University of California, Berkeley
Center for Labor Research and Education

Research Brief

How Would Health Care Reforms Change the Spending of California Families Without an Employer Plan?

by Ken Jacobs, Laurel Tan, Roland McDevitt, Jon Gabel and Ryan Lore

December 2009

This brief was funded by a grant from The California Endowment.

The California Endowment

The health reform bills recently passed by the House and proposed by Senate Democrats would subsidize premiums and cost sharing for low- and middle-income Californians purchasing through a health insurance exchange. The legislation aims to make health care more affordable for individuals and families that have incomes at or below 400 percent of the Federal Poverty Level (FPL), equivalent to $43,320 for a single individual or $73,240 for a family of three. The exchange would offer a choice of plans that meet standards for coverage and would provide information to consumers to help them make educated choices about the policies they are purchasing. The exchange would only be open to those who are not offered affordable coverage on the job.[1]

This paper examines health care spending for the estimated two million Californians who would qualify for subsidies under the proposed exchange.[2] We report spending under the House and Senate bills, and for plans currently purchased in the individual market. The analysis focuses on spending for single individuals and families of three, the median household size for Californians enrolled in family coverage.[3]

Ken Jacobs is chair of the Center for Labor Research and Education at UC Berkeley. Laurel Tan is a policy analyst at the Center for Labor Research and Education at UC Berkeley. Roland McDevitt is director of health care research for Watson Wyatt Worldwide, a benefit-consulting firm in Arlington, Virginia. Jon Gabel is a senior fellow at the National Opinion Research Center (NORC) in Bethesda, Maryland. Ryan Lore is a research associate at Watson Wyatt Worldwide in Arlington, Virginia.

Specifically we find:

- Californians with an income of $16,245 a year would save $5,053 on average on premiums and out-of-pocket costs under the House bill compared to what they would spend in the current individual market; they would save $4,116 under the Senate bill.
- Those with an income of $43,320 a year would save $838 a year under both plans compared to what they would spend in the current individual market.
- California families of three with typical health care use earning less than $59,000 would spend significantly less under the House bill than the Senate bill, while those earning between $59,000 and $73,240 would spend less under the Senate bill.
- Families with high health care use earning less than $46,000 would spend up to $2,937 less on annual member premiums and out-of-pocket costs under the House bill than the Senate bill, but some of those earning between $46,000 and $73,240 would spend less under the Senate bill.

Premium Contributions and Cost Sharing in Exchange After Reform

Proposed subsidies would make premiums more affordable for Californians without job-based coverage by capping enrollee contributions at a set percentage of income for those below 400 percent FPL. Some subsidy-eligible families would pay the entire premium if it is less than their premium cap. For these families, our analysis uses the Congressional Budget Office's estimate of the average premium of the three lowest-cost 2016 Basic Plans under the House bill, adjusted to 2009 dollars.[4]

Subsidies would also reduce out-of-pocket spending for low- and middle-income individuals in the exchange. This would increase a plan's actuarial value, a measure of the percentage of medical costs paid by the health plan. Approximately 8 to 12 percent of individuals and 9 to 16 percent of families eligible for subsidies in the exchange would have out-of-pocket expenses that reach the annual limits for their income level, as shown in Tables 1 and 2. For these high users of health services, out-of-pocket spending would be equivalent to the out-of-pocket limits set in the bills.

For the majority of individuals and families who do not reach the spending limits, out-of-pocket spending would instead reflect the level and type of services used, the use of out-of-network providers, and the deductible and cost-sharing amounts of the specific plan each family selects in the exchange. The income-specific actuarial values stipulated in the bills are the best indicator we currently have to estimate out-of-pocket expenses for medical services. Our analysis uses simulated median out-of-pocket spending data for California employer-sponsored plans with actuarial values that are similar to those proposed in the bills. Provided by Watson Wyatt, the 2009 spending estimates are based on simulation of claims payment for a standard population. The medical claims data for the standard population are from the 2006 MarketScan Commercial Claims database from Thomson Reuters. Most contributing employers are large firms. We adjusted medical expenses for this population to 2009 levels of spending for Californians enrolled in employer-sponsored insurance.

