

Appendix J

The California Health Service Plan

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Under the California Health Service Plan (CHSP), all providers would be employed by the state to provide health services to all California residents. The state would own the health facilities used by covered persons in California and all providers would become salaried employees of the state (excluding nursing homes). This would require the state to purchase all assets in the health care system and establish an employee wage and benefits administrative function for all health professionals placed on salary. Health services would then be provided to all California residents through this health care system with an increased emphasis on primary care.

In this report, we summarize the major components of the CHSP proposal and present the key assumptions used to simulate their effects. We then present our preliminary estimates of the proposal's impacts on coverage and costs.

Summary of the CHSP Plan

Covered Persons

- All California Residents would be covered for a standard benefits package;
- Includes citizens, documented persons and the undocumented; and
- There would be a six-month residency requirement for coverage.

Benefits

All California residents would be covered under a single uniform benefits package. The program would cover the services typically covered by major employer health plans. However, the program would not cover long term care, eyeglasses and alternative medicine.

Covered Services

Inpatient/outpatient hospital care;
Prescription drugs;
Durable Medical Equipment;
Physicians office visits;
Mental Health;
Dental care;
Vision care;
Psychologists;
Chiropractors;
Acupuncturists;
Podiatrists; and
Other health professionals (if salaried in group practice).

Services not Covered

Long Term Care;
Eyeglasses;
Alternative Medicine.

Bulk Purchasing

The program would be able to achieve substantial economies of scale in the purchase of prescriptions and durable medical equipment.

- All Prescription Drugs purchased subject to the Federal Supply Schedule (FSS) plus formulary savings;
- Durable medical equipment would be purchased at FSS rates. .

Cost Sharing

There would be no cost sharing for covered services, drugs or supplies.

Disposition of Medicaid Population

The Medicaid eligible population would continue to be covered for Medicaid covered services that are not covered by CHSP (transportation, EPSDT, eye glasses, etc.). The portion of the Medi-Cal program that now covers nursing home care and home health services would be retained and integrated into the CHSP.

Expenditure Budgets

A global budgeting system is adopted where health spending in the first year of the program is constrained not to exceed what spending would have been in the absence of the program. There after, the rate of growth in health spending is capped not to exceed the rate of growth in the state's Gross Domestic Product (GDP).

Primary Care

Increased emphasis on primary care:

- Adjust funding for medical education to emphasize primary care
- Geographic redistribution of physicians based on need

Financing

- Current program revenues;
 - State Medicaid and DSH;
 - Federal Medicaid;
 - Medicare;
 - Workers Compensation (health component); and
 - CHAMPUS.
- Savings in safety-net programs;
- No Maintenance of effort requirement for counties;

- Tobacco tax increase of \$1.00 per pack with proportionate increase in taxes on other tobacco products; and
- Income tax increase to fund the balance of the program if needed.

Key Assumptions

Our analysis requires us to make several key assumptions concerning the utilization of health services under the program bulk purchasing savings and the impact of administrative simplification. We also had to estimate the cost of the buy-out of the health system. In addition, we made certain assumptions concerning the economic impacts of the program. These assumptions are summarized below. A detailed discussion of the data and methods used is presented in *Appendix A*.

Utilization of Acute Care Services

Acute care services include inpatient hospital services and ambulatory care provided by physicians and other licensed providers. In this analysis, acute care services also includes outpatient prescription drugs and durable medical equipment. Acute care excludes nursing home services and home health services.

Utilization for Uninsured – We assume that uninsured persons who become covered under the proposal would use health care services at the same rate as reported by currently insured persons with similar age, sex and health status characteristics. This assumption encompasses two important effects. First, the increase in access to primary care for this population would result in savings due to a reduction in preventable emergency room visits and hospitalizations. Second, there would be a general increase in the use of elective services such as primary care, corrective orthopedic surgery, advanced diagnostic tests, and other care that the uninsured either forego or delay.

Using this methodology, we estimate that health spending among the currently uninsured population would increase. That is, savings from improved primary care would be more than offset by increased use of elective care. We estimate that the uninsured in California will consume about \$5.2 billion in health services in 2002, including free care (valued at cost) and services purchased out-of-pocