room in half if it is still large enough to comfortably host similar events as in the past.

The second part of this plan would be more expensive, because 355 high schools recently had ratios above 600 students per counselor. Note that this 600:1 minimum ratio is conservative—the American School Counselor Association recommends a ratio of no more than 250 students per counselor. If the first part of this plan (the 0.5 FTE counselor minimum per school) were adopted, then only 239 of these 355 high schools would still need to hire

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<sup>11</sup> As of 2014-15, 186 of California’s regular public high schools did not offer even a part-time counselor, and 18 additional high schools offered a counselor at less than half-time. Under the most optimistic sharing and part-time employment scenario, the 186 high schools would need to hire 93 counselors and the other 18 schools would need to hire 4 counselors to bring all of those schools up to having a half-time counselor each. Without displacing counselors from other schools, this would require the state system to employ 97 additional full-time counselors. Under a more realistic scenario, assume that counselors must be employed full-time by a single school district—counselors may be shared across two high schools only if those schools are in the same district. Under that assumption, the state system would need to hire 155 new high school counselors.

<sup>12</sup> A typical salary schedule for counselors in California begins at close to \$50,000 for hires without any prior experience and increases up to \$80,000 for more experienced counselors. Many of the additional counselors hired during a state expansion would have to be relatively inexperienced.

<sup>13</sup> Throughout this report, I estimate the cost of employee benefits as equivalent to 38 percent of the cost of salary—with 38 percent equal to the sum of estimated employer health insurance contributions (16 percent), retirement contributions by localities and the state (10.25 percent), and payroll taxes paid by the employer (11.75 percent). Note that the *social* cost of these programs will actually be slightly lower, because payroll taxes help to fund government budgets. I include payroll taxes here so that the cost estimates reflect how much additional revenues will need to be dedicated specifically to this sector. I estimate hiring and search costs to be equivalent to 5 percent of all salaries per year, though they may be higher than this in the very first year of a program expansion and lower in subsequent years.

additional counselors. To reach this minimum level, these 239 high schools would require funding for 373 full-time counselors.<sup>14</sup> The annual cost to the state, on top of the costs from the first part of the plan, would likely be in the range of 28.8 to 33.1 million dollars, equivalent to between \$4 and \$5 of additional spending per California public student. Together, both parts of the plan would require an allocation of about \$43 million annually for staffing costs, or about \$7 per California public school student.

## **2. Require all elementary schools to offer a minimum amount of mental health care.**

Policy-makers may wish to focus on expanding school-based mental health care programs for California's youngest children, since less than half of elementary school students currently have access to school-based mental health care. A flexible plan could require that each elementary school offers mental health care services to the general student population at least once per week. Schools could satisfy this requirement in one of several ways: (1) employ a counselor or psychologist with at least 0.25 FTE appointment (a counselor could travel to, at most, four different schools one day per week and use the fifth day for paperwork and communications and planning), (2) host an outside-funded organization (such as a non-profit group or police-sponsored counselors) providing appropriate care for at least one day per week, or (3) host a school-based health center that offers mental health services.

To meet these requirements, assuming that some elementary schools would satisfy this requirement by continuing to host an outside-funded organization<sup>15</sup>, the state would need to hire 1,722 additional elementary school counselors. Using similar staffing cost assumptions as in policy proposal #1 above, the staffing cost of adding this requirement could be between 111 and 127 million dollars annually, or between \$17 and \$20 per California public school student. There would also be costs for the additional space needed in schools.

## **3. Require all middle schools to offer some form of mental health care.**

Since middle school level coverage currently exceeds elementary school coverage, the incremental cost of promoting mental health coverage across all California middle schools is somewhat cheaper than for elementary schools. To provide minimally effective mental health services, middle schools may need to offer services on-site at least twice per week. Middle schools could satisfy this requirement in one of several ways: (1) employ a counselor or psychologist with at least 0.5 FTE appointment (a counselor could, at most, travel to two different schools two days per week and use the fifth day for paperwork and communications and planning), (2) host an outside-funded organization such as a non-profit group or police-

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<sup>14</sup> Similar to footnote 11, this estimate of 373 full-time counselors assumes that counselors' time may be divided across multiple high schools within the same school district but cannot be divided across districts.

<sup>15</sup> For this estimate, I assume that 16.5% of elementary schools would continue to use an outside organization to provide mental health services at least once per week. My analysis of the RAND (2018) data suggests that about 22% of elementary schools currently do so without providing other forms of mental health services, and I assume that three-quarters of those schools would continue to do so. Ignoring outside organizations' efforts and requiring all elementary schools to directly offer mental health services would raise staffing costs by nearly 20 percent—from a range of \$111-127 million to \$133-\$152 million.

sponsored counselors for at least two days per week, or (3) host a school-based health center that offers mental health services at least two days per week.

To meet these requirements, assuming that a small fraction of middle schools would satisfy this requirement by continuing to host an outside-funded organization<sup>16</sup>, the state would need to hire 276 additional middle school counselors. Using similar staffing cost assumptions as in policy proposal #1 above, the staffing costs of adding this requirement could be between 19.5 and 22.3 million dollars annually, or between \$3 and \$4 per California public school student. There would also be costs for the additional space needed in schools.

The next two policy options describe ways in which the state could better leverage small existing healthcare programs. Although employing nurses or health clinics in all public schools would be prohibitively expensive, schools without these services could gain a minimum level of coverage by greater hiring of fee-for-service providers and greater use of mobile health clinics.

#### **4. Promote greater levels of school-based health services billed to Medi-Cal for healthcare and mental health services offered to general population students.**

While most Medi-Cal billing in schools is for services provided to students with IEPs, current policy permits billing for some services provided to other Medicaid-eligible students. Eligible screenings include hearing, vision, health/nutrition, and psychosocial assessments. Eligible services include general nursing services and initial treatment for issues revealed in those assessments, including psychological services. Medicaid-eligible students may receive up to 24 “service units” of some types of services over a 12-month period for services unrelated to IEPs. Service units are small, typically fifteen minutes of care. For example, a district would be able to bill for a student receiving 12 medically-important 30-minute psychological counseling sessions during a 12-month period even if the student’s condition does not warrant an IEP.

Medi-Cal billing for non-IEP students has amounted to less than 1 percent of all Medi-Cal billing by school districts. As shown in Figures 2 and 3, only a small percentage of school districts use Medi-Cal billings as a substitute for providing services through district employees. This small percentage is not due to districts having insufficient numbers of Medicaid eligible students—Figure 6 shows that usage of Medi-Cal for students without IEPs is quite low even for schools enrolling large shares of students from low-income families. And this is a small percentage of an overall low rate—recall that California ranks only 43<sup>rd</sup> among states for Medicaid spending for school-based health care.