The Congressional Budget Office has estimated average out-of-pocket spending under both bills,[5] but we used median spending to compare the two bills. The median is a better measure of what the typical family would spend because medical costs are highly concentrated among a small fraction of the population,[6] making average out-of-pocket spending significantly greater than the median. A recent study in *Health Affairs* by Jon R. Gabel et al. found that for adults the national average out-of-pocket spending in employer-based plans was $729 in 2007, compared to a median of $288.[7]

Single Coverage Example

Table 1 provides examples of expected spending after subsidies for Californians who purchase single coverage in the exchange. All figures are in 2009 dollars. Adding premium contributions to median out-of-pocket costs, we find that total spending (measured in medians) in our examples would range from 8.2 percent of income for an individual with an annual family income of $18,963 (175 percent FPL) to 13.0 percent of income for an individual with a family income of $29,783 (275 percent FPL) under the Senate bill, and 5.1 to 11.6 percent of income under the House bill. While fewer than 12 percent of individuals would exceed their out-of-pocket limits, those who do would spend between 15.6 and 19.1 percent of income under the Senate bill, compared to a range of 8.4 to 19.6 percent under the House bill.

Table 1

Expected Spending after Subsidies for Californians with Single Coverage Purchased in Exchange after Health Reform (2009 Dollars)

Bill	FPL	Family Income	Actuarial Value of Plan	Member Premium after Subsidy	Out-of-Pocket Spending ($)		Total Member Spending ($)		Total Member Spending (% Income)		Percent of Single Adults Reaching OOP Max
					Median	Max	Median	Max	Median	Max	
Senate	175%	18,953	80%	1,028	523	1,933	1,551	2,962	8.2	15.6	11.9
House	175%	18,953	93%	805	168	789	973	1,595	5.1	8.4	10.1
Senate	225%	24,368	70%	1,748	1,202	2,900	2,951	4,648	12.1	19.1	11.9
House	225%	24,368	85%	1,645	392	1,578	2,036	3,223	8.4	13.2	10.8
Senate	275%	29,783	70%	2,658	1,202	2,900	3,860	5,558	13.0	18.7	11.9
House	275%	29,783	78%	2,680	664	3,156	3,344	5,837	11.2	19.6	7.5
Senate	375%	40,613	70%	3,502	1,202	3,867	4,704	7,368	11.6	18.1	8.6
House	375%	40,613	70%	3,502	1,202	3,946	4,704	7,447	11.6	18.3	8.3

Source: Authors' calculations from MarketScan 2006 Commercial Claims database from Thomson Reuters and California HealthCare Foundation Employer Health Benefits Survey 2006; CBO analysis of premiums under HR 3962

Family Coverage Example

California families of three with median health care use and incomes between $32,043 and $68,663 would spend between 11.3 and 16.2 percent of income on combined premium and out-of-pocket spending after subsidies under the Senate bill (Table 2). These same families would spend 6.2 to 16.9 percent of income under the House bill. The small share of families that exceed the out-of-pocket limits (fewer than one in five families) would spend significantly more—between 17.5 and 21.3 percent in our examples under the Senate bill and between 9.2 and 23.0 percent under the House bill.

