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The Impact of Health Insurance on Poverty in California

Technical Appendices

CONTENTS

Caroline Danielson, Patricia Malagon, and Shannon McConville

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Appendix A. Background on the California Poverty Measure

The California Poverty Measure (CPM), a joint research effort by PPIC and the Stanford Center on Poverty and Inequality, provides a robust measure of the number of Californians lacking resources to meet basic needs, accounting for county-level differences in the cost of housing and diverse safety net resources that families use to meet their needs. It builds on the approach used to create the Supplemental Poverty Measure (Creamer et al. 2022) by:

- Using the American Community Survey (ACS) to provide a large sample size that allows for geographic and demographic disaggregation;
- Identifying likely unauthorized immigrants in order to accurately capture individual and family access to safety net programs;
- Correcting for survey underreporting of major means-tested benefits;
- Including state-specific programs like the CalEITC, Young Child Tax Credit (YCTC), and Golden State Stimulus (GSS) II.

See Kimberlin, et al. (2022) for additional details. The most recent CPM release reflects Fall 2021, which provides a more up-to-date picture of poverty by using a novel method to update the 2019 CPM data to project annual poverty rates to the labor market and policy conditions of the fourth quarter of 2021, after most COVID-19 pandemic emergency supports had ended and the labor market had significantly tightened. We used this method both to provide more timely poverty estimates, which are more relevant to the current policy context than 2020 estimates would be, and to respond to pandemic-related data quality issues affecting the American Community Survey (ACS), which compromised the usability of the 2020 ACS data for construction of the CPM.

The Poverty in California: Technical Appendices (published with the release of Fall 2021 CPM data) provides detailed information on our updated methodology and comparisons between the Fall 2021 CPM and 2019 CPM. The original CPM Technical Appendix document (published with the release of 2011 CPM data) can be found on the PPIC website, and the first and second revision Technical Appendices (published with the release of 2012 CPM and the 2014 CPM) can be found on the Stanford Center for Poverty and Inequality website.

Appendix B. Health-Inclusive CPM Data Sources and Methodology

To create the health-inclusive CPM, we rely heavily on the approach described in Korenman and Remler (2016) and Korenman, Remler, and Hyson (2019)—hereafter "KRH." The health-inclusive CPM augments the CPM by adding the need for health insurance to poverty thresholds and including health insurance as a resource in family budgets (for those who are insured). The health-inclusive CPM also modifies the medical expense calculation used in the SPM and CPM (Bohn et al. 2017). The base dataset for the health-inclusive CPM presented in this report is the fall 2021 CPM, which is built from the 2019 ACS and a number of additional data sources described in Kimberlin et al. (2022), Bohn et al. (2017), and Bohn et al. (2013).

The KRH methodology calculates the need for health insurance to be the cost of the second-lowest cost Silver plan within a rating region. For those who are insured through Medi-Cal or their employer, this same cost is added to family resources minus premium out of pocket costs. For those who direct purchase coverage through Covered California, they are assigned a prescribed subsidy amount to their family resources based on household income. Those who are uninsured do not have this resource. Medical out-of-pocket spending comes in the form of spending on premiums and non-premium medical costs. Both are capped. Premium out of pocket cannot exceed the cost of the health insurance need and non-premium spending cannot exceed the cap on out of pocket spending given in the Silver plan.

Our key adaptations of their methodology include:

- Correcting for survey underreporting of Medicaid using California Department of Health Care Services (DHCS) caseload counts;
- In some cases reclassifying the insurance status of likely undocumented immigrants;
- Simplifying the categorization of health insurance status based on the questions asked in the ACS;
- For all but direct purchasers of insurance, imputing out-of-pocket costs to ACS respondents using the CPS-ASEC.
- Assigning subsidies to direct purchasers based on reported cash income for the health insurance unit (HIU).

We describe each of these adaptations in more detail below. A final section in Appendix B describes the direct purchase subsidy and Medicaid expansion scenarios that are presented in the report.

Table B1 lists the data sources and key variables used to create the health-inclusive CPM beyond those used in the CPM.

TABLE B1
Summary of health-inclusive CPM data sources

Name	Purpose	Key variables
American Community Survey (ACS)	Capture insurance status	Self-reported insurance coverage
California Department of Health Care Services Medi-Cal caseloads	Correct for Medi-Cal underreporting	Number of people enrolled in full-scope Medi-Cal by age and county
Current Population Survey, Annual Social and Economic Supplement (CPS-ASEC)	Impute out-of-pocket expenses to the ACS	Person-level, self-reported out-of-pocket medical spending, out-of-pocket spending on premiums
HIX Compare Datasets	Silver plan premiums and out-of-pocket caps; Medicare Advantage plan costs	Premiums, caps

Correction for survey underreporting of Medi-Cal

If we take self-reported insurance status as given, we undercount Medi-Cal participation by roughly 5 to 6 million people (Table B2). Underreporting is more severe for adults than for children, and due to the growth in Medi-Cal enrollment between 2019 and 2021, is more severe in 2021. Hest (2022) finds that underreporting of Medicaid worsened nationally in the 2021 ACS. As we do in other aspects of the CPM, we correct for survey underreporting. In the health-inclusive CPM we do this by assigning Medi-Cal receipt to survey respondents who do not report this insurance coverage, but who are likely income-eligible, in order to more closely match administratively reported Medi-Cal totals. In some cases we exclude likely unauthorized immigrants from this procedure (see below). The units we use to calculate poverty levels for Medi-Cal eligibility are the SHADAC health insurance units (SHADAC 2012), and we use federal poverty level (FPL) percentages that vary by age (0-17, 18-64, 65+). To allow for varying within-year income, we multiply computed poverty levels by 1.33.

TABLE B2

Medi-Cal caseloads across survey and data sources

	Survey (self-report)	Administrative (2019)	Administrative (2021)
Children 0-18	3,871,976	4,897,174	5,028,990
Adults 18+	4,410,344	7,339,437	8,513,683
Total	8,282,320	12,236,611	13,542,673

SOURCES: California Department of Health Care Services, Medi-Cal certified enrollees by age group in 2019 and 2021; ACS 2019.

NOTES: In the "narrow" approach, only those reporting health insurance status as "uninsured" and who are likely income eligible are potentially reclassified as insured by Medi-Cal. We also exclude likely unauthorized immigrant adults. In the "broad" approach, all those who are likely income eligible are potentially reclassified as Medi-Cal enrollees.

Given the uncertainty surrounding several key choices necessary to correct for underreporting, we take two approaches to provide reasonable bounds on our estimates. Due to the severity of underreporting of Medi-Cal in the ACS, we do not implement an approach that relies solely on self-reports. This is also consistent with the approach taken in the CPM for social safety net programs, including CalFresh and CalWORKs.

First, we take a narrow approach to correcting for Medi-Cal underreporting:

- Those flagged as unauthorized immigrants have their self-reported Medi-Cal recoded to uninsured
- Income-eligible uninsured who are flagged as unauthorized are not eligible to be imputed to have Medi-Cal
- Only income-eligible uninsured (not flagged as unauthorized) are eligible to imputed to have Medi-Cal
- We match 2019 Medi-Cal caseloads count (by ages 0-18 and 19+ and county)

Second, we take a broad approach:

- All self-reported Medi-Cal is retained
- All income-eligible individuals, regardless of immigration status or self-reported insurance status are in the pool for Medi-Cal imputation
- We match 2021 Medi-Cal caseload counts (by ages 0-18 and 19+ and county)

Additional details pertaining to unauthorized immigrants are presented in the next section.

Reclassifying the insurance status of likely undocumented immigrants

There is no reporting of immigration status in the ACS. Instead, respondents are asked whether they are citizens by birth, naturalization, or are non-citizens. The CPM implements a procedure for identifying likely unauthorized immigrants among the larger group of self-identified non-citizens in the ACS. See Bohn, et al. (2013) for details of the approach, which generally follows the methodology outlined by Passel and Cohn (2009). We use the unauthorized flags created for the CPM to classify insurance status based on California policy.

California is implementing state-funded eligibility for Medicaid in several waves. Children under age 19 who are income-eligible became eligible for full-scope Medi-Cal regardless of immigration status in May 2016. This eligibility extended to young adults ages 19-25 in January 2020, and to adults ages 50 and older starting May 2022. The remaining group of adults (ages 26-49) will be eligible in January 2024. Therefore, in the fall 2021 CPM, young adults ages 25 and younger were eligible for Medi-Cal. However, adults ages 26 and older were ineligible. We reclassified adults age 26 and older flagged as unauthorized as uninsured if they reported Medi-Cal coverage, making the assumption that that these respondents had mistakenly reported restricted-scope Medicaid coverage as full-scope insurance. This assumption of widespread confusion is consistent with research using the California Health Interview Survey (CHIS) showing that 45 percent of low-income, self-identified immigrants who are not Legal Permanent Residents report Medi-Cal (Cha and McConville 2021).

We note that young adults were not actually eligible for Medi-Cal in the 2019 ACS. However, DHCS assumed that those with limited scope coverage would transition to full-scope—so we use self-reports as a proxy. In this first approach we do not reclassify likely unauthorized who report other types of insurance, mainly employer or direct-purchase.

The second approach takes the assignment of unauthorized status within the group of non-citizens as random. In this approach, we do not reassign adults to uninsured status if they report Medi-Cal, and we do allow all those flagged as unauthorized who are likely income eligible to be imputed to have Medi-Cal.

Table B3 shows uninsurance rates across demographic groups after Medi-Cal imputation. The share without insurance drops by a third (from 9% to 6%) after reassignment to Medi-Cal, regardless of the approach used. There are differences across age subgroups, however, with children and young adults having higher rates of uninsurance in the broad correction vs. the narrow correction, but adults seeing the reverse. The most notable difference is for non-citizens, who have a higher uninsurance rate after the narrow correction approach (29%) than self-reported (26%), but a sharply lower rate after the broad approach (17%).