A major obstacle to mental health services for children without IEPs is the lack of alignment of incentives, access, funding, and responsibilities. In 2012, California returned the

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<sup>16</sup> For this estimate, I assume that 8.7% of middle schools would continue to use an outside organization to provide mental health services at least once per week. My analysis of the RAND (2018) data suggests that about 11.6% of middle schools currently do so without providing other forms of mental health services, and I assume that three-quarters of those schools would continue to do so. Ignoring outside organizations’ efforts and requiring all middle schools to directly offer mental health services would raise staffing costs by nearly 10 percent—from a range of \$19.5-22.3 million to \$21.4-\$24.4 million.

responsibility of child mental health to school districts, but only for children with IEPs. County behavioral health departments are responsible for the mental health of all other children. Yet there is no mechanism to induce collaboration between county behavioral health departments and school districts. For example, mental health screenings and follow-up care are major components of EPSDT (Early and Periodic Screening, Diagnosis, and Treatment) under Medicaid, a benefit available to all Medicaid-eligible children regardless of whether they have IEPs. Elementary schools and pre-schools are logical places to target EPSDT benefits, because the motivation for EPSDT is to detect problems early in childhood. Yet responsibility for California's EPSDT programs for students without IEP's falls to counties rather than school districts (California School-Based Health Alliance, 2018). While county behavioral health departments receive annual state revenue distributions to provide children with needed EPSDT screenings and services, they are not compelled to work inside school buildings or to collaborate with school districts. Only a few districts receive reimbursement for EPSDT services (at a 50 percent rate) by contracting with their county behavioral health department. Very few districts have billed for psychosocial assessments and treatments for non-IEP students under the Medi-Cal billing option program. Without a statewide policy aligning revenues with tangible responsibilities and with access to children, many children throughout the state never receive needed mental health screenings.

Districts have also had substantial disputes with the California Department of Health Care Service (CDHCS) concerning Medi-Cal reimbursements under both the SMAA and LEA BOP programs. After a federal audit uncovered abuse of the SMAA program by one school district and two county offices of education, the CDHCS enacted statewide austerity measures for both programs. CDHCS froze all SMAA payments for several years, so participating districts were submitting billing forms without knowing the timing and size of the eventual reimbursements. CDHCS also punished many districts by revising previously-authorized payments downward for LEA BOP claims, often using standards that had not been established during the actual years of the billings. The largest controversies over claims in the LEA BOP program have focused on issues that would not necessarily affect billings for non-IEP services differently than other billings: issues such as expensing for trained health care aid services or for certain types of transportation services. Yet the lack of clear guidance for billings and for compliance with audits, as well as denials of claims for vaguely-worded "failure to provide proper documentation," likely discouraged the use of claims for students without IEPs. Districts may now be dropping out of the program entirely due to continued uncertainty over compliance rules and due to fears that newly-submitted claims will be washed away by the CDHCS's efforts to recapture previously-distributed funds.

Aside from uncertainty about audits and reimbursements, there are various costs that can dissuade districts from using outside providers for services partly funded by the Medi-Cal program. First, the district must contribute 50 percent of the service costs. Second, there are the administrative costs of finding a fee-for-service provider, coordinating with that provider, keeping detailed records, submitting invoices and documentation, and responding to annual audit requests. Third, reimbursement rates for the services provided are often low, so few providers may want to step in unless they are enticed by a call for philanthropy. Principals or

superintendents would have to recruit a fee-for-service provider that will serve non-IEP students, without having the extra special education funding that goes along with IEP students. They would be taking a calculated risk that parents will be satisfied with the quality of care provided to their children. All of these administrative costs and monitoring costs would be on top of the districts' responsibilities for coordinating services for its special education students.

While a cloud of uncertainty continues to hang over the school-based Medi-Cal billing in California, there are some potential opportunities to promote greater use of billings for non-IEP services. In December 2014, a rule interpretation change made it permissible to do so even for services offered for free to non-Medicaid-eligible students in the same school districts. Previously, districts could not bill Medi-Cal for services such as counseling programs if they were providing that program to non-Medicaid eligible students for free. Under the new guidance, a school can host a counseling program and bill Medi-Cal for all students with IEPs receiving services, further bill Medi-Cal for any additional Medicaid-eligible students receiving services and lacking private insurance, bill insurance companies for privately-insured students receiving services, and offer the services for free to remaining students. This policy change could be enticing for increasing Medi-Cal billing in places where just a small fraction of students are not eligible for Medicaid, especially because of relatively high administrative cost for collecting fees from non-Medicaid-eligible families. This new rule, nicknamed the "free care rule", is another area where the CDHCS should publish clear and specific guidelines.

In the interest of reducing uncertainty around LEA BOP claims moving forward, a state bill (AB 3192) would compel CDHCS:

...in consultation with the LEA Ad Hoc Workgroup and the State Department of Education, to prepare and complete a fiscal and program compliance audit guide for the LEA Medi-Cal billing option. The bill would require the department to distribute the audit guide to LEAs by June 30, 2019. The bill would require the department to provide specific written notice prior to adopting a revision to the audit guide and would further require the department to only conduct an audit of a Medi-Cal billing option claim according to the audit guide and any revisions that are in effect at the time the service was provided. (California Legislative Information, 2018)

Passage of this bill, or a similar policy, could create a better climate for expansion of non-IEP Medi-Cal billings by reducing uncertainty surrounding compliance and audits. The Department of Health Care Services currently provides information about procedures through links on its website, but the information is scattered across several places, is not always complete, and is sometimes contradictory. The main costs of this audit guide policy would be relatively low: the labor costs of Department of Health Care Services' efforts to streamline and enhance the guidelines and to update the guidelines in a timely fashion. That Department might be able to simply shift resources by offering fewer in-person training sessions, (which not all districts are willing to devote resources to attend), and devoting more manpower to creating a centralized document that explains the full details of expense guidelines in a sufficient manner that would enable districts to successfully pass audits.

The costs for enticing districts to expand their Medi-Cal billings will reflect both the costs of the enticements and the services themselves. Federal Medicaid funds only partially subsidize the healthcare services, and there is a risk that federal support for Medicaid may decline in the future. Even so, billings for non-IEP students are currently so small that the direct costs of a large expansion would be relatively low. Non-IEP billings would remain a small fraction of the more than \$140 million in total Medi-Cal billings by school districts. A quadrupling of the recent levels of use of school districts' non-IEP Medi-Cal billings would mean moving from \$1.42 million to \$5.68 million annually, an increase equivalent to less than 68 cents per California K-12 public school student.