Table 2

Expected Spending after Subsidies for California Families of Three who Purchase Coverage in Exchange after Health Reform (2009 Dollars)

Bill	FPL	Family Income	Actuarial Value of Plan	Member Premium after Subsidy	Out-of-Pocket Spending ($)		Total Member Spending ($)		Total Member Spending (% Income)		Percent of Families Reaching OOP Max*
					Median	Max	Median	Max	Median	Max	
Senate	175%	32,043	80%	1,738	1,873	3,867	3,612	5,605	11.3	17.5	15.5
House	175%	32,043	93%	1,362	640	1,578	2,001	2,940	6.2	9.2	12.6
Senate	225%	41,198	70%	2,956	3,674	5,800	6,630	8,756	16.1	21.3	15.5
House	225%	41,198	85%	2,781	1,506	3,156	4,287	5,937	10.4	14.4	13.8
Senate	275%	50,353	70%	4,494	3,674	5,800	8,168	10,294	16.2	20.4	15.5
House	275%	50,353	78%	4,532	2,029	6,313	6,561	10,845	13.0	21.5	8.6
Senate	375%	68,663	70%	6,729	3,674	7,733	10,403	14,462	15.2	21.1	10.0
House	375%	68,663	70%	7,896	3,674	7,891	11,570	15,787	16.9	23.0	9.7

*Includes all families with two more more covered lives.

Source: Authors' calculations from MarketScan 2006 Commercial Claims database from Thomson Reuters and California HealthCare Foundation Employer Health Benefits Survey 2006; CBO analysis of premiums under HR 3962

Low-Income Families Would Spend Less Under House Bill Compared to Senate

Our analysis finds that a subsidy-eligible Californian who has typical (median) health needs and purchases single coverage in the exchange would spend the same or less on premiums and out-of-pocket costs under the House bill than under the Senate (Graph 1) as would a California family of three with an income or at or below $59,000 (320 percent FPL). At these income levels, spending under the House bill would be as much as $984 less for individuals and $2,461 less for families, compared to the Senate. For families with incomes between $59,000 and $73,240 (320–400 percent FPL),

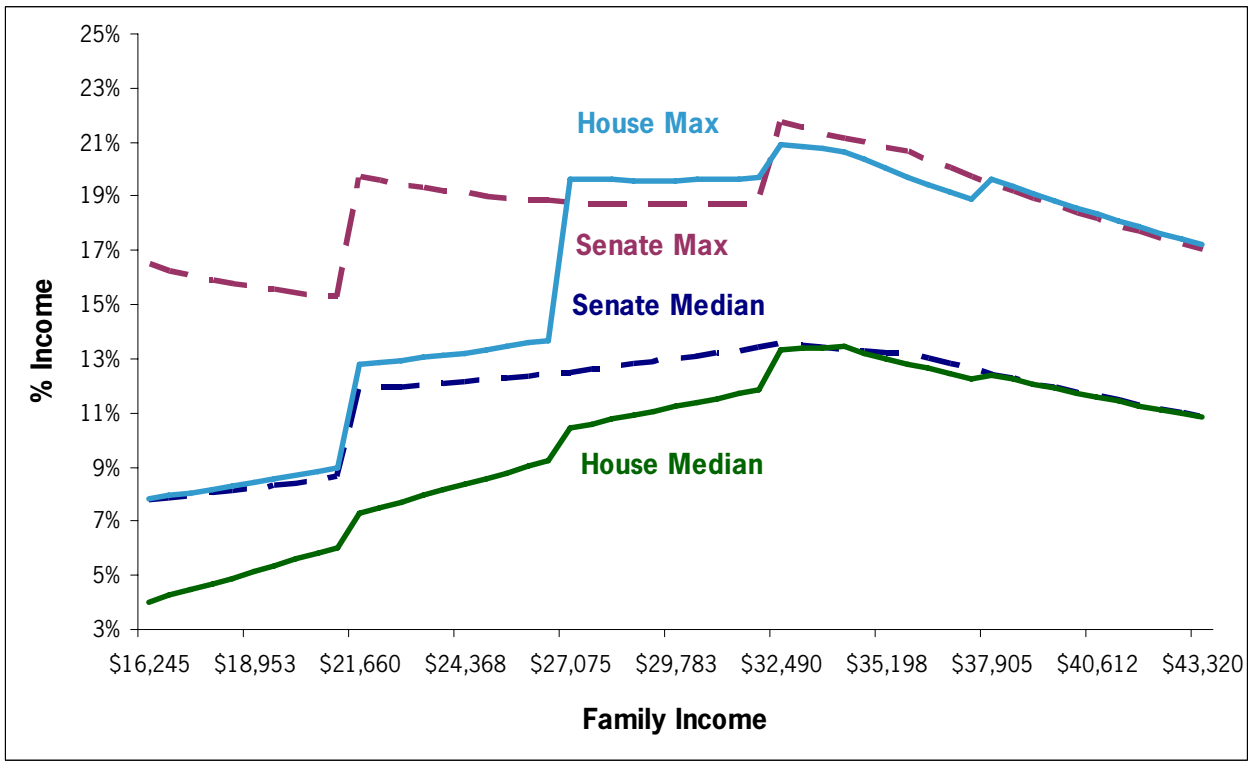
median spending would be lower under the Senate bill by as much as $1,611 because the Senate premium cap is lower and the Senate actuarial values are similar or identical at these income levels.