TABLE B3

Rates of uninsurance by demographic groups

	Self-reported	After underreporting correction (narrow)	After underreporting correction (broad)
All	0.09	0.06	0.06
Age			
0-5	0.03	0.00	0.02
6-18	0.04	0.01	0.03
19-25	0.12	0.03	0.07
26-44	0.12	0.11	0.09
45-64	0.09	0.08	0.07
Race/ethnicity			
Latino	0.14	0.10	0.09
White	0.05	0.03	0.04
Asian	0.06	0.05	0.04
Black	0.06	0.03	0.04
All other	0.05	0.03	0.03
Citizenship			
Citizen	0.06	0.03	0.04
Non-citizen	0.26	0.29	0.17
Highest education in family			
Less than high school	0.22	0.20	0.13
High school	0.14	0.11	0.10
Some college	0.10	0.07	0.07
College or more	0.05	0.03	0.04

SOURCES: Author calculations from the fall 2021 health inclusive CPM.

NOTES: Estimates include those under age 65.

Imputation proceeds by random assignment of those determined to be Medi-Cal eligible within cells defined by age and county. Because the ACS groups the 20 least populated counties, we necessarily impute within those groups. Table B4 shows the results. Drawing only from the pool of self-reported uninsured Californians, we lack enough likely eligible respondents to match Medi-Cal caseloads. This is particularly true for children. Therefore, the final count of Californians with Medi-Cal is still well under administrative caseload count (9.0 million vs. 12.2 million). With the broader approach, we come closer to matching administrative totals (12.1 million vs. 13.5 million).

TABLE B4

Insurance status after reassignment to Medi-Cal

	Narrow approach						Broad approach					
	Adults 19-64		Children 0-18		Total		Adults 19-64		Children 0-18		Total	
Uninsured	2,026,340	9%	71,028	1%	2,097,368	6%	1,802,552	8%	210,381	2%	2,012,933	6%
Medi-Cal	4,897,099	21%	4,137,698	44%	9,034,797	27%	7,097,515	30%	4,988,055	54%	12,085,570	37%
Direct purchase	2,095,059	9%	529,049	6%	2,624,108	8%	1,708,559	7%	405,031	4%	2,113,590	6%
Employer	13,685,783	58%	4,375,433	47%	18,061,216	55%	12,361,627	52%	3,571,959	38%	15,933,586	48%
Medicare	553,658	2%	58,238	1%	611,896	2%	340,045	1%	33,123	0%	373,168	1%
VA/IHS	337,272	1%	129,093	1%	466,365	1%	284,913	1%	91,990	1%	376,903	1%

SOURCE: Author calculations from the fall 2021 health-inclusive CPM.

NOTES: Weighted counts shown.

Categorization of health insurance status

The ACS asks about current health insurance coverage. We make the simplifying assumption that each respondent has one source of insurance coverage (or no coverage) for the entire calendar year. However, as described below, we do allow for premium out-of-pocket spending even among those whose current insurance status is Medicaid or uninsured (meaning currently they have no spending in this category). We are unable to identify different categories of direct-purchase insurance – whether it is subsidized or unsubsidized, purchased on- or off-exchange.

To create health insurance units, we group people in the same CPM unit by insurance status, and assume that those who report employer coverage or direct purchase insurance are obtaining insurance together. We also assume that those in a CPM unit who report being uninsured can be grouped. All others are classified as health insurance units of one. These units are used to assign health insurance plan costs.

Table B5 shows the results. In our categorization that reflects the narrow correction for Medi-Cal underreporting, 54.9 percent of Californians under age 65 have employer-based coverage, 27.5 percent have Medi-Cal, 8.0 percent have direct purchase insurance, another 3.3 percent have other coverage (including IHS, VA, and Medicare), and 6.4 percent are uninsured. These percentages vary considerably by citizenship, race and ethnicity, age, and educational attainment. These shares shift in our alternate approach, with nearly 10 percentage points more people covered by Medi-Cal (36.7%) and fewer with other sources of insurance. About the same are uninsured across the two approaches (6.4% in the narrow approach vs. 6.1% in the broad approach).

These statuses determine, first, whether an individual has health insurance added to the family's resources and, second, the amount of out-of-pocket costs subtracted from family resources. We describe our procedures for assigning these resources and costs below.

TABLE B5

Final health insurance coverage status by demographic characteristics, California population under 65

	Narrow Medi-Cal underreporting correction					Broad Medi-Cal underreporting correction				
	Medi-Cal	Covered California	Employer-based	Uninsured	Other coverage	Medi-Cal	Covered California	Employer-based	Uninsured	Other coverage
All	27.5%	8.0%	54.9%	6.4%	3.3%	36.7%	6.4%	48.4%	6.1%	2.3%
Age										
0-5	45.8	5.1	46.5	0.4	2.2	56.5	3.7	36.8	1.6	1.4
6-18	43.9	5.9	47.3	0.9	1.9	52.4	4.6	39.1	2.6	1.3
19-25	33.4	8.8	52.4	3.3	2.2	51.9	5.2	34.5	7.1	1.5
26-44	20.4	7.4	59.0	10.5	2.7	28.7	6.1	54.6	8.6	2.0
45-64	16.6	10.5	58.9	8.4	5.6	23.7	9.3	56.4	6.8	3.8
Race/ethnicity										
Latino	16.6	10.9	65.5	3.0	4.1	23.8	9.1	60.2	3.8	3.0
White	35.1	4.9	50.4	3.2	6.5	44.9	3.5	42.6	4.4	4.6
Asian-American	39.1	5.0	43.3	10.3	2.4	49.9	3.8	35.8	9.1	1.5
African American	16.0	11.7	65.1	4.8	2.4	25.3	9.4	59.7	3.9	1.7
All other	23.6	7.2	60.9	2.7	5.6	33.1	5.9	53.9	3.4	3.7
Citizenship										
Citizen by birth	29.3	7.7	56.9	2.6	3.5	37.6	6.1	49.6	4.2	2.5
Non-citizen	23.5	7.3	38.3	29.3	1.6	42.2	5.7	34.0	17.1	1.0
Highest education in family										
Less than high school	56.7	3.5	17.0	19.5	3.3	69.7	2.5	13.1	13.1	1.6
High school	45.9	5.1	34.4	10.8	3.8	56.1	3.9	28.0	9.6	2.4
Some college	34.1	7.1	48.2	6.5	4.1	44.5	5.4	40.3	7.0	2.8
BA or more	13.0	10.1	71.1	3.3	2.6	20.7	8.4	65.4	3.5	2.0

SOURCE: Author calculations from the fall 2021 health-inclusive CPM.

NOTES: Individuals under age 65 are included in the table calculations. "Other" coverage includes IHS, Medicare, and VA.

Health plan costs

We use HIX Compare data files assembled by the Robert Wood Johnson Foundation to determine a dollar value for the basic need for health insurance that can be incorporated into the CPM framework. Specifically, we use the unsubsidized premium costs of the second cheapest silver plan for each of Covered California's 19 rating regions to assign a value for health insurance.

The cost of the silver plan is used because it provides what is considered a "socially and politically determined set of care services" as defined under the Affordable Care Act, which included provisions like federal subsidies and 'community rating' regulations that were intended to make the silver plan available and affordable to everyone (see Korenman et al. 2016; Korenman et al. 2019 for a more detailed discussion).

The HIX Compare data includes monthly premium costs for an individual silver plan for a 27-year old. Those premium costs are adjusted by an individual's age using the Federal default standard age curve, which provides premium ratios for all ages under 65 that comply with ACA rules that insurance premiums cannot vary by more than three times based on age (Center for Medicaid and Medicare Services, 2021).

We assign annualized silver plan costs to all individuals under age 65 adjusted for the person's age reported at the time of the survey. These annual costs for individual coverage are then aggregated up to the CPM unit and added to the regional CPM poverty thresholds used to determine if people are living in poverty. Table B6 provides sample sizes and threshold amounts across different family composition types.

For those 65 and older, we use the national average annual benefit amount for Medicare enrollees as reported in the 2021 Medicare Trustees Report (Center for Medicaid and Medicare Services, 2021). The average annual benefit amount of $15,671 is added to the second lowest costs premium for Medicare Advantage Prescription Drug (MAPD) plans as reported in the HIX Compare data files. In many regions, especially large counties in the state, MAPD premiums are $0 and so the total cost for a basic plan for most seniors is just the $15,671 amount.

In the main report we typically report poverty rates only for the population under age 65 so we exclude senior-only households from most of our analyses. Seniors over 65 who live in households with children and other adults are included in the poverty thresholds and resource amounts that are presented in the report. Table B6 provides

TABLE B6

Health-inclusive CPM poverty thresholds are substantially higher with cost of health insurance

	Sample size	Weighted count	CPM threshold	health-inclusive CPM threshold	Cost of health insurance
All households*	147,773	15,341,824	$27,298	$44,795	$17,497
Senior-only households	29,897	2,526,527	$18,118	$40,131	$22,013
Households with any members under age 65	117,876	12,816,908	$29,106	$45,713	$16,607
With seniors in household	19,046	1,847,455	$34,869	$67,719	$32,850
With no seniors in household	98,830	10,969,453	$28,136	$42,007	$13,871
Children under 18 in household (may or may not include seniors)					
Single adult	4,697	583,339	$27,926	$39,057	$11,131
2 adults	24,131	2,636,650	$35,854	$53,255	$17,401
3 or more adults	12,278	1,427,485	$47,264	$76,762	$29,499
No children under 18*					
Single adult	31,575	3,682,194	$16,957	$23,423	$6,466
2 adults	28,880	2,792,653	$23,410	$40,097	$16,687
3 or more adults	16,299	1,692,976	$39,529	$67,852	$28,323

SOURCE: Author calculations from the fall 2021 health-inclusive California Poverty Measure.

NOTE: Weighted averages are shown for the thresholds. Households are defined to be CPM poverty unit. Households with and without children under 18 can have seniors over 65 in the household. Number of adults is inclusive of any seniors living in the household as well as adult children who may reside in the household.