Aside from improved directives from the CDHCS, other policies used to attract this level of additional billing would likely be relatively expensive. One enticement option would be to provide greater funds to county health departments that are able to induce greater billing rates out of their local school districts—this might incentivize county offices to allocate staff time to provide districts with administrative assistance with billing and assistance with finding fee-for-service providers. Another enticement option would be to create a new program that funds services for non-eligible students at schools where at least 80 percent of students are eligible. This would make it easier to offer school-wide programs—screenings, preventative care, a half-time nurse, etc.—that bill Medi-Cal for a large share of their costs but could use additional funding. A different option would be to *require* that school districts have some form of healthcare offered to the general student population at each of their schools for a minimum of once per month. The permitted forms of care could include traditional care (school nurses and school psychologists), visits from mobile health clinics, visits from other outside healthcare providers, or a minimum amount of fee-for-service billings. Any of these options would impose significant regulatory and administrative costs.

##### **5. Greater use of mobile health clinics for screenings, routine treatments, and referrals.**

Current mobile health clinics programs represent a promising model for spreading students' access to physical health services. Unlike the policy options above, expanding the number of mobile health clinics would require minimal space allocations from schools: just a parking space when the van or trailer is there. The costs of operating the mobile health clinic include the costs of leasing or buying the van, maintaining the equipment, paying the staff, gasoline, and vehicle insurance costs. National reporting on mobile clinics estimates that there may be between 1,500 and 2,000 in operation and that they “cost about \$300,000 initially and \$375,000 annually to operate” (Srinivasan, 2015). The annual costs in California are likely greater, due to higher labor costs and more expensive gasoline prices.

An advantage of mobile health clinics is that they may serve several schools during the same week and can also be used as community health clinics on the weekends and outside of school hours. Contra Costa and Fresno Counties have programs that rotate mobile health vans across multiple schools; under this type of program, a van typically visits one particular public school for four hour clinic shifts twice per week. The shifts are often scheduled so that the van is either on site for at least thirty minutes before the school day starts or at least one hour after



the school day ends, so that students may access the clinic hours without necessarily missing class time. If a van were to visit only two schools per day and visit each school only once per week, then the van could serve ten different schools per week. Assuming an annual cost of \$500,000 (\$40,000 for purchase payments or leasing the van and \$460,000 for operating costs), the cost would be \$50,000 per school. An additional worthwhile cost would be time spent by county department of health officials coordinating with the operators of the mobile health clinics—they could collaborate to ensure that mobile health clinic staff have a current and accurate roster of outside health providers for referrals for more serious issues.

Requiring every public school to have either a school nurse at least one day per week, a school-based health center, or a mobile health van visiting for three to four hours per week would represent an increased annual cost to the state of about \$374 million<sup>17</sup>, equivalent to \$59 per K-12 public school student. One way to reduce this total cost, as described above, would be to allow schools to otherwise satisfy a health services requirement by making some minimum level of fee-for-service Medi-Cal billings. The option of using Medi-Cal billings might be relatively popular in smaller suburban school districts (see Figures 4a, 4b, and 4c).

### Conclusion

There are large potential economic returns to bringing California's school-based health and mental health programs up to a basic minimum level at all schools. Given the sporadic use of school-based health care in California's schools, there are some relatively low-intensity reforms that could make a meaningful difference for the future success of numerous California children. Even in a challenging fiscal environment, California has a tremendous opportunity to invest in school-based healthcare. Gradual expansions of health services are preferable to overnight expansions, so that school districts have several years to recruit and hire appropriate staff. The annual additional staffing costs per K-12 public school student for bringing California's school-based mental health services up to a *basic minimum* level for students statewide could be as low as \$31. The additional cost of bringing California's school-based physical healthcare programs up to a basic minimum level would be more expensive, costing about \$59 per K-12 student. By expanding small programs, such as districts' Medi-Cal billings and counties' use of mobile health clinics, the state could rapidly spread the percentage of its students receiving screenings, basic treatments, and valuable referrals. Existing partnerships between public school districts and outside organizations provide promising examples for how healthcare can be scaled up in California's public schools. California currently ranks at or near the bottom of states for availability of school-based health and mental health care, but for less than \$100 of additional annual spending per student the state could provide basic coverage at all public schools.

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<sup>17</sup> This \$374 million estimate is based on \$50,000 in costs per school for the 7,482 schools that do not currently offer at least a 0.25 full-time equivalent nurse or a school-based health center or a mobile health clinic.

## References

- Austin, G., Polik, J., Hanson, T., & Zheng, C. (2016). School climate, substance use, and student well-being in California, 2013-2015. Results of the fifteenth Biennial Statewide Student Survey, Grades 7, 9, and 11. San Francisco: WestEd Health & Human Development Program.
- California Dental Association (2018). *Kindergarten Oral Health Assessment*. Retrieved from <https://www.cda.org/public-resources/kindergarten-oral-health-requirement>
- California Department of Education (CDE). (2016) *Staff Assignments* (2014-15 school year). Retrieved from <https://www.cde.ca.gov/ds/sd/df/filesassign.asp>
- California Department of Health Care Services (CDHCS). (2017). *FY 2014-15 Annual Reimbursement Report*. Retrieved from [http://www.dhcs.ca.gov/provgovpart/Pages/CRCS\\_14-15.aspx](http://www.dhcs.ca.gov/provgovpart/Pages/CRCS_14-15.aspx).
- California Department of Health Care Services (CDHCS). (2018). *School-based Medicaid Funding: A State by State Comparison*. Retrieved from <http://www.dhcs.ca.gov/services/Documents/SchoolBasedHealthFunding.pdf>.
- California Legislative Information. (2018). AB-3192 LEA Medi-Cal billing option: audit guide. Retrieved from [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180AB3192](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB3192).
- California School-Based Health Alliance (2016). *California SBHCs by County*. Retrieved from <http://www.schoolhealthcenters.org/school-health-centers-in-ca/locations/sbhcs-by-county>.
- California School-Based Health Alliance (2018). *Medi-Cal EPSDT*. <https://www.schoolhealthcenters.org/start-up-and-operations/funding/mental-health/medi-cal-epsdt/>
- Carrell, S.E., & Carrell, S.A. (2006). Do lower student to counselor ratios reduce School Disciplinary Problems? *Contributions to Economic Analysis and Policy* 5(1), Article 11.
- Carrell, S. E., & Hoekstra, M. (2014). Are school counselors an effective education input? *Economics Letters*, 125(1), 66-69. doi:10.1016/j.econlet.2014.07.020
- Case, A., Lubotsky, D., & Paxson, C. (2002). Economic Status and Health in Childhood: The Origins of the Gradient. *American Economic Review*, 92(5), 1308-1334. doi:10.1257/000282802762024520
- Case, A., Fertig, A., & Paxson, C. (2005). The lasting impact of childhood health and circumstance. *Journal of Health Economics*, 24(2), 365-389. doi:10.1016/j.jhealeco.2004.09.008
- Castleman, B., & Goodman, J. (2018). Intensive college counseling and persistence of low-income students. *Education Finance & Policy* 13(1), 19-41.
- Cohodes, E., Chen, S., & Lieberman, A. (2017). Maternal Meta-Emotion Philosophy Moderates Effect of Maternal Symptomatology on Preschoolers Exposed to Domestic Violence. *Journal of Child and Family Studies*, 26(7), 1831-1843. doi:10.1007/s10826-017-0699-3
- Currie, J., & Gruber, J. (1996). Health Insurance Eligibility, Utilization of Medical care, and Child Health. *The Quarterly Journal of Economics*, 111(2), 431-466. doi:10.3386/w5052
- Currie, J., Decker, S., & Lin, W. (2008). Has Public Health Insurance for Older Children Reduced Disparities in Access to Care and Health Outcomes? *Journal of Health Economics* 27(6), 1567-1581.