For high users of health services that exceed their out-of-pocket spending limit, the House bill would result in spending up to $1,495 less than the Senate bill for those with incomes below $27,000 (250 percent) and between $32,000 and $37,000 (300–345 percent). The House bill would save as much as $2,937 for subsidized families of three with incomes below $46,000 (250 percent) or between $55,000 and $62,000 (300–340 percent). The lower Senate out-of-pocket maximums for families with incomes between 250 and 300 percent FPL and between 350 and 400 percent FPL produce lower out-of-pocket spending under the Senate bill at those income levels.

The graphs below also show that California families earning less than $45,000 with the highest health care use would spend less under the House bill than the amount they would spend under the Senate bill if they had median health care use.

Graph 1

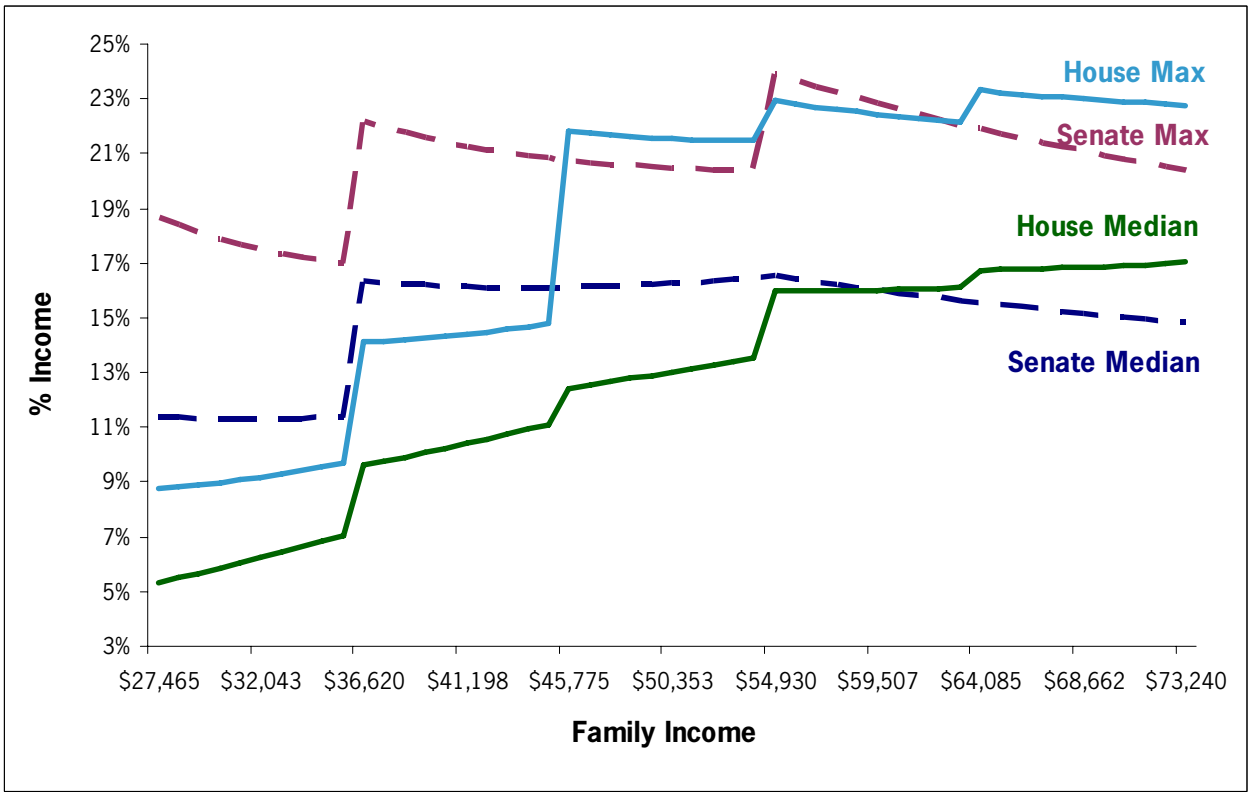
Percent of Income Spent Out-of-Pocket on Premiums and Medical Services, after Subsidies in the House and Senate Bills: Californians with Single Coverage, 150–400 Percent FPL