The table below shows differences in the average health-inclusive CPM threshold by county and includes the silver plan costs as a separate component of the thresholds.[1]

[1] The smallest 20 counties are not identified individually in the American Community Survey (ACS), which is the base dataset for the CPM and health-inclusive CPM. These twenty counties are shown as groups.

TABLE B7

Variation in health-inclusive CPM poverty thresholds for two-adult households with children across counties and county groups

County/County group	CPM threshold	health-inclusive CPM threshold	Cost of health insurance
Alameda	$40,311	$63,013	$22,702
Alpine/Amador/Calaveras/Inyo/Mariposa/Mono/Tuolumne	$30,303	$53,475	$23,172
Butte	$29,670	$52,534	$22,864
Colusa/Glenn/Tehama/Trinity	$29,160	$51,511	$22,350
Contra Costa	$38,821	$63,730	$24,910
Del Norte/Lassen/Modoc/Plumas/Siskiyou	$29,044	$52,344	$23,300
El Dorado	$33,186	$53,576	$20,390
Fresno	$30,048	$46,809	$16,761
Humboldt	$30,926	$53,395	$22,469
Imperial	$27,577	$47,124	$19,548
Kern	$30,079	$46,767	$16,688
Kings	$28,350	$44,222	$15,872
Lake/Mendocino	$30,648	$53,438	$22,790
Los Angeles	$36,503	$50,928	$14,426
Madera	$31,088	$47,853	$16,765
Marin	$44,606	$67,583	$22,977
Merced	$29,302	$48,106	$18,804
Monterey/San Benito	$36,995	$58,836	$21,841
Napa	$39,246	$61,306	$22,060
Orange	$40,206	$56,024	$15,817
Placer	$36,742	$56,907	$20,165
Riverside	$34,379	$49,081	$14,702
Sacramento	$33,134	$52,954	$19,820
Nevada/Sierra	$34,506	$56,996	$22,490
San Bernardino	$33,218	$47,836	$14,618
San Diego	$38,016	$53,206	$15,190
San Francisco	$41,877	$65,354	$23,476
San Joaquin	$32,634	$51,546	$18,912
San Luis Obispo	$35,731	$55,239	$19,507

County/County group	CPM threshold	health-inclusive CPM threshold	Cost of health insurance
San Mateo	$48,310	$72,054	$23,743
Santa Barbara	$38,566	$58,467	$19,901
Santa Clara	$44,801	$65,304	$20,503
Santa Cruz	$38,102	$60,314	$22,212
Shasta	$31,850	$55,219	$23,369
Solano	$36,980	$58,867	$21,887
Sonoma	$38,106	$60,264	$22,158
Stanislaus	$32,158	$50,907	$18,749
Sutter/Yuba	$29,209	$52,430	$23,221
Tulare	$28,537	$46,792	$18,255
Ventura	$39,073	$59,290	$20,217
Yolo	$33,717	$53,790	$20,072

SOURCE: Author calculations from the fall 2021 health-inclusive California Poverty Measure.

NOTE: Weighted averages are shown for the thresholds. Households are defined to be CPM poverty unit. Thresholds shows are for households with two adults (which could include seniors) and children under age 18. All 58 counties are not identified separately in the ACS; those counties are shown as groups.

Health spending

Like the CPM, the health-inclusive CPM subtracts out of pocket medical expenses. We follow the KHR approach in the health-inclusive CPM which differences from the CPM approach in several ways. For the health-inclusive CPM, we draw on questions asked in the CPS-ASEC at the person level about self-reported premium and non-premium out of pocket expenditures at the person level. We exclude over the counter medical spending. Finally, while we use model-based imputation from the CPS in both the CPM and the health-inclusive CPM, in the latter we stratify the imputation by insurance type.

Out-of-pocket health insurance premiums

For all but direct purchasers, we use phip_val2 from the CPS-ASEC to capture spending at a person level and model this spending based on cash income, demographic characteristics, and county of residence (among those identified in the CPS-ASEC). Models are stratified by current, self-reported health insurance status. We make use of two outcome variables: whether a person reports any premium spending using logistic regression, and the dollar amount of spending using linear regression. This approach is largely consistent with the approach employed in the CPM that uses model-based imputation from the CPS (Kimberlin, et al. 2022). Sample sizes for the models range from 227 to 22,020. Table B8 provides model coefficients.

TABLE B8

Prediction models: premium out of pocket

Current source of health insurance:	Any out of pocket (logistic regression)				Amount of out of pocket, positive amounts (linear regression)			
	Medicaid	Employer	Medicare	Uninsured	Medicaid	Employer	Medicare	Uninsured
Unit cash income	0.000008	0.00000	0.000003	0.00001	0.0097	0.0022	0.0034	0.013
	(0.00)***	(0.00)	(0.00)***	(0.00)*	(0.00)***	(0.00)***	(0.00)***	(0.01)*
Unit cash income squared	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	(0.00)***	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)**	(0.00)***	(0.00)**
Age	0.22	0.29	0.063	0.15	98.78	113.00	5.87	260.00
	(0.01)***	(0.01)***	(0.02)***	(0.02)***	(39.82)*	(19.80)***	(49.52)	(86.99)**
Age squared	-0.0023	-0.0032	-0.0004	-0.0019	-0.87	-0.81	0.016	-2.87
	(0.00)***	(0.00)***	(0.00)**	(0.00)***	(0.48)	(0.23)***	(0.36)	(1.02)**
Difficulty: hearing	-0.46	0.10	-0.02	0.35	428.00	820.00	-124.00	-1330.00
	(0.55)	(0.22)	(0.10)	(0.79)	(1,064.00)	(784.03)	(202.08)	(1,700.72)
Difficulty: vision	-0.39	0.10	0.31	0.79	435.00	-1240.00	-306.00	-776.00
	(0.44)	(0.30)	(0.14)*	(0.57)	(983.01)	(433.69)**	(296.00)	(507.35)
Difficulty: cognitive	-0.44	-0.12	-0.15	-1.82	-641.00	-107.00	-9.97	7440.00
	(0.27)	(0.20)	(0.13)	(0.73)*	(634.15)	(332.46)	(275.96)	(2,582.05)**
Difficulty: ambulatory	-0.52	-0.16	-0.09	0.49	-493.00	-117.00	132.00	-845.00
	(0.27)	(0.19)	(0.09)	(0.74)	(780.26)	(443.09)	(239.33)	(798.39)
Difficulty: independent living	-0.59	-0.43	-0.47	0.07	1080.00	-763.00	-112.00	3730.00
	(0.32)	(0.27)	(0.13)***	(0.73)	(942.64)	(551.96)	(291.56)	(903.74)***
Difficulty: self-care	0.84	0.15	0.08	0.35	-732.00	567.00	-124.00	-2150.00
	(0.38)*	(0.37)	(0.15)	(1.22)	(957.28)	(729.18)	(323.30)	(1,592.68)
CPM unit of 2	-0.16	-0.53	-0.14	-0.50	-58.60	469.00	52.48	-1110.00
	(0.19)	(0.07)***	(0.07)	(0.27)	(382.56)	(118.53)***	(152.25)	(678.80)
CPM unit of 3	-0.30	-0.70	-0.63	-1.11	-934.00	586.00	184.00	220.00
	(0.20)	(0.07)***	(0.11)***	(0.32)***	(401.39)*	(143.25)***	(261.03)	(678.04)
CPM unit of 4	-0.44	-0.92	-0.68	-1.24	-570.00	767.00	-53.30	-326.00
	(0.20)*	(0.08)***	(0.14)***	(0.35)***	(436.15)	(164.12)***	(334.58)	(749.72)
CPM unit of 5+	-0.63	-0.89	-0.98	-1.49	-1360.00	649.00	-1100.00	-1240.00
	(0.21)**	(0.08)***	(0.18)***	(0.38)***	(468.10)**	(190.97)***	(353.81)**	(736.26)
Black	-0.74	-0.024	-0.48	0.38	-31	-558	-867	236
	(0.23)**	(0.09)	(0.12)***	(0.32)	(528.82)	(165.68)***	(195.32)***	(662.57)
Asian-American	0.06	-0.060	-0.42	-0.34	-362	-476	65	-1650
	(0.17)	(0.05)	(0.09)***	(0.31)	(341.75)	(119.91)***	(235.04)	(694.13)*
All other race	-0.61	-0.07	-0.27	0.41	-1040	-146	404	151

Current source of health insurance:	Any out of pocket (logistic regression)				Amount of out of pocket, positive amounts (linear regression)			
	Medicaid	Employer	Medicare	Uninsured	Medicaid	Employer	Medicare	Uninsured
	-0.34	-0.11	-0.20	-0.41	(375.54)**	-219	-460	-807
Latino	0.04	0.13	-0.43	-0.70	-568	-561	-475	-605
	(0.12)	(0.05)**	(0.08)***	(0.23)**	(281.51)*	(102.99)***	(168.16)**	(606.54)
Any foreign born in unit	-0.14	0.028	-0.12	0.051	105	-103	-115	375
	(0.11)	(0.04)	(0.07)	(0.19)	(255.84)	(90.31)	(176.60)	(486.81)
Any child in unit	0.051	-0.30	0.13	0.61	600	694	214	-186
	(0.12)	(0.05)***	(0.14)	(0.23)**	(251.33)*	(121.31)***	(312.80)	(444.58)
Any senior in unit	0.025	0.41	0.45	0.26	-51.80	-416	-376	805
	(0.12)	(0.05)***	(0.16)**	(0.23)	(249.69)	(128.22)**	(460.48)	(513.64)
Unit highest education: HS	0.50	0.15	0.50	0.15	715.00	226	479	1160
	(0.18)**	(0.14)	(0.14)***	(0.29)	(401.53)	(247.61)	(228.94)*	(623.19)
Unit highest education: some college	0.54	0.12	0.71	0.45	393.00	628	626	621
	(0.18)**	(0.14)	(0.14)***	(0.29)	(309.33)	(241.67)**	(215.53)**	(619.66)
Unit highest education: BA+	0.54	0.047	0.94	0.39	558.00	673	1150	1780
	(0.19)**	(0.14)	(0.14)***	(0.32)	(353.65)	(236.47)**	(220.31)***	(694.27)*
Constant	-7.29	-5.24	-3.65	-5.55	-882	-1320	1030	-6080
	(0.34)***	(0.18)***	(0.58)***	(0.58)***	(869.08)	(467.04)**	(1,555.35)	(1,904.47)**
R-squared					0.08	0.07	0.04	0.26
N	10,203	22,020	7,075	3,493	745	9,191	2,413	227

SOURCES: Author calculations from the 2020-2022 CPS-ASEC, IPUMS and Census.