- Currie, J. (2009). Healthy, Wealthy, and Wise: Socioeconomic Status, Poor Health in Childhood, and Human Capital Development. *Journal of Economic Literature* 47(1), 87-122.
- Currie, J., Stabile, M., Manivong, P., & Roos, L. L. (2010). Child Health and Young Adult Outcomes. *Journal of Human Resources* 45(3), 517-548.
- Dhuey, E. & Lipscomb, S. (2011). Funding Special Education by Capitation: Evidence from State Finance Reforms. *Education Finance and Policy* 6(2), 168-201.
- Education Commission of the States (ECS). (2017). *State Legislation: Health--School Based Clinics or School Nurses*.
- Everytown for Gun Safety Support Fund. (2018). Gunfire on school grounds in the United States. Retrieved from <https://everytownresearch.org/gunfire-in-school/#6069>
- Finkelstein, A., Taubman, S., Wright, B., Bernstein, M., Gruber, J., Newhouse, J. P., Baicker, K. (2012). The Oregon Health Insurance Experiment: Evidence from the First Year. *The Quarterly Journal of Economics* 127(3), 1057-1106.
- Gross, T., & Notowidigdo, M. J. (2011). Health insurance and the consumer bankruptcy decision: Evidence from expansions of Medicaid. *Journal of Public Economics* 95(7-8), 767-778.
- Human Services Research Institute & Technical Assistance Collaborative. (2012). *California Mental Health and Substance Use System Needs Assessment*. Retrieved from <http://www.dhcs.ca.gov/provgovpart/Documents/1115%20Waiver%20Behavioral%20Health%20Services%20Needs%20Assessment%203%201%2012.pdf>
- Hurwitz, M., & Howell, J. (2014). Estimating causal impacts of school counselors with statistical discontinuity designs. *Journal of Counseling & Development* 92(3).
- Kaestner, R., Joyce, T., & Racine, A. (2001). Medicaid eligibility and the incidence of ambulatory care sensitive hospitalizations for children. *Social Science & Medicine*, 52(2), 305-313.
- kidsdata.org: A Program of Lucile Packard Foundation of Children's Health (2016). Youth Suicide and Self-Inflicted Injury. Retrieved from <https://www.kidsdata.org/topic/34/youth-suicide-and-self-inflicted-injury/summary>.
- Lakdawalla, D.N., Sun, E.C., Jena, A.B., Reyes, C.M., Goldman, D.P. & Philipson, T.J. (2010). An Economic Evaluation of the war on cancer. *Journal of Health Economics* 29(3), 333-346.
- Lear, J. G. (2007). Health At School: A Hidden Health Care System Emerges From The Shadows. *Health Affairs* 26(2), 409-19.
- Legislative Analyst's Office (2012). *Overview of Health Care Districts*. Retrieved from [http://www.lao.ca.gov/handouts/Health/2012/Overview\\_Health\\_Care\\_Districts\\_4\\_11\\_12.pdf](http://www.lao.ca.gov/handouts/Health/2012/Overview_Health_Care_Districts_4_11_12.pdf)
- Legislative Analyst's Office (2013). *Overview of Special Education in California*. Retrieved from <http://www.lao.ca.gov/reports/2013/edu/special-ed-primer/special-ed-primer-010313.aspx>
- Lovenheim, M., Reback, R., & Wedenoja, L. (2016). How Does Access to Health Care Affect Teen Fertility and High School Dropout Rates? Evidence from School-based Health Centers. *NBER Working Paper 22030*.
- McConville, S. (2017). *Just the Facts: The Medi-Cal Program*. Retrieved from <http://www.ppic.org/publication/the-medi-cal-program/>.
- Murphy, K.M., & Topel, R.H. (2006). The Value of Health and Longevity. *Journal of Political Economy* 114(5), 871-904.

- National Education Association (NEA) (2012). *A National Look at the School Nurse Shortage*. Retrieved from <http://www.nea.org/home/35691.htm>.
- National Center for Education Statistics (NCES). (2016a). Common Core of Data (CCD), *Local Education Agency (School District) Universe Survey, v.1a*.
- National Center for Education Statistics (NCES). (2016b). Common Core of Data (CCD), *State Nonfiscal Public Elementary/Secondary Education Survey Directory Data, v.1a*.
- National Center for Education Statistics (2017). Common Core of Data for 2014-15 school year.
- Oregon Health Authority (2010). *Nationwide School Nurse Funding*. Retrieved from [http://www.oregon.gov/oha/ph/HealthyPeopleFamilies/Youth/HealthSchool/Documents/TFN/Nationwide\\_School\\_Nurse\\_Funding\\_and\\_Requirements\\_Comparison.pdf](http://www.oregon.gov/oha/ph/HealthyPeopleFamilies/Youth/HealthSchool/Documents/TFN/Nationwide_School_Nurse_Funding_and_Requirements_Comparison.pdf)
- Paschall, M. J., & Bersamin, M. (2018). School-based mental health services, suicide risk and substance use among at-risk adolescents in Oregon. *Preventive Medicine*, 106, 209-215.
- Pearce, J. (2017). *Requirements for School Nurses*. Retrieved from [http://www.nasbe.org/healthy\\_schools/hs/bytopics.php?topicid=2130](http://www.nasbe.org/healthy_schools/hs/bytopics.php?topicid=2130).
- Radford, A. W., Ifill, N., & Lew, T. (2017). National Association for College Admissions Counseling (NACA). *A National Look at the High School Counseling Office What Is It Doing and What Role Can It Play in Facilitating Students' Paths to College?* Retrieved from [https://www.nacacnet.org/globalassets/documents/publications/research/hsls\\_counseling.pdf](https://www.nacacnet.org/globalassets/documents/publications/research/hsls_counseling.pdf)
- RAND American Educator Panels. (2018). California School Principal Survey for Getting Down to Facts, 2018, the RAND Corporation, Santa Monica, CA.
- Reback, R., 2010a. Non-instructional spending improves non-cognitive outcomes: Discontinuity evidence from a unique school counselor financing system. *Education Finance and Policy* (2), 105–137.
- Reback, R., 2010b. Schools' mental health services and young children's emotions. *Journal of Policy Analysis and Management* 29(4), 698–725.
- Reback, R., & Cox, T.L. 2017. Primary Health Care Access and Children's Educational Achievement, mimeo, Barnard College Economics Department. <http://www.columbia.edu/~rr2165/research.html>
- Rodman, J., Weill, K. & Driscoll, M. (1999). *A Nationwide Survey of Financing Health-Related Services for Special Education Students*. *Journal of School Health* 69(4), 133-139.
- Santelli, J., Anthony Kouzis, and Susan Newcomer. (1996). School-based Health Centers and Adolescent Use of Primary Care and Hospital Care. *Journal of Adolescent Health* 19(4), 267-75.
- School-Based Health Alliance (2017). *2013-2014 Digital Census Report*. <http://censusreport.sbh4all.org/>.
- Srinivasan, V. (2015). Docs on Wheels. *Slate* [http://www.slate.com/articles/health\\_and\\_science/medical\\_examiner/2015/05/mobile\\_health\\_clinics\\_outcomes\\_community\\_relationships\\_privacy\\_concerns.html](http://www.slate.com/articles/health_and_science/medical_examiner/2015/05/mobile_health_clinics_outcomes_community_relationships_privacy_concerns.html).
- Swain, Walker. 2018. "School-based Benefits of School-based Health Services: Test Score and Attendance Effects of Non-Urban SBHCs." mimeo, University of Georgia College of Education.
- Warren, P. & Hill, L. 2018. "Revisiting Finance and Governance Issues in Special Education." Public Policy Institute of California. Reported submitted as part of Getting Down to Facts II.

## Appendix A

**Table A.2.** Rates used for Figure 2

	Both Nurses and SBHC	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None
Grade 1	0.0086	0.1072	0.0109	0.0237	0.0391	0.8104
Grade 8	0.0038	0.1243	0.0164	0.0216	0.0371	0.7967
Grade 12	0.0225	0.1779	0.0601	0.0156	0.0256	0.6995
<u>Overall Rates</u>						
			SBHC	Mobile Clinics	Medi-Cal	
Grade 1			0.0120	0.0313	0.0572	
Grade 8			0.0197	0.0222	0.0523	
Grade 12			0.0795	0.0186	0.0289	

**Table A.3.** Rates used for Figure 3

	Both Counselors/psychologists and Clinical Care	Counselor/psychologist only	Clinics Only	Medi-Cal Only	None
Grade 1	0.0039	0.3374	0.0031	0.0262	0.6244
Grade 8	0.0135	0.8051	0.0025	0.0129	0.1622
Grade 12	0.0665	0.8499	0.0002	0.0022	0.0684
<u>Overall Rates</u>					
			Clinics	Medi-Cal	
Grade 1			0.0070	0.0413	
Grade 8			0.0159	0.0374	
Grade 12			0.0667	0.0229	

**Table A.4. Rates for Figures 4a, 4b, 4c**

District Organization	Elementary					Middle					High School							
	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None
Not Unified	0.0104	0.0962	0.0093	0.0107	0.0360	0.8373	0.0028	0.1227	0.0178	0.0084	0.0459	0.8024	0.0094	0.1490	0.0598	0.0021	0.0273	0.7524
Unified	0.0000	0.0922	0.0098	0.0558	0.0328	0.8094	0.0034	0.0918	0.0034	0.0646	0.0340	0.8027	0.0473	0.0541	0.0574	0.0537	0.0372	0.7534
Large City	0.0092	0.0924	0.0142	0.0369	0.0263	0.8209	0.0031	0.1277	0.0405	0.0466	0.0280	0.7539	0.0364	0.0879	0.1182	0.0241	0.0061	0.7303
Small/Mid-size city	0.0000	0.1330	0.0108	0.0141	0.0184	0.8238	0.0044	0.1659	0.0131	0.0172	0.0306	0.7686	0.0215	0.2097	0.0538	0.0108	0.0323	0.6720
Large suburb	0.0158	0.0867	0.0069	0.0104	0.0183	0.8618	0.0039	0.1098	0.0039	0.0020	0.0157	0.8647	0.0099	0.1414	0.0471	0.0049	0.0124	0.7841
Small/Mid-size suburb	0.0000	0.1725	0.0000	0.0000	0.1170	0.7105	0.0000	0.1928	0.0241	0.0000	0.1205	0.6627	0.0247	0.1358	0.0123	0.0000	0.0988	0.7284
Town	0.0000	0.0474	0.0111	0.0279	0.1421	0.7716	0.0000	0.0333	0.0000	0.0333	0.1417	0.7917	0.0095	0.0952	0.0095	0.0190	0.0952	0.7714
Rural	0.0035	0.0574	0.0087	0.0261	0.0296	0.8748	0.0000	0.0303	0.0000	0.0404	0.0808	0.8485	0.0000	0.0833	0.0278	0.0276	0.0417	0.8194

Table A.5. Rates for Figures 5a, 5b, 5c

District Organization	Elementary				Middle				High School						
	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none
Not Unified	0.0031	0.2863	0.0033	0.0250	0.6822	0.0141	0.7176	0.0047	0.0235	0.2402	0.0572	0.8072	0.0011	0.0021	0.1324
Unified	0.0009	0.4112	0.0027	0.0161	0.5691	0.0034	0.8328	0.0000	0.0068	0.1570	0.0893	0.7526	0.0000	0.0034	0.1546
Large City	0.0071	0.2698	0.0064	0.0150	0.7016	0.0250	0.7156	0.0156	0.0219	0.2219	0.1277	0.7165	0.0000	0.0000	0.1558
Small/Mid-size city	0.0022	0.3373	0.0022	0.0261	0.6322	0.0260	0.8442	0.0000	0.0216	0.1082	0.0652	0.8370	0.0000	0.0054	0.0924
Large suburb	0.0010	0.3610	0.0020	0.0104	0.6256	0.0020	0.8047	0.0000	0.0099	0.1834	0.0524	0.8678	0.0000	0.0000	0.0798
Small/Mid-size suburb	0.0000	0.3626	0.0000	0.0760	0.5614	0.0122	0.7561	0.0000	0.0366	0.1951	0.0250	0.9000	0.0000	0.0000	0.0750
Town	0.0028	0.2682	0.0056	0.0810	0.6425	0.0000	0.5833	0.0000	0.0333	0.3833	0.0095	0.8286	0.0000	0.0190	0.1429
Rural	0.0000	0.1926	0.0018	0.0158	0.7898	0.0000	0.4545	0.0000	0.0303	0.5152	0.0208	0.6250	0.0069	0.0000	0.3472

Location

**Table A.6. Rates for Figures 6a, 6b, 6c**

	Elementary					Middle					High School								
	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None	
% Free lunch	Low	0.0091	0.0863	0.0005	0.0101	0.0197	0.874	0.0000	0.1297	0.0000	0.0088	0.0132	0.848	0.0120	0.1779	0.0313	0.0096	0.0192	0.7500
	Middle	0.0107	0.1013	0.0064	0.0165	0.0341	0.831	0.0022	0.1148	0.0088	0.0110	0.0486	0.814	0.0239	0.1244	0.0550	0.0024	0.0383	0.7560
	High	0.0053	0.0987	0.0213	0.0325	0.0523	0.789	0.0066	0.1035	0.0352	0.0418	0.0683	0.744	0.0193	0.0771	0.0916	0.0311	0.0313	0.7518
% White	Low	0.0091	0.1023	0.0224	0.0320	0.0394	0.794	0.0088	0.1165	0.0330	0.0351	0.0505	0.756	0.0313	0.0745	0.1130	0.0191	0.0168	0.7476
	Middle	0.0160	0.0907	0.0037	0.0224	0.0416	0.825	0.0000	0.0971	0.0110	0.0198	0.0530	0.819	0.0145	0.1639	0.0434	0.0167	0.0482	0.7133
	High	0.0000	0.0933	0.0021	0.0048	0.0251	0.874	0.0000	0.1344	0.0000	0.0066	0.0264	0.832	0.0096	0.1411	0.0215	0.0072	0.0239	0.7967
% Hispanic	Low	0.0000	0.0741	0.0021	0.0069	0.0139	0.903	0.0000	0.1096	0.0044	0.0066	0.0132	0.866	0.0240	0.1394	0.0481	0.0072	0.0072	0.7740
	Middle	0.0112	0.1173	0.0043	0.0133	0.0331	0.820	0.0000	0.1394	0.0155	0.0110	0.0354	0.798	0.0120	0.1463	0.0528	0.0048	0.0336	0.7506
	High	0.0139	0.0949	0.0219	0.0389	0.0592	0.771	0.0088	0.0991	0.0242	0.0440	0.0815	0.742	0.0192	0.0938	0.0769	0.0311	0.0481	0.7332
# of Students	Low	0.0048	0.0628	0.0075	0.0133	0.0218	0.889	0.0000	0.0786	0.0175	0.0197	0.0437	0.840	0.0072	0.0263	0.0120	0.0120	0.0215	0.9211
	Middle	0.0106	0.0942	0.0064	0.0181	0.0383	0.832	0.0022	0.1463	0.0177	0.0110	0.0532	0.769	0.0169	0.1181	0.1060	0.0120	0.0482	0.6988
	High	0.0096	0.1294	0.0144	0.0278	0.0460	0.772	0.0066	0.1236	0.0088	0.0308	0.0331	0.796	0.0313	0.2356	0.0601	0.0191	0.0192	0.6370



Table A.7. Rates for Figures 7a, 7b, 7c

	Elementary				Middle				High School						
	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none
Low	0.0000	0.3523	0.0000	0.0085	0.6391	0.0022	0.7873	0.0000	0.0088	0.2018	0.0432	0.8273	0.0024	0.0000	0.1271
Middle	0.0016	0.3014	0.0021	0.0182	0.6766	0.0110	0.7307	0.0000	0.0199	0.2384	0.0585	0.8024	0.0000	0.0000	0.1390
High	0.0065	0.2798	0.0075	0.0431	0.6631	0.0222	0.7089	0.0111	0.0311	0.2267	0.0931	0.7525	0.0000	0.0074	0.1471
Low	0.0070	0.2983	0.0081	0.0221	0.6645	0.0222	0.7289	0.0089	0.0156	0.2244	0.1166	0.7568	0.0000	0.0025	0.1241
Middle	0.0011	0.3072	0.0011	0.0385	0.6522	0.0110	0.7489	0.0022	0.0308	0.2070	0.0553	0.8029	0.0000	0.0048	0.1370
High	0.0000	0.3284	0.0005	0.0091	0.6620	0.0022	0.7495	0.0000	0.0132	0.2352	0.0240	0.8221	0.0024	0.0000	0.1514
Low	0.0000	0.3280	0.0011	0.0064	0.6645	0.0000	0.7368	0.0044	0.0066	0.2522	0.0719	0.7794	0.0024	0.0000	0.1463
Middle	0.0016	0.3093	0.0016	0.0224	0.6651	0.0110	0.7792	0.0066	0.0177	0.1854	0.0533	0.7918	0.0000	0.0000	0.1550
High	0.0065	0.2965	0.0070	0.0410	0.6491	0.0244	0.7111	0.0000	0.0356	0.2289	0.0691	0.8123	0.0000	0.0074	0.1111
Low	0.0011	0.2329	0.0027	0.0118	0.7516	0.0066	0.4902	0.0088	0.0263	0.4683	0.0144	0.6091	0.0024	0.0048	0.3693
Middle	0.0011	0.3342	0.0021	0.0267	0.6358	0.0156	0.8289	0.0022	0.0200	0.1333	0.1122	0.8585	0.0000	0.0024	0.0268
High	0.0059	0.3672	0.0048	0.0312	0.5909	0.0133	0.9115	0.0000	0.0133	0.0619	0.0686	0.9191	0.0000	0.0000	0.0123