Source: Authors' calculations from MarketScan 2006 Commercial Claims database from Thomson Reuters and California HealthCare Foundation Employer Health Benefits Survey 2006; CBO analysis of premiums under HR 3962

Graph 2

Percent of Income Spent Out of Pocket on Premiums and Medical Services, after Subsidies in the House and Senate Bills: Californian Families of Three, 150–400 Percent FPL



Source: Authors' calculations from MarketScan 2006 Commercial Claims database from Thomson Reuters and California HealthCare Foundation Employer Health Benefits Survey 2006; CBO analysis of premiums under HR 3962

Low- and Middle-Income Individuals Would Spend Less Under Both Bills Than They Would in the Current Individual Market

Californians with average health care use and subsidized single coverage in the exchange would spend $838 to $5,053, or 14.2 to 85.8 percent, less per year under the House bill than they would on premiums and out-of-pocket costs in the current individual market. Under the Senate bill, spending would be $838 to $4,116, or 14.2 to 69.9 percent, less than in the individual market. Table 3 below shows the range of spending for Californians earning between $16,245 to $43,320 or 150 to 400 percent FPL.

The percent of income spent in the individual market is hypothetical because many low- and middle-income individuals currently cannot afford to purchase coverage in the individual market. A

recent Commonwealth Fund study found that most adults who tried to purchase coverage in the individual market found it impossible or very difficult to find an affordable plan, and low-income adults who shopped for coverage were even more likely to never enroll.[8]

Unlike the other analyses in this brief, Table 3 and Graph 3 are based on average out-of-pocket spending because median spending data is not available.

Table 3

Cost to Individuals with Average Health Use for Premiums and Out-of-Pocket Expenses in Existing California Individual Market Compared to House and Senate Bills after Subsidies (2009 Dollars)