NOTES: All models include year dummies and county fixed effects. "Medicaid" includes VA and IHS; "Employer" includes Tricare. Direct purchase subsidies calculated directly in the ACS, so direct purchase models note shown. Amount of out-of-pocket spending deflated to 2019. Models are at the individual level.
* p<0.05, ** p<0.01, *** p<0.001

With coefficients in hand, we then predict premium out of pocket for observations in the ACS for all observations except those with direct purchase coverage. We sort observations inversely by their predicted probability of having any out of pocket spending, assigning them zeros until the sum of their weights adds up to the observed percentage of zeros in the CPS-ASEC. The remaining observations are assigned the predicted premium out of pocket spending. Premium out of pocket is capped at Silver plan premium amount applicable to the person.

Tables B9 and B10 indicate that imputed spending is lower in the health-inclusive CPM in the $1-$1,499 range of expenditures, and higher in the $1,500 and up range than in the CPS. However, we do not capture the highest-spending individuals. In other words, we cap relatively few observations.

Covered California subsidies

Following the KHR method, instead of imputing net premium costs for those who purchase insurance directly, we assign subsidies based on the amounts households are expected to pay for health coverage as proscribed in the Affordable Care Act and in the American Rescue Plan Act. We make the assumption that all direct purchasers are buying insurance through Covered California and thus eligible for federal subsidies. We also assume direct purchasers do not have access to affordable employer based insurance, which is also a requirement to qualify for premium tax credits. In this way, we may be over-estimating subsidy amounts for some people, although the number of people who directly purchase coverage 'off-exchange' has been declining in recent years.

We calculate the subsidy amount for people with direct purchase coverage by multiplying the share of income they are expected to contribute to premium costs and subtracting that from the basic health plan costs based on Covered California's silver plan. We then add these subsidy amounts to family resources for those reporting direct coverage. This differs from those who report employer-based coverage for whom we calculate net costs based on silver plan after out-of-pocket premium contributions and those who report Medi-Cal coverage who we simply assign the value of the silver plan to their family resources since there should be virtually no out-of-pocket costs for that coverage.

TABLE B9

Distribution of reported (CPS) and imputed (ACS) out of pocket spending on premiums

	All			Medicaid			Employer			Uninsured		
	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad
No OOP	0.69	0.70	0.73	0.93	0.93	0.92	0.58	0.57	0.57	0.93	0.94	0.94
$1-499	0.06	0.002	0.003	0.03	0.002	0.002	0.07	0.000	0.000	0.03	0.02	0.02
$500-999	0.04	0.003	0.002	0.01	0.002	0.002	0.05	0.003	0.002	0.01	0.01	0.01
$1,000-1,499	0.04	0.01	0.01	0.01	0.003	0.004	0.06	0.01	0.01	0.01	0.01	0.01
$1,500 and over	0.17	0.29	0.26	0.02	0.07	0.07	0.24	0.42	0.42	0.02	0.03	0.03

SOURCES: Author calculations from the 2020-2022 CPS-ASEC and 2019 ACS, IPUMS and Census.

NOTES: Imputations include all individuals, but tables show those under age 65. VA, IHS and Medicare not shown. Imputed values in the ACS based on assigning coefficients from CPS regression models based on observable characteristics. Direct purchase subsidies calculated directly in the ACS, and are not shown in this table.

TABLE B10

Mean and quartiles reported (CPS) and imputed (ACS) positive out of pocket spending on premiums

	All			Medicaid			Employer			Uninsured		
	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad
Mean	$3,099	$3,470	$3,436	$1,693	$2,778	$2,744	$3,053	$3,304	$3,298	$1,637	$1,850	$1,906
25th percentile	$645	$2,680	$2,647	$218	$2,192	$2,150	$753	$2,702	$2,701	$179	$82	$82
Median	$1,721	$3,370	$3,337	$719	$2,741	$2,708	$1,859	$3,336	$3,327	$784	$1,514	$1,567
75th percentile	$3,921	$4,073	$4,029	$2,158	$3,296	$3,296	$3,921	$3,928	$3,908	$2,055	$2,975	$3,077

SOURCES: Author calculations from the 2020-2022 CPS-ASEC and 2019 ACS, IPUMS and Census.

NOTES: Estimates include only those with positive expenditures. Imputations include all individuals, but tables show those under age 65. VA, IHS and Medicare not shown. Imputed values in the ACS based on assigning coefficients from CPS regression models based on observable characteristics. Direct purchase subsidies calculated directly in the ACS, and are not shown in this table.

Other out-of-pocket costs

We use pmed_val from the CPS-ASEC to capture medical spending at a person level and model this spending in an entirely parallel fashion as for premium out-of-pocket spending, except that we do model non-premium out of pocket medical spending for direct purchasers. Table B12 provides model coefficients.

We note that spending across the CPS-ASEC years we use might be expected to be quite different, given that these years cross the COVID-19 pandemic. Table B11 shows that spending was indeed lower in the 2021 and 2022 CPS-ASEC as compared with the 2020 survey (referencing prior year spending). Note that we use the experimental weights created by Census for the 2020 CPS-ASEC throughout. However, differences are modest at the 25th percentile and median spending, amounting to about a percent drop. At the 75th percentile, spending is 10 percent to 20 percent lower in 2020 and 2021 as compared with 2019. Differences across years vary somewhat by insurance type, but in many cases rebound in 2021 to approach 2019 amounts. We conclude that the benefit of pooling three years of data to obtain larger sample sizes outweighs the concern about abnormally low spending in 2020.

TABLE B11

Reported non-premium out of pocket spending in the CPS-ASEC tended to be moderately lower in 2020 and 2021

	CPS-ASEC, 2020-2022	CPS-ASEC 2020	CPS-ASEC 2021	CPS-ASEC 2022
Percentile				
			All	
25th	$100	$100	$95	$94
50th	$283	$300	$285	$283
75th	$900	$1,000	$798	$905
			Medicaid, IHS, VA	
25th	$94	$100	$95	$94
50th	$190	$200	$190	$188
75th	$500	$580	$475	$471
			Employer	
25th	$95	$100	$95	$94
50th	$250	$300	$237	$236
75th	$700	$700	$570	$660
			Direct	
25th	$120	$150	$95	$118
50th	$300	$500	$285	$283
75th	$1,000	$1,200	$950	$942
			Medicare	
25th	$188	$200	$166	$183
50th	$471	$500	$427	$396
75th	$1,092	$1,000	$1,092	$1,131
			Uninsured	
25th	$100	$125	$95	$94
50th	$300	$300	$285	$347
75th	$942	$900	$665	$942

SOURCES: Author calculations from the 2020-2022 CPS-ASEC, IPUMS and Census.

TABLE B12

Prediction models: non-premium out-of-pocket medical spending

Current source of health insurance:	Any out of pocket (logistic regression)					Amount of out of pocket spending (linear regression)				
	Medicaid	Employer	Direct	Medicare	Uninsured	Medicaid	Employer	Direct	Medicare	Uninsured
Unit cash income	0.000005	0.000002	0.000003	0.000006	0.000002	0.0253	0.0013	0.0025	0.0040	0.0032
	(0.00)***	(0.00)***	(0.00)***	(0.00)***	(0.00)	(0.02)	(0.00)***	(0.00)**	(0.00)**	(0.00)**
Unit cash income squared	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
	(0.00)***	(0.00)***	(0.00)***	(0.00)***	(0.00)	(0.00)	(0.00)**	(0.00)	(0.00)**	(0.00)**
Age	0.049	0.033	0.016	0.038	0.010	61.10	12.92	19.01	1.80	19.02
	(0.01)***	(0.00)***	(0.01)	(0.01)**	(0.01)	(24.32)*	(3.29)***	(11.73)	(25.61)	(10.57)
Age squared	-0.00038	-0.00019	0.00010	-0.00025	0.00002	-0.997	-0.03	0.06	0.09	-0.14
	(0.00)***	(0.00)***	(0.00)	(0.00)*	(0.00)	(0.51)	(0.06)	(0.17)	(0.24)	(0.15)
Difficulty: hearing	-0.50	0.05	-0.04	-0.02	0.37	-842	344	-343	-13	23.18
	(0.34)	(0.25)	(0.49)	(0.10)	(0.41)	(949.42)	(269.31)	(599.66)	(206.72)	(402.53)
Difficulty: vision	-0.11	-0.58	0.01	0.00	-0.12	639	512	88	-244	-79.80
	(0.29)	(0.30)	(0.60)	(0.14)	(0.44)	(556.68)	(407.49)	(483.64)	(319.12)	(372.99)
Difficulty: cognitive	-0.011	0.47	-0.43	-0.32	0.076	-966	694	1080	-249	492
	(0.18)	(0.22)*	(0.37)	(0.11)**	(0.39)	(679.84)	(326.01)*	(921.02)	(310.03)	(451.85)
Difficulty: ambulatory	-0.13	0.49	-0.31	0.22	0.22	540	616	-502	66.48	394
	(0.17)	(0.23)*	(0.39)	(0.10)*	(0.34)	(420.83)	(292.07)*	(704.85)	(151.21)	(567.82)
Difficulty: independent living	-0.36	-0.22	0.19	-0.28	-0.40	424	458	1090	316	98.97
	(0.23)	(0.27)	(0.47)	(0.11)*	(0.50)	(483.19)	(388.68)	(872.48)	(247.08)	(481.31)
Difficulty: self-care	0.20	-0.71	0.09	0.10	0.19	-810	1360	-369	928	380
	(0.27)	(0.37)	(0.81)	(0.14)	(0.61)	(834.17)	(870.52)	(1,093.95)	(385.42)*	(1,044.87)
CPM unit of 2	0.23	0.076	-0.45	0.20	-0.11	-543	-138	-100	-232	-64.70
	(0.13)	(0.07)	(0.16)**	(0.07)**	(0.15)	(465.36)	(88.71)	(249.51)	(167.61)	(194.49)
CPM unit of 3	0.087	-0.10	-0.64	-0.25	-0.35	-383	-284	-287	-460	-293.00
	(0.14)	(0.08)	(0.17)***	(0.10)*	(0.16)*	(327.46)	(88.77)**	(257.20)	(222.16)*	(142.23)*
CPM unit of 4	-0.09	-0.25	-0.80	-0.19	-0.54	782	-367	-237	-461	-395.00
	(0.15)	(0.08)**	(0.18)***	(0.13)	(0.17)**	(1,505.44)	(94.29)***	(303.52)	(251.74)	(152.45)**
CPM unit of 5+	-0.23	-0.35	-0.98	-0.89	-0.72	-303	-357	-671	-1300	-433.00
	(0.15)	(0.08)***	(0.19)***	(0.15)***	(0.19)***	(557.86)	(95.39)***	(260.88)*	(285.76)***	(163.63)**
Black	-0.51	-0.07	-0.74	-0.51	-0.07	-49.60	-206.00	7.73	-629.00	-250
	(0.14)***	(0.08)	(0.20)***	(0.11)***	(0.22)	(467.71)	(78.91)**	(475.61)	(184.80)***	(220.64)
Asian-American	-0.19	-0.09	-0.06	-0.40	-0.39	-574	-131	-648	-354	-231
	(0.12)	(0.05)	(0.13)	(0.09)***	(0.18)*	(593.47)	(47.63)**	(196.53)***	(162.11)*	(227.82)