Table A.8. Rates for Figure 8a, 8b, 8c

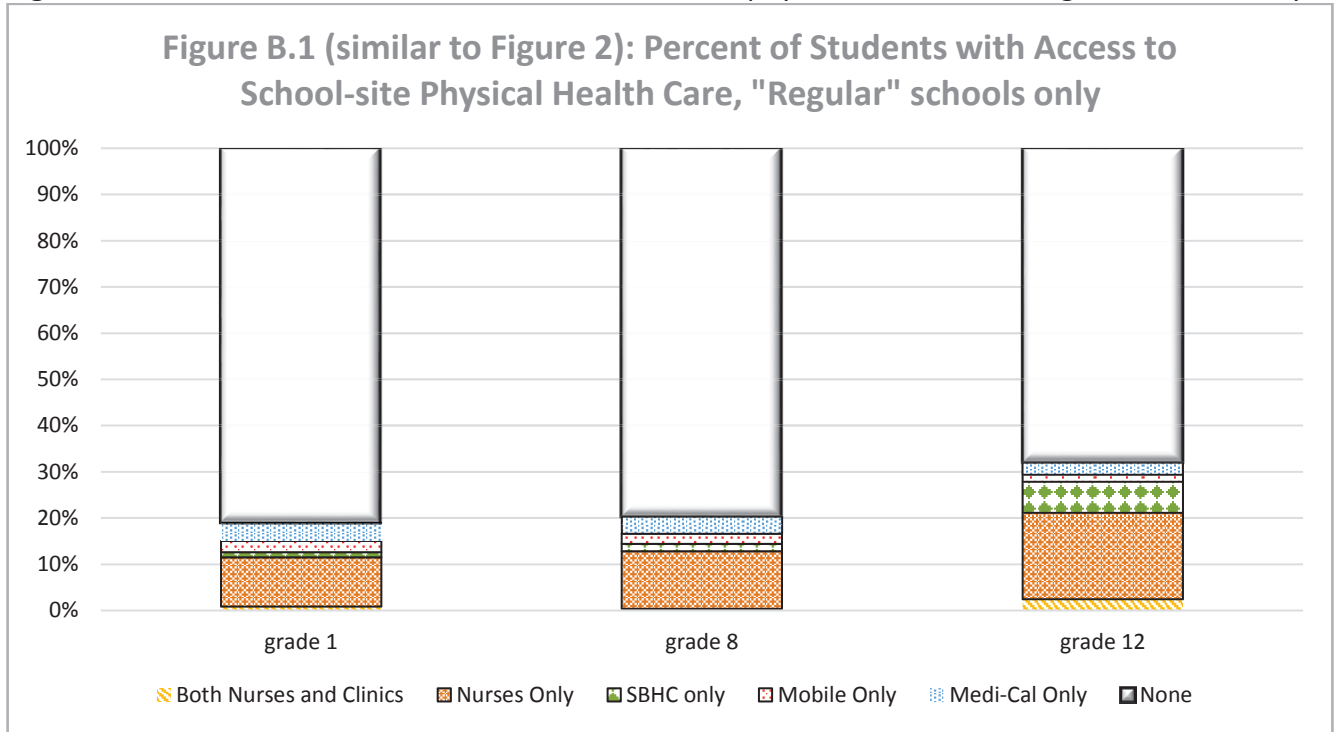
	Elementary					Middle					High School							
	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None	Both Nurses and Clinics	Nurses Only	SBHC Only	Mobile Only	Medi-Cal Only	None
Low	0.0102	0.0727	0.0112	0.0133	0.0401	0.8524	0.0000	0.0909	0.0222	0.0154	0.0310	0.8404	0.0337	0.0506	0.0795	0.0191	0.0169	0.8000
Middle	0.0101	0.1025	0.0096	0.0160	0.0304	0.8314	0.0022	0.1308	0.0155	0.0155	0.0687	0.7672	0.0192	0.1274	0.0625	0.0096	0.0505	0.7332
High	0.0048	0.1112	0.0069	0.0299	0.0358	0.8113	0.0066	0.1280	0.0066	0.0309	0.0309	0.7969	0.0024	0.2029	0.0362	0.0145	0.0217	0.7222
Low	0.0027	0.1110	0.0090	0.0281	0.0754	0.7738	0.0000	0.1048	0.0087	0.0306	0.1004	0.7555	0.0096	0.1555	0.0550	0.0215	0.0694	0.6890
IEP	0.0198	0.1021	0.0091	0.0272	0.0246	0.8171	0.0022	0.1356	0.0200	0.0287	0.0244	0.7889	0.0337	0.1466	0.0433	0.0191	0.0120	0.7476
High	0.0027	0.0731	0.0101	0.0037	0.0059	0.9045	0.0066	0.1079	0.0154	0.0022	0.0044	0.8634	0.0120	0.0771	0.0795	0.0024	0.0072	0.8217