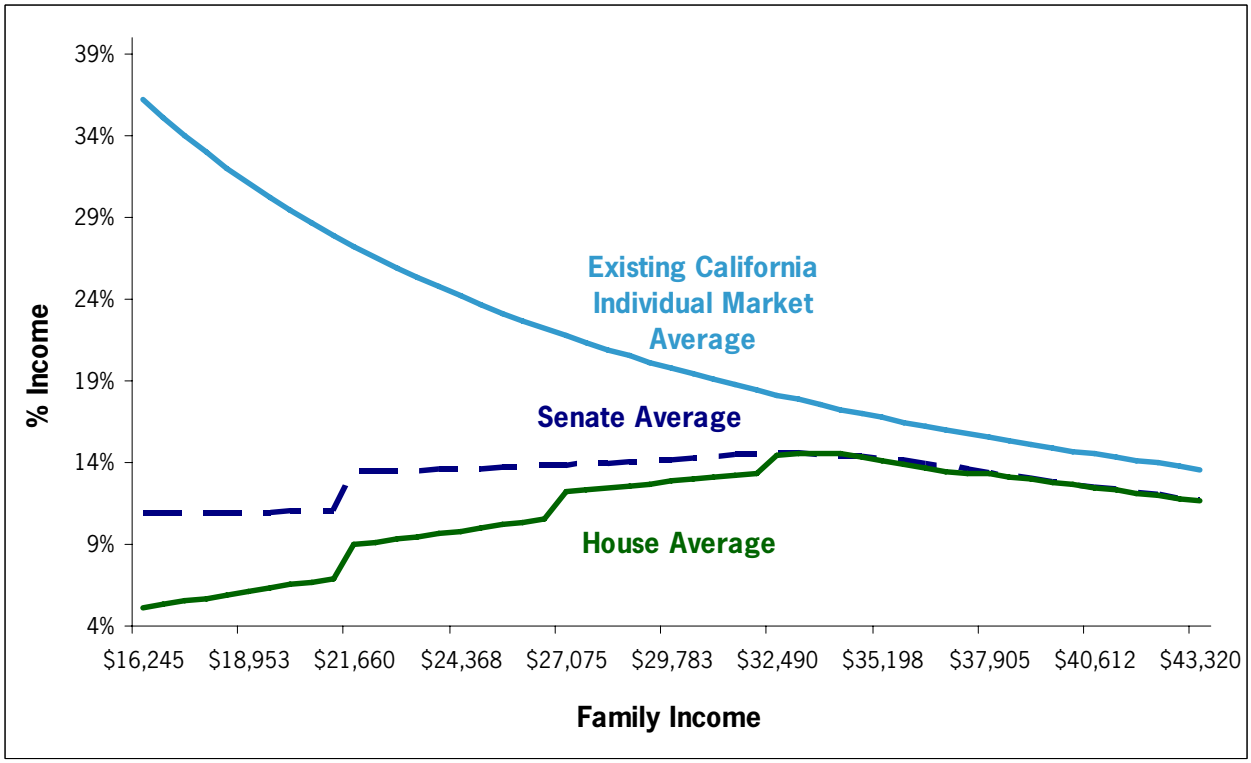
	FPL	Family Income	Actuarial Value of Plan	Member Premium after Subsidy	Average Annual Out-of-Pocket Spending	Average Member Total Spending ($)	Average Member Total Spending (% of Income)
Existing Individual Market	150%	16,245	55%	3,712	2,180	5,892	36.3%
Existing Individual Market	400%	43,320	55%	3,712	2,180	5,892	13.6%
Senate	150%	16,245	80%	739	1,036	1,775	10.9%
Senate	400%	43,320	70%	3,502	1,553	5,054	11.7%
House	150%	16,245	93%	487	351	839	5.2%
House	400%	43,320	70%	3,502	1,553	5,054	11.7%

Source: Authors' calculations from MarketScan 2006 Commercial Claims database from Thomson Reuters, California HealthCare Foundation Employer Health Benefits Survey 2006, California Market Tracking Survey 2006, and eHealthInsurance.com; CBO analysis of premiums under HR 3962

The graph below also shows how much less average Californians would spend as a percentage of income under both health reform bills compared to what they would spend if they purchased coverage in the existing California individual market. It shows that, for persons with family incomes below $32,000, savings are substantial—as much as 31 percent of income. At higher income levels, savings are approximately two percent of income.

Graph 3

Cost to Individuals with Average Health Use for Premiums and Out-of-Pocket Medical Expenses in Existing California Individual Market Compared to House and Senate Bills after Subsidies: Californians with Single Coverage, 150–400 Percent FPL



Source: Authors' calculations from MarketScan 2006 Commercial Claims database from Thomson Reuters, California HealthCare Foundation Employer Health Benefits Survey 2006, California Market Tracking Survey 2006, and eHealthInsurance.com; CBO analysis of premiums under HR 3962

Conclusion

The subsidies in the House and Senate bills would enable low- and middle-income Californians without employer coverage to pay significantly lower premium and out-of-pocket costs than they would currently pay in the individual market. The House bill would result in lower spending than the Senate bill for the lowest-income individuals and families, especially those with high health care use. Nevertheless, many families would still pay a substantial share of their income on health care expenses under both bills.