Current source of health insurance:	Any out of pocket (logistic regression)					Amount of out of pocket spending (linear regression)				
	Medicaid	Employer	Direct	Medicare	Uninsured	Medicaid	Employer	Direct	Medicare	Uninsured
All other race	-0.46	0.11	-0.22	-0.49	-0.04	-1320	-172	33.46	697.00	167
	(0.20)*	(0.10)	(0.22)	(0.20)*	(0.30)	(1,079.77)	(70.14)*	(311.75)	(905.28)	(615.86)
Latino	0.05	-0.01	-0.53	-0.21	-0.08	-1010.00	-90.20	-388	-261	-52.70
	(0.08)	(0.04)	(0.10)***	(0.08)**	(0.14)	(826.67)	(46.79)	(151.96)*	(146.53)	(141.72)
Any foreign born in unit	-0.16	-0.08	-0.26	-0.39	0.02	60.75	-73.40	141.00	-99.30	-174
	(0.07)*	(0.04)*	(0.09)**	(0.07)***	(0.10)	(351.03)	(36.23)*	(168.58)	(152.30)	(121.14)
Any child in unit	0.07	0.23	0.24	-0.22	0.26	-888.00	-49.40	-38.10	283	348
	(0.08)	(0.05)***	(0.12)*	(0.12)	(0.11)*	(1,215.63)	(50.80)	(190.33)	(195.58)	(108.58)**
Any senior in unit	-0.06	-0.16	0.17	0.43	-0.23	-702.00	-27.20	-241	-451	177
	(0.08)	(0.05)**	(0.12)	(0.13)**	(0.12)	(819.30)	(52.91)	(157.16)	(284.56)	(227.76)
Unit highest education: HS	-0.01	0.14	0.60	0.27	0.17	-294.00	190.00	399.00	384.00	96.40
	(0.10)	(0.13)	(0.26)*	(0.11)*	(0.13)	(782.84)	(102.88)	(315.31)	(224.20)	(118.72)
Unit highest education: some college	0.25	0.21	0.39	0.50	0.13	-918	248	648	404	151
	(0.09)**	(0.12)	(0.24)	(0.11)***	(0.13)	(1,025.41)	(100.32)*	(299.11)*	(163.30)*	(130.14)
Unit highest education: BA+	0.45	0.38	0.57	0.76	0.18	-704	311	390	651	-70.80
	(0.10)***	(0.12)**	(0.25)*	(0.11)***	(0.15)	(778.14)	(102.85)**	(286.39)	(214.96)**	(153.93)
Constant	-2.60	-0.04	-0.49	-1.61	-0.98	946	293	101	702	243
	(0.17)***	(0.15)	(0.31)	(0.37)***	(0.28)***	(1,572.54)	(120.75)*	(414.75)	(712.67)	(356.47)
R-squared						0.01	0.03	0.07	0.02	0.03
N	10,203	22,020	3,576	7,075	3,553	2,051	15,933	2,206	4,662	1,141

SOURCES: Author calculations from the 2020-2022 CPS-ASEC, IPUMS and Census.

NOTES: All models include year dummies and county fixed effects. "Medicaid" includes VA and IHS; "Employer" includes Tricare. Amount of out-of-pocket spending inflated to fall 2021. Models are at the individual level.

* p<0.05, ** p<0.01, *** p<0.001

Tables B13 and B14 also indicate that we underestimate lower levels of spending and overestimate higher levels of spending. However, we do not adequately capture the highest spending levels. Still, those with high out-of-pocket spending would see their spending capped at silver plan maximums. For non-premium medical spending, we cap 1,594-1,758 observations for individuals under age 65 (depending on the Medi-Cal imputation approach taken) at the Covered California amounts for 2021 ($8,550 for an individual and $17,100 for a family). This corresponds to about 154,000-169,000 people. For premium out-of-pocket costs, the method we use caps reported costs at the silver plan premium. We cap fewer observations than for medical out-of-pocket spending: 124-218 observations. These observation counts correspond to about 12,000-22,000 people. The wide range stems from the fact that Medi-Cal enrollees do not pay health insurance premiums—and the broad imputation approach moves some with employer or direct purchase insurance to Medi-Cal coverage.

TABLE B13

Distribution of reported (CPS) and imputed (ACS) non-premium out of pocket spending

	All			Medicaid			Direct			Employer			Uninsured		
	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad
No OOP	0.46	0.47	0.52	0.80	0.80	0.81	0.38	0.39	0.39	0.28	0.28	0.28	0.68	0.69	0.69
$1-499	0.34	0.05	0.04	0.14	0.07	0.06	0.33	0.02	0.02	0.45	0.05	0.03	0.19	0.03	0.03
$500-999	0.08	0.22	0.19	0.02	0.02	0.02	0.10	0.06	0.05	0.11	0.37	0.36	0.05	0.15	0.15
$1,000-1,499	0.04	0.17	0.16	0.01	0.02	0.02	0.06	0.13	0.12	0.06	0.26	0.28	0.03	0.11	0.12
$1,500 and over	0.08	0.09	0.09	0.02	0.08	0.02	0.13	0.39	0.19	0.10	0.05	0.04	0.05	0.02	0.02

SOURCES: Author calculations from the 2020-2022 CPS-ASEC and 2019 ACS, IPUMS and Census.

NOTES: Imputations include all individuals, but tables show those under age 65. VA, IHS and Medicare not shown. Imputed values in the ACS based on assigning coefficients from CPS regression models based on observable characteristics.

TABLE B14

Mean and quartiles reported (CPS) and imputed (ACS) positive non-premium out of pocket spending

	All			Medicaid			Direct			Employer			Uninsured		
	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad	CPS	ACS - narrow	ACS - broad
Mean	$954	$1,136	$1,214	$1,002	$1,691	$1,920	$1,368	$1,791	$1,865	$885	$978	$1,007	$825	$954	$971
25th percentile	$108	$736	$765	$103	$1	$32	$131	$1,291	$1,373	$108	$735	$771	$109	$739	$763
Median	$272	$985	$1,012	$215	$1,148	$1,297	$327	$1,742	$1,818	$272	$943	$971	$327	$945	$959
75th percentile	$807	$1,294	$1,333	$545	$2,627	$3,020	$1,089	$2,179	$2,243	$753	$1,173	$1,197	$1,027	$1,152	$1,171

SOURCES: Author calculations from the 2020-2022 CPS-ASEC and 2019 ACS, IPUMS and Census.

NOTES: Estimates limited to those with positive out of pocket spending. Imputations include all individuals, but tables show those under age 65. VA, IHS and Medicare not shown. Imputed values in the ACS based on assigning coefficients from CPS regression models based on observable characteristics.

Development of direct purchase and Medicaid scenarios

In the report we present three Medicaid scenarios:

- Zero out Medicaid from family resources and recalculate poverty.
- Add resources from Medicaid for all those who are uninsured and currently both categorically and income-eligible for Medicaid and recalculate poverty. In cases where a person has been assigned a tax penalty for not carrying insurance, also zero out this penalty.
- Add resources from Medicaid for all those who are uninsured and currently income-eligible but categorically ineligible for Medicaid (e.g., undocumented immigrants ages 26-49). In cases where a person has been assigned a tax penalty for not carrying insurance, also zero out this penalty.

We also present one direct purchase scenario where we zero out government premium subsidies and recalculate poverty. In all cases the changes affect the resources of those who gain or lose coverage or subsidies, but also family members who share resources, but who are not directly affected by the hypothetical change. This is consistent with our approach to measuring poverty in the CPM.

It is also important to note that we do not recalculate out-of-pocket costs for those whose insurance status is changed in the Medicaid scenarios. We elected not to do this because out-of-pocket costs are similar for Medicaid participants and the uninsured (see Tables B9 and B13). In particular, 94 percent of those who are uninsured report no premium out of pocket spending in the past year, and 69 percent report no other medical out of pocket spending. For those with Medicaid coverage, the similar shares are 93 percent and 80 percent, respectively.