Table A.9. Rates for Figures 9a, 9b, 9c

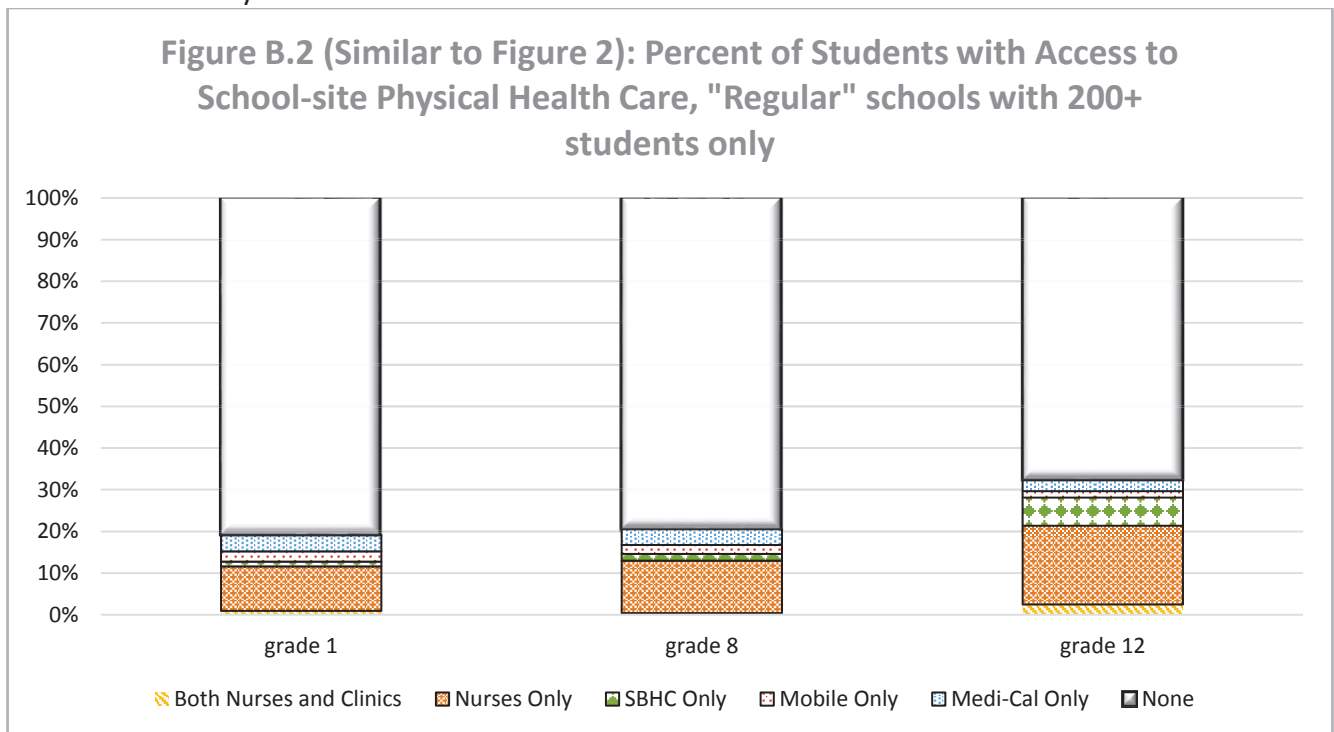
	Elementary				Middle				High School						
	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none	Both Counselors and SBHC	Only Counselors/psychologists	SBHC only	Medi-Cal only	none
Low	0.0032	0.2809	0.0043	0.0290	0.6826	0.0177	0.6984	0.0044	0.0111	0.2683	0.1065	0.6344	0.0024	0.0024	0.2542
Middle	0.0021	0.3099	0.0032	0.0241	0.6606	0.0089	0.7822	0.0067	0.0267	0.1756	0.0611	0.8582	0.0000	0.0024	0.0782
High	0.0027	0.3444	0.0021	0.0166	0.6341	0.0089	0.7561	0.0000	0.0222	0.2129	0.0269	0.8973	0.0000	0.0024	0.0733
Low	0.0021	0.3010	0.0032	0.0454	0.6483	0.0044	0.6761	0.0022	0.0481	0.2691	0.0506	0.7807	0.0024	0.0072	0.1590
IEP	0.0048	0.3945	0.0021	0.0145	0.5840	0.0177	0.7765	0.0088	0.0111	0.1858	0.0725	0.8213	0.0000	0.0000	0.1063
High	0.0011	0.2386	0.0043	0.0097	0.7464	0.0133	0.7756	0.0000	0.0000	0.2111	0.0714	0.7808	0.0000	0.0000	0.1478

## Appendix B

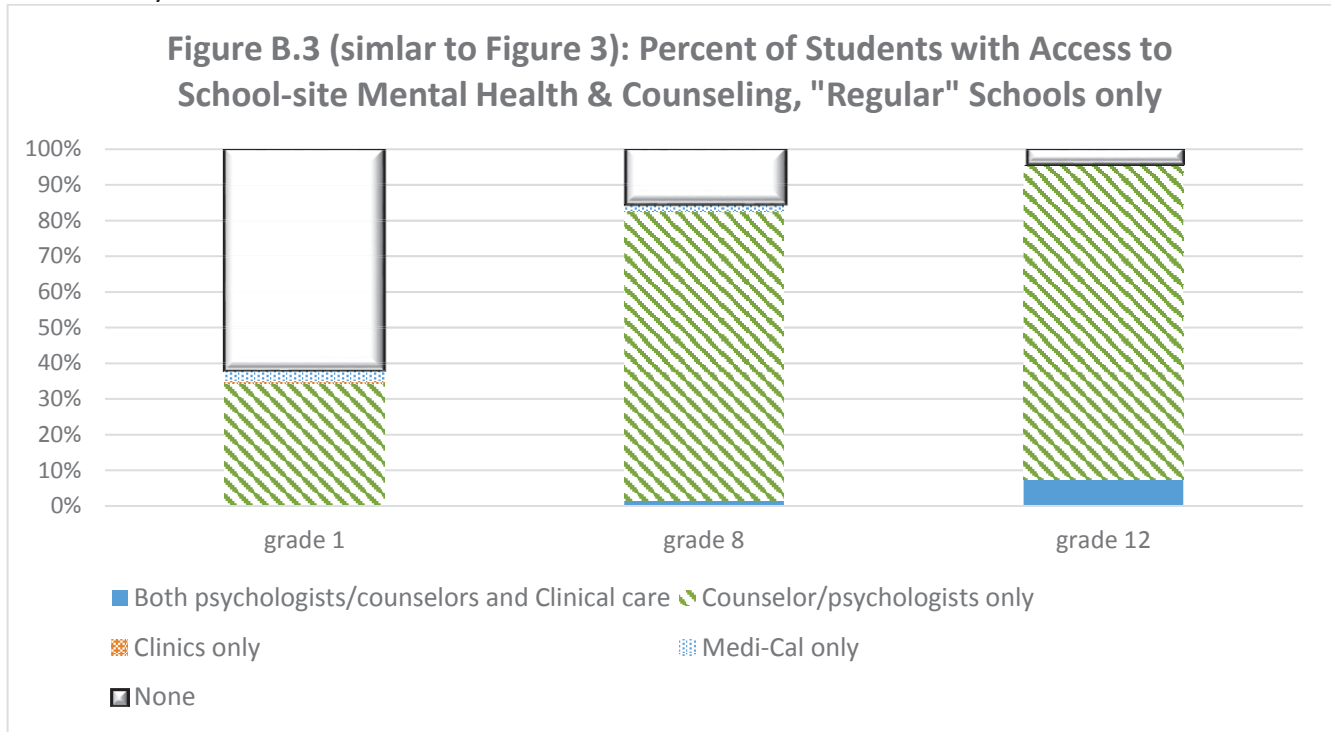
**Figure B1.** Percent of students with access to school-site physical health care, “regular” schools only



**Figure B2.** Percent of students with Access to school-site physical health care, “regular” schools with 200+ students only



**Figure B3.** Percent of students with access to school-site mental health and counseling, “regular” schools only



**Figure B4.** Percent of students with access to school-site mental health and counseling, “regular” schools with 200+ students only