Methodology

Annual premium contributions for subsidy-eligible families were estimated by multiplying each family's income by the premium percentage limits for the appropriate 2009 Federal Poverty Level (FPL). The premium caps were calculated in a sliding scale, linear manner from 1.5 percent of income at 133 percent FPL to 12.0 percent at 400 percent FPL in the House bill, and from 4.0 percent of income at 133 percent FPL to 9.8 percent of income at 300 through 400 percent FPL under the Senate bill. This analysis applies the 2013 percentage limits to 2009 income levels. We compare the maximum contribution towards the premium and the estimated unsubsidized premium the average Californian would pay under the reform bills, based on CBO's estimate (11/2/09) of the national average of three lowest-cost House Basic Plan 2016 premiums, deflated to 2009 dollars by 6.1 percent annually. If the monthly premium was less than the maximum premium contribution, the estimated monthly premium cost to the family was set equal to the premium without subsidy.

The average and median out-of-pocket spending amounts were estimated using out-of-pocket spending and actuarial value data provided by Watson Wyatt, shown in the table below. This data was based on simulation of claims payment for a standard population based on a sample of 20,000 persons enrolled in large employer plans in the 2006 MarketScan Commercial Claims database from Thomson Reuters. Using data from the California HealthCare Foundation (CHCF) Employer Health Benefits Survey, Watson Wyatt calculates the out-of-pocket expenses that each person in the medical claims sample would pay if they were covered by each plan in the Employer Health Benefits Survey. Watson Wyatt also calculates the portion of the bill paid by the health plan. Median and mean out-of-pocket expenses are calculated for each health plan. The next step is to calculate the mean of the medians from each health plan. The level of medical expense for this population was adjusted to 2009 levels of spending for Californians enrolled in employer-sponsored insurance.

Estimated Out-of-Pocket Spending under Employer-Sponsored Health Plans, 2009

	Single Individual			Family	
	Actuarial Value	Average	Median (Mean of Medians)	Actuarial Value	Median (Mean of Medians)
All Health Plans	85.4%	$748	$392	84.4%	$1,506
Health Maintenance Organization	90.1%	$498	$238	89.7%	$941
Point of Service	84.3%	$797	$385	83.3%	$1,547
Preferred Provider Organization	80.0%	$1,036	$523	78.4%	$2,029
High Deductible Health Plan with Savings Option Excluding Employer Contribution	70.3%	$1,553	$1,202	67.4%	$4,184

The average premium and out-of-pocket spending for California individual market plans was based on a *Health Affairs* study by Jon R. Gabel et al.[9] that simulated claims payment in a manner similar to the methodology used for employer-based claims described above. Using 2006 data for California individual market plans, the study found that the average monthly premium was $259 (based on an average for a healthy 32- and 52-year old), the average out-of-pocket spending for the entire enrolled population was $1,825 and the average plan actuarial value was 54.6 percent. We adjusted the premium and out-of-pocket spending averages to 2009 assuming 6.1 percent annual growth.

To approximate median out-of-pocket spending under exchange plans with the specific actuarial values proposed in the bills, we adjusted the "Mean of Median" spending amounts estimated by Watson Wyatt. At income levels in which the actuarial value proposed in the bill is within one percentage point of the actuarial value for a current plan type, we assumed that spending under the new exchange plan would be equal to spending under the employer-based plan with the same actuarial value. At income levels in which the proposed actuarial value under the bill falls between the actuarial values of two current employer-based plan types, we assumed that spending under the new exchange plan would reflect the proportional difference between the spending levels under the employer-based plans with the closest actuarial values. Finally, for the 93 percent actuarial value plan under the House bill, we assumed that spending would be less than "Mean of Median" spending under HMO plans by an amount proportional to the difference in actuarial values.