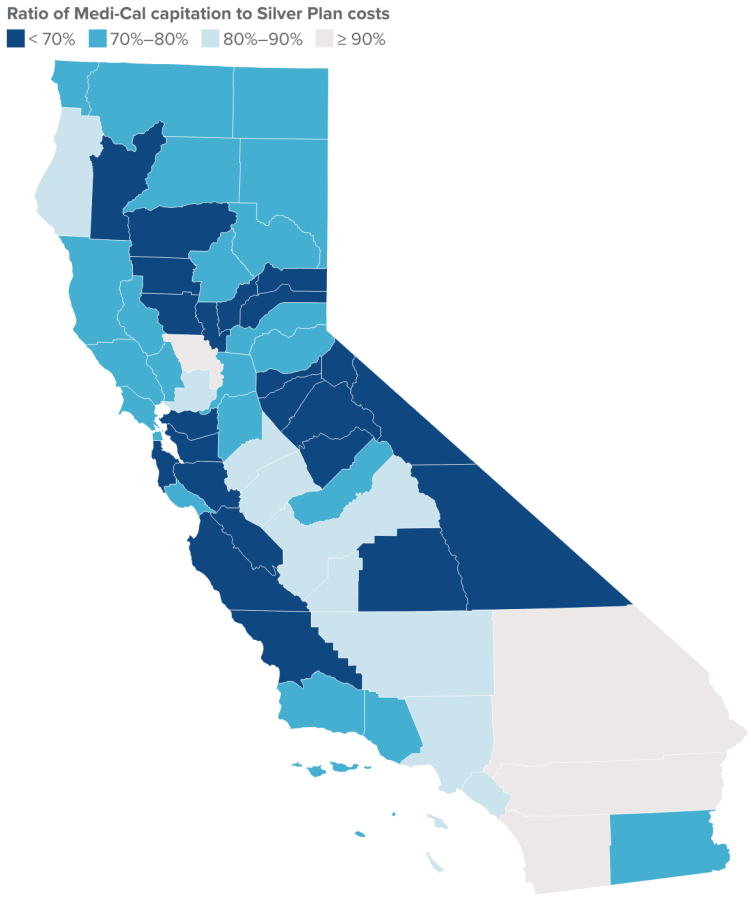
Poverty estimates given these scenarios are shown in Tables D4 through D6. In all cases we calculate only immediate, direct effects of these programs. This is consistent with the approach taken in the CPM, but carries the important caveat that we would expect indirect effects of big policy changes like these to phase in over time. For example, it is likely that some of those who purchase insurance from Covered California would remain uninsured if subsidies were unavailable, increasing their poverty beyond the levels indicated by the scenario.

Appendix C. Comparing Medi-Cal Capitation Rates to Covered California Silver Plan Costs Used for HICPM Thresholds

An admittedly simplistic way to compare the 'value' of Medi-Cal relative to the 'value' of health insurance based on the Covered California plans we use to determine the dollar amount of health need captured in the health-inclusive CPM is to look at the monthly capitation rates paid to Medi-Cal managed care plans. Nearly all people with Medi-Cal coverage are enrolled in managed care plans, which receive set monthly payments from the state to organize and deliver medical care. Overall, the Covered California silver plan costs used to construct the poverty threshold are about 20 percent higher, on average, compared to Medi-Cal capitation rates (Figure C1). However this varies across regions of the state. In some areas – most notably the Inland Empire (Riverside and San Bernardino) and San Diego counties—Medi-Cal capitation rates are nearly equivalent to the cost of the silver plan from Covered California used in the health-inclusive CPM. In contrast, in counties in the Bay Area and Far Northern and Eastern regions of the state Medi-Cal capitation rates are more than one-third lower compared to silver plan costs.

FIGURE C1

Medi-Cal capitation rates are closest to Silver Plan costs in the Inland Empire, San Diego, and Yolo County



SOURCE: Authors' calculations from 2021 Medi-Cal Managed Care capitation rate files; Medi-Cal Certified Eligibles Tables, by County 2010 to most current month.

NOTE: Weighted monthly capitation rates are calculated based on estimated county-level caseload counts for eligibility categories that align with published capitation rates. We use the highest amount for the upper-bound limit when calculating Medi-Cal capitation rates.

We use publicly available information from the California Health and Human Services Open Data Portal to estimate county-level capitation rates for Medi-Cal to compare with the silver plan costs used in the health-inclusive CPM. Specifically, we use county caseload counts by sex and age categories, aid code categories, and dual-enrollment status to construct six groups of Medi-Cal enrollees that correspond to different rates paid to Medi-Cal managed care plans.

The six groups include: children, parent and caretaker adults under 65, adults who gained coverage from ACA expansions, seniors and people with disabilities (SPD) not dually enrolled in Medicare, SPDs with Medicare (dual enrollees), and pregnant women. First we calculated monthly average caseloads in 2021 for all available groups across files. We combine the counts of SPDs from the aid code categories with counts on seniors and dual-eligibles under 65 to estimate the number of SPDs with and without Medicare coverage. We estimate the number of parents and caretakers by subtracting 'expansion' adults in the aid code categories from all non-elderly adults based on sex and age. We estimate the number of people needing maternity care by applying California's fertility rate (~5.5%) to caseload counts of the number of females ages 19 – 44. The county counts we used for each of these groups are included in Table C1 below.

We used the 2021 Medi-Cal capitation rates files for each of the different types of managed care plans (two-plan, COHS, GMC, and rural expansion) also from the CHHS open data portal to calculated weighted averages of monthly capitation rates. The Medi-Cal capitation rate files include a lower-bound, midpoint, and upper-bound monthly rate and we used the upper-bound amount in our estimates of county monthly capitation rates. For most large enrollee groups (e.g. children, parents, and expansion adults) the difference between the lower and upper bound payment rates is quite small), though for smaller groups called out in the capitation rates (e.g. SPDs, maternity care) the differences are larger.

TABLE C1

Caseload counts by age categories, aid code categories, and dual-enrollment categories across counties.

County	Total enrollment under 65	Children	SPD, non-dual	SPD, dual	Maternity	Expansion adult	Parent/ Caretaker	Weighted monthly capitation rate
Alameda	395,242	136,056	17,974	10,662	4,940	152,310	73,300	$401
Alpine	282	101	27	0	3	105	46	$468
Amador	8,277	3,145	215	514	93	2,804	1,506	$394
Butte	75,484	26,899	4,120	4,890	908	25,469	13,198	$432
Calaveras	12,483	4,570	399	665	140	4,465	2,244	$405
Colusa	10,105	4,873	103	351	115	2,579	2,084	$354
Contra Costa	269,728	103,857	8,861	10,621	3,324	92,371	50,694	$391
Del Norte	11,624	4,419	985	803	126	3,504	1,787	$501
El Dorado	38,435	13,977	1,308	2,001	445	14,420	6,284	$413
Fresno	482,230	211,837	16,681	12,093	5,679	135,346	100,594	$327
Glenn	12,646	5,809	331	573	144	3,231	2,558	$371
Humboldt	56,773	18,738	2,905	2,420	745	21,903	10,062	$523
Imperial	87,460	38,015	2,540	2,983	1,034	25,618	17,270	$331
Inyo	5,695	2,321	24	268	61	1,974	1,047	$368
Kern	439,855	194,396	16,775	9,830	5,194	120,497	93,163	$326
Kings	61,244	27,749	1,901	1,791	715	17,148	11,940	$320
Lake	31,711	11,774	1,427	2,198	340	9,967	6,005	$467
Lassen	8,129	3,134	372	534	91	2,370	1,628	$467
Los Angeles	3,715,125	1,323,667	80,301	104,279	45,226	1,398,689	762,963	$311
Madera	75,448	34,724	1,329	1,926	858	20,569	16,042	$291
Marin	48,135	16,540	411	2,017	571	18,270	10,326	$465
Mariposa	5,325	1,774	127	320	58	2,079	967	$406
Mendocino	38,844	14,753	949	1,842	450	13,397	7,453	$461
Merced	138,212	63,748	4,024	3,961	1,622	36,903	27,954	$376
Modoc	3,312	1,260	143	225	33	1,025	626	$453
Mono	3,543	1,409	-10	84	41	1,398	621	$381
Monterey	195,575	84,762	1,029	4,863	2,326	47,061	55,534	$386

County	Total enrollment under 65	Children	SPD, non-dual	SPD, dual	Maternity	Expansion adult	Parent/ Caretaker	Weighted monthly capitation rate
Napa	32,656	13,460	352	1,544	372	10,192	6,736	$435
Nevada	25,676	8,800	681	1,419	307	10,104	4,365	$417
Orange	857,958	322,804	17,770	16,121	10,162	321,496	169,605	$356
Placer	63,830	25,125	2,661	3,154	751	21,587	10,552	$411
Plumas	6,286	2,235	200	443	74	2,235	1,099	$411
Riverside	882,745	379,092	28,929	20,787	10,492	276,682	166,763	$348
Sacramento	547,699	216,480	31,593	17,312	6,539	172,701	103,074	$391
San Benito	18,574	8,154	251	501	226	5,559	3,883	$313
San Bernardino	872,624	371,639	34,452	20,308	10,551	270,227	165,447	$355
San Diego	876,165	330,863	29,579	22,146	10,704	321,437	161,436	$373
San Francisco	185,114	51,902	8,710	7,040	2,128	84,356	30,978	$437
San Joaquin	288,659	128,560	13,246	6,671	3,364	80,712	56,106	$327
San Luis Obispo	61,099	23,843	1,367	2,952	730	21,436	10,771	$347
San Mateo	139,173	50,299	1,121	4,468	1,657	53,888	27,739	$402
Santa Barbara	154,839	68,146	1,942	4,790	1,882	45,732	32,347	$356
Santa Clara	373,472	137,366	10,034	8,377	4,317	142,999	70,379	$350
Santa Cruz	76,208	27,476	2,395	2,199	933	27,247	15,958	$451
Shasta	63,296	24,445	3,450	4,747	721	18,858	11,075	$478
Sierra	693	245	14	53	7	244	130	$386
Siskiyou	18,110	6,535	991	1,282	197	5,944	3,161	$482
Solano	121,945	47,319	4,574	6,013	1,501	40,002	22,536	$480
Sonoma	120,347	47,321	2,159	5,588	1,428	42,328	21,523	$455
Stanislaus	237,759	100,427	6,686	8,471	2,839	69,913	49,423	$371
Sutter	40,161	17,092	1,061	1,665	459	11,468	8,416	$384
Tehama	27,897	11,938	1,291	1,703	316	7,328	5,321	$394
Trinity	5,064	1,697	194	324	54	1,880	915	$476
Tulare	256,104	114,357	7,032	6,953	2,972	67,583	57,207	$275
Tuolumne	13,370	4,745	548	981	151	4,737	2,208	$414
Ventura	230,170	96,534	6,989	5,571	2,754	76,730	41,592	$408
Yolo	55,317	21,762	1,906	2,173	685	18,825	9,966	$478
Yuba	33,161	14,022	1,839	1,631	378	9,195	6,096	$406

SOURCES: Author calculations from 2021 Medi-Cal capitation rate files; Medi-Cal certified enrollees by county 2010 – current month.

NOTES: Weighted monthly capitation rates are calculated by multiplying the upper-bound capitation rate for each eligibility group by the estimated average monthly caseload for each eligibility group.

Appendix D. Detailed Tables

The following tables provide estimates that underlie the report figures, along with additional detail. Note that education level refers to the highest level attained by an adult family member in the CPM unit. Also note that we include individuals under age 65 in all of the estimates presented, but we did not restrict the sample to those in family units with only members under age 65.

In principle poverty should nearly always be lower under the CPM approach as compared with the health-inclusive CPM approach because the value of insurance cannot exceed the cost of insurance or put another way the value of health insurance cannot go towards non-health related needs. Capping medical expenditures in the health-inclusive CPM (not done in the CPM) could remove a few individuals from poverty. Table D1 shows slightly higher poverty among those under age 65 (CPM: 10.9% vs. health-inclusive CPM: 11.5%). However, the table also shows notably lower poverty rates (of 1 to 2 percentage points) under the health-inclusive CPM approach for multiple age and race/ethnic subgroups. These are driven by modifications to our methodology for imputing out-of-pocket costs described in Appendix B, which lowers costs for individuals with Medi-Cal in the health-inclusive CPM as compared with the CPM.

We note as well that deep poverty and near poverty are computed differently in the CPM as compared with the health-inclusive CPM. In the CPM, deep poverty is defined as having net resources less than half of the poverty threshold, and near poverty is having resources between 100 to 149 percent of the poverty threshold. In the health inclusive approach, the poverty threshold is split into the non-health need and the health need, and the health need is always included at 100 percent. Only the non-health need is scaled (e.g., to 50 percent in the case of the deep poverty calculation).

Tables D2 through D6 present both the narrow and broad approaches to correcting for Medi-Cal underreporting (see Appendix B for the rationale for correcting for underreporting and a description of both approaches). All report figures are based on the narrow approach. Differences in poverty rates across the two approaches are often small (within a percentage point of each other), but are large for non-citizens (including both those with and without documentation status), who have much higher rates of being uninsured under the narrow approach as compared with the broad approach. This is because under the narrow approach, those flagged as undocumented for purposes of the CPM are automatically classified as uninsured, while in the broad approach they may have insurance. These differences are also discernible for adults and for Latinos.

There are also notable differences in poverty rates across insurance coverage types apart from Medi-Cal (Table D3). In the broad approach, some lower income individuals are imputed to have Medi-Cal regardless of their self-reported coverage, thus lowering the poverty rate for the remaining individuals with employer-based, direct purchase, and other types of coverage. In the narrow approach, we take self-reported insurance as given (with the exception of those flagged as undocumented).

In addition, the scenario presented in Table D4 where we first zero out Medi-Cal and assume that all Medi-Cal enrollees are uninsured (corresponding to report Figure 3), the broad imputation approach produces poverty effects that are 2-3 percentage points larger as compared to the narrow approach. The opposite is true of the Medi-Cal expansion scenarios, where the narrow imputation approach produces larger estimates than the broad approach.

Turning to the scenarios involving direct purchase subsidies (Table D5), the narrow imputation approach again produces larger estimates of the poverty effects of subsidies than the broad approach because the narrow imputation does not reassign any low-income direct purchasers to Medi-Cal, while the broad approach does.

Finally, focusing in on Medi-Cal and direct purchase enrollees (Table D6)—and not surprisingly—we see much larger effects of eliminating public spending on enrollees as compared with all Californians.

TABLE D1

Baseline comparisons of the CPM and health-inclusive CPM

	Poverty (0-99%)		Deep poverty (0-49%)		Near poverty (100-149%)	
	CPM	health-inclusive CPM (narrow)	CPM	health-inclusive CPM (narrow)	CPM	health-inclusive CPM (narrow)
All	10.9	11.5	3.0	3.6	17.6	16.8
Age						
0-5	8.4	7.0	1.5	1.4	22.0	19.4
6-18	9.8	8.5	1.9	1.8	22.6	21.2
19-25	18.2	16.8	6.7	6.1	19.8	20.4
26-44	9.6	11.3	2.7	3.6	15.9	14.9
45-64	11.2	13.1	3.2	4.5	14.0	13.9
Citizenship						
Not a citizen	19.0	27.0	5.2	9.5	26.2	23.3
Citizen	9.7	9.1	2.7	2.7	16.3	15.8
Race/ethnicity						
White	8.8	8.4	3.4	3.4	9.8	9.5
Black	12.2	11.7	2.8	2.9	21.2	20.1
Latino	12.7	14.5	2.7	3.7	25.7	24.3
Asian	10.3	10.6	3.5	4.2	11.6	11.2
Other	8.6	8.1	2.3	2.5	12.4	11.6
Highest education in family						
Less than High School	27.4	31.8	6.8	9.7	38.6	35.0
High school	16.6	18.2	4.2	5.4	29.7	28.2
Some college	11.9	12.4	3.1	3.6	21.7	20.9
College or more	6.3	6.1	2.1	2.3	8.1	7.8

	Poverty (0-99%)		Deep poverty (0-49%)		Near poverty (100-149%)	
	CPM	health-inclusive CPM (narrow)	CPM	health-inclusive CPM (narrow)	CPM	health-inclusive CPM (narrow)
Region						
Northern	10.3	9.9	3.7	3.7	15.1	13.5
Sacramento	9.0	9.9	2.8	3.2	14.3	13.0
Bay Area	10.6	11.0	3.0	3.7	13.5	13.4
Central valley and Sierra	8.5	9.6	2.3	2.9	16.0	14.5
Central Coast	11.4	13.5	3.0	4.6	18.6	18.7
Inland Empire	9.5	9.7	2.8	3.0	17.9	16.8
Los Angeles	12.6	13.3	3.2	3.9	21.9	20.7
Orange	12.6	13.3	3.4	3.8	18.1	18.2
San Diego	11.5	11.1	3.4	3.7	17.9	17.3

SOURCES: Author calculations from the fall 2021 health inclusive CPM and Fall 2021 California Poverty Measure.

NOTES: Estimates include those under age 65. "Narrow" refers to Medi-Cal underreporting correction procedures described in Technical Appendix B. A comparison of poverty rates between the "narrow" and "broad" approaches is shown in Table 2. Poverty is <100% of the health-inclusive CPM threshold; deep poverty is <50% of the threshold, and near poverty is 100-149% of the threshold.

TABLE D2

Health-inclusive CPM poverty by demographics and region

	Poverty (0-99%)		Deep poverty (0-49%)		Near poverty (100-149%)	
	Narrow Medi-Cal correction	Broad Medi-Cal correction	Narrow Medi-Cal correction	Broad Medi-Cal correction	Narrow Medi-Cal correction	Broad Medi-Cal correction
All	11.5	10.8	3.6	3.2	16.8	17.1
Age						
0-5	7.0	7.1	1.4	1.4	19.4	19.5
6-17	8.5	8.5	1.8	1.9	21.2	21.1
18-25	16.8	17.4	6.1	6.2	20.4	20.3
26-44	11.3	10.1	3.6	3.0	14.9	15.5
45-64	13.1	12.0	4.5	3.8	13.9	14.2
Citizenship						
Not a citizen	27.0	21.8	9.5	6.4	23.3	25.7
Citizen	9.1	9.2	2.7	2.7	15.8	15.7
Race/ethnicity						
White	8.4	8.3	3.4	3.2	9.5	9.6
Black	11.7	11.3	2.9	2.7	20.1	20.3
Latino	14.5	13.3	3.7	3.3	24.3	24.8
Asian	10.6	10.0	4.2	3.6	11.2	11.4
Other	8.1	7.9	2.5	2.3	11.6	11.6
Highest education in family						
Less than High School	31.8	28.6	9.7	8.0	35.0	37.0
High school	18.2	16.8	5.4	4.9	28.2	29.0
Some college	12.4	12.0	3.6	3.3	20.9	20.9
College or more	6.1	5.8	2.3	2.0	7.8	7.9
Region						
Northern	9.9	9.6	3.7	3.7	13.5	13.9
Sacramento	9.9	9.2	3.2	3.0	13.0	13.3
Bay Area	11.0	10.5	3.7	3.2	13.4	13.6
Central valley and Sierra	9.6	8.7	2.9	2.4	14.5	14.5
Central Coast	13.5	12.4	4.6	4.1	18.7	19.1
Inland Empire	9.7	9.5	3.0	2.9	16.8	16.6
Los Angeles	13.3	12.3	3.9	3.4	20.7	21.2
Orange	13.3	12.3	3.8	3.3	18.2	19.0
San Diego	11.1	11.2	3.7	3.6	17.3	17.5

SOURCES: Author calculations from the fall 2021 health inclusive CPM.