The maximum spending examples are based on the out-of-pocket maximums for HR 3962 passed by the House on November 7, 2009, and the Senate bill, HR 3590, from November 18. The Senate out-of-pocket maximums are based on a percentage of the 2009 Health Savings Account limits, as outlined in the bill. The House out-of-pocket maximums reflect the amounts included in the bill, deflated to convert the amounts from 2013 to 2009 dollars.

Notes

[1] Under the reform bills, affordability is defined as an employee contribution of no more than 12 percent of family income under the House bill or 9.8 percent under the Senate bill. A plan with an actuarial value of less than 60 percent is also considered unaffordable under the Senate bill. Individuals and families with an affordable offer of employer coverage are not eligible for premium or cost-sharing subsidies in the exchange. However, the health reform bills do offer some cost-sharing protections for those enrolled in employer plans. Under the Senate bill, employer plans that are not grandfathered or self-insured can have out-of-pocket limits no higher than the current limits for Health Savings Accounts ($5,800/$11,600 in 2009). Under the House bill, employer-based plans, including self-insured plans, must have out-of-pocket limits of no more than $5,000/$10,000 (2013 dollars) by 2018.

[2] Ken Jacobs and Dave Graham-Squire, "Californians' Access to Coverage Under the Health Reform Proposals," UC Berkeley Center for Labor Research and Education Data Brief, December 2009.

[3] Based on analysis of CPS data (March 2005, March 2006 and March 2007) on enrollment in employer-sponsored insurance by family structure.

[4] CBO, Letter to Representative Rangel, November 2, 2009.

[5] CBO, "Analysis of Exchange Subsidies and Enrollee Payments in 2016, Senate Finance Committee Chairman's Mark as Amended," October 9, 2009; CBO, Letter to Representative Rangel, November 2, 2009.

[6] Agency for Healthcare Quality and Research, "The High Concentration of U.S. Health Care Expenditures," June 2006, http://www.ahrq.gov/research/ria19/expendria.pdf

[7] Jon R. Gabel, Roland McDevitt, Ryan Lore, Jeremy Pickreign, Heidi Whitmore and Tina Ding, "Trends in Underinsurance and the Affordability of Employer Coverage, 2004–2007," *Health Affairs* Web Exclusive w595, June 2, 2009.

[8] Commonwealth Fund, "Issue Brief: Failure to Protect: Why the Individual Insurance Market Is Not a Viable Option for Most U.S. Families," July 2009.

[9] Jon R. Gabel, Roland McDevitt, Ryan Lore, Jeremy Pickreign, Heidi Whitmore and Tina Ding, "Trends in the Golden State: Small-Group Premiums Rise Sharply While Actuarial Values for Individual Coverage Plummet," *Health Affairs* Web Exclusive w488, June 14, 2007.

UC Berkeley Center for Labor Research and Education

Institute for Research on Labor and Employment
University of California–Berkeley
2521 Channing Way
Berkeley, CA 94720-5555
(510) 642-0323
http://laborcenter.berkeley.edu

An affiliate of the University of California Miguel Contreras Labor Program

The Center for Labor Research and Education (Labor Center) is a public service project of the UC Berkeley Institute for Research on Labor and Employment that links academic resources with working people. Since 1964, the Labor Center has produced research, trainings and curricula that deepen understanding of employment conditions and develop diverse new generations of leaders.

Acknowledgments

Our thanks to Dave Graham-Squire and Beth Capell for their helpful feedback and comments and to Jenifer MacGillvary for her help in the preparation of this research brief.

The views expressed in this research brief are those of the authors and do not necessarily represent the Regents of the University of California, the UC Berkeley Institute for Research on Labor and Employment, the California Endowment, or collaborating organizations or funders.

Coalition of
CUE Local 3
University Employees