NOTES: Estimates include those under age 65. "Narrow" and "broad" refer to Medi-Cal underreporting correction procedures described in Technical Appendix B. Poverty is <100% of the health-inclusive CPM threshold; deep poverty is <50% of the threshold, and near poverty is 100-149% of the threshold. Technical Appendix E lists the counties within each region.

TABLE D3

Health-inclusive CPM poverty by insurance coverage

	Poverty (0-99%)		Deep poverty (0-49%)		Near poverty (100-149%)	
	Narrow Medi-Cal correction	Broad Medi-Cal correction	Narrow Medi-Cal correction	Broad Medi-Cal correction	Narrow Medi-Cal correction	Broad Medi-Cal correction
Medi-Cal	18.5	18.4	4.5	4.8	31.5	29.7
Direct purchase	15.6	10.9	8.5	5.0	12.6	12.5
Employer-based	4.2	2.2	1.3	0.6	8.9	7.0
Uninsured	38.4	34.7	13.4	12.6	25.3	26.3
All other	13.7	9.3	3.7	2.4	19.9	15.3

SOURCES: Author calculations from the fall 2021 health inclusive CPM.

NOTES: Estimates include those under age 65. "Narrow" and "broad" refer to Medi-Cal underreporting correction procedures described in Technical Appendix B. Poverty is <100% of the health-inclusive CPM threshold; deep poverty is <50% of the threshold, and near poverty is 100-149% of the threshold. We collapse Medicare & VA categories for insurance into "all other" because both are small categories for the <65.

TABLE D4

Health-inclusive CPM poverty changes, Medi-Cal scenarios

	Narrow Medi-Cal correction				Broad Medi-Cal correction			
		Percentage point difference if:				Percentage point difference if:		
	Poverty rate	Zero out Medi-Cal	Income eligible uninsured obtain Medi-Cal	Medi-Cal expansion January 2024	Poverty rate	Zero out Medi-Cal	Income eligible uninsured obtain Medi-Cal	Medi-Cal expansion January 2024
All	11.5	7.4	-0.2	-0.6	10.8	10.3	-0.5	-0.2
Age								
0-5	7.0	9.9	-0.1	-0.7	7.1	12.8	-0.3	-0.2
6-18	8.5	10.5	-0.3	-1.0	8.5	14.0	-0.5	-0.3
19-25	16.8	7.4	-0.3	-0.4	17.4	10.4	-0.7	-0.1
26-44	11.3	5.9	-0.2	-0.8	10.1	8.5	-0.4	-0.2
45-64	13.1	6.2	-0.4	-0.3	12.0	8.9	-0.5	-0.1
Citizenship status								
Not a citizen	27.0	10.5	-1.1	-2.9	21.8	16.1	-1.2	-0.7
Citizen	9.1	6.9	-0.1	-0.3	9.2	9.4	-0.4	-0.1
Family citizenship status								
All citizens	8.8	5.4	0.0	0.0	8.8	7.3	-0.3	0.0
Mixed citizenship	15.5	13.8	-0.8	-2.5	13.1	19.7	-0.9	-0.6
No citizens	33.8	5.5	-1.1	-1.5	31.4	9.3	-1.0	-0.5
Race/ethnicity								
White	8.4	3.7	0.0	0.0	8.3	5.2	-0.2	0.0
Black	11.7	9.4	0.0	0.0	11.3	12.1	-0.3	0.0
Latino	14.5	11.2	-0.5	-1.4	13.3	15.4	-0.8	-0.4
Asian	10.6	4.2	-0.3	-0.2	10.0	6.8	-0.2	0.0
Other	8.1	5.6	0.0	-0.1	7.9	7.5	-0.2	0.0
Highest education in family								
Less than High School	31.8	20.6	-0.9	-4.6	28.6	27.6	-1.4	-1.3
High school	18.2	14.0	-0.5	-1.3	16.8	18.9	-0.9	-0.3
Some college	12.4	9.0	-0.2	-0.4	12.0	12.3	-0.5	-0.1
College or more	6.1	2.4	-0.1	-0.1	5.8	3.8	-0.2	0.0
Region								
Northern	9.9	11.7	0.0	-0.5	9.6	15.5	-0.4	0.0
Sacramento	9.9	7.6	-0.1	-0.4	9.2	10.3	-0.4	0.0
Bay Area	11.0	5.3	-0.2	-0.5	10.5	7.8	-0.2	-0.1
Central valley and Sierra	9.6	10.2	-0.2	-0.8	8.7	13.7	-0.5	-0.1
Central Coast	13.5	9.0	-0.4	-1.6	12.4	12.5	-0.9	-0.6
Inland Empire	9.7	7.6	-0.2	-0.5	9.5	9.4	-0.5	-0.1
Los Angeles	13.3	7.9	-0.3	-0.8	12.3	11.4	-0.4	-0.2
Orange	13.3	5.9	-0.3	-0.6	12.3	9.1	-0.8	-0.3
San Diego	11.1	5.5	-0.2	-0.3	11.2	7.5	-0.7	0.0

SOURCES: Author calculations from the fall 2021 health inclusive CPM.

NOTES: Estimates include individuals under age 65. "Narrow" and "broad" refer to Medi-Cal underreporting correction procedures described in Technical Appendix B. First scenario (zero out Medi-Cal) assumes all Medi-Cal enrollees become uninsured. Second scenario (income eligible obtain Medi-Cal) assumes all currently income-eligible residents who are uninsured obtain Medi-Cal. Third scenario (Medi-Cal expansion) assumes all income-eligible unauthorized immigrants obtain Medi-Cal.

TABLE D5

Health-inclusive CPM poverty changes, Covered California subsidy scenarios

	Narrow Medi-Cal correction			Broad Medi-Cal correction		
		Percentage point change if:			Percentage point change if:	
	Poverty rate	Zero out Covered California subsidies - ARPA	Zero out Covered California subsidies - ACA	Poverty rate	Zero out Covered California subsidies - ARPA	Zero out Covered California subsidies - ACA
All	11.5	1.0	1.0	10.8	0.8	0.7
Age						
0-5	7.0	0.7	0.6	7.1	0.4	0.4
6-17	8.5	1.0	0.9	8.5	0.7	0.6
18-25	16.8	1.1	1.0	17.4	0.8	0.7
26-44	11.3	0.8	0.7	10.1	0.5	0.5
45-64	13.1	1.5	1.4	12.0	1.2	1.1
Citizenship						
Not a citizen	19.0	1.2	1.1	21.8	0.9	0.8
Citizen	9.7	1.0	0.9	9.2	0.7	0.7
Family citizenship status						
All citizens	8.8	1.0	0.9	8.8	0.7	0.6
Mixed citizenship	15.5	1.2	1.1	13.1	0.9	0.8
No citizens	33.8	1.3	1.2	31.4	1.0	0.9
Race/ethnicity						
White	8.4	1.1	1.1	8.3	0.8	0.8
Black	11.7	0.5	0.5	11.3	0.4	0.4
Latino	14.5	0.9	0.8	13.3	0.6	0.5
Asian	10.6	1.6	1.4	10.0	1.2	1.1
Other	8.1	0.6	0.5	7.9	0.4	0.4
Highest education in family						
Less than High School	31.8	1.2	1.0	28.6	0.7	0.5
High school	18.2	1.2	1.1	16.8	0.9	0.8
Some college	12.4	1.1	1.0	12.0	0.8	0.7
College or more	6.1	1.0	0.9	5.8	0.7	0.6
Region						
Northern	9.9	1.6	1.5	9.6	1.2	1.1
Sacramento	9.9	1.0	0.9	9.2	0.6	0.5
Bay Area	11.0	1.2	1.1	10.5	1.0	0.9
Central valley and Sierra	9.6	0.9	0.8	8.7	0.7	0.5
Central Coast	13.5	1.1	1.0	12.4	0.8	0.7
Inland Empire	9.7	0.7	0.7	9.5	0.5	0.5
Los Angeles	13.3	1.0	0.9	12.3	0.7	0.6
Orange	13.3	1.5	1.4	12.3	1.0	0.9
San Diego	11.1	1.2	1.1	11.2	0.8	0.7

SOURCES: Author calculations from the fall 2021 health inclusive CPM.

NOTES: Estimates include individuals under age 65. "Narrow" and "broad" refer to Medi-Cal underreporting correction procedures described in Technical Appendix B. Scenarios assume all direct purchase enrollees lose subsidies. *ACA subsidies scenario shows the difference between poverty rates with and without ACA subsidies , not the difference between ARPA and ACA subsidies.

TABLE D6

Poverty after zeroing out programs for individuals with the specified insurance type

	Narrow Medi-Cal correction		Broad Medi-Cal correction	
	Poverty rate	Percentage point increase if zero out program	Poverty rate	Percentage point increase if zero out program
Medi-Cal participants	18.5	22.7	18.4	23.6
Covered California participants – ARPA subsidies	15.6	10.0	10.9	8.2
Covered California participants – ACA subsidies	16.4	9.2	11.7	7.3

SOURCES: Author calculations from the fall 2021 health inclusive CPM.

NOTES: Estimates include individuals under age 65. "Narrow" and "broad" refer to Medi-Cal underreporting correction procedures described in Technical Appendix B.

Appendix E. Regional Grouping of Counties

Region	List of counties
Northern	Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama, and Trinity
Sacramento area	El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba
Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma
Central Valley and Sierra	Alpine, Amador, Calaveras, Fresno, Inyo, Kern, Kings, Madera, Mariposa, Merced, Mono, San Joaquin, Stanislaus, Tulare, and Tuolumne
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, and Ventura
Inland Empire	Imperial, Riverside, and San Bernardino

NOTE: The three most populous counties—Los Angeles, Orange, and San Diego—are presented on their own.

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Public Policy Institute of California
500 Washington Street, Suite 600
San Francisco, CA 94111
T: 415.291.4400
F: 415.291.4401
PPIC.ORG

PPIC Sacramento Center
Senator Office Building
1121 L Street, Suite 801
Sacramento, CA 95814
T: 916.440.1120
F: 916.440.1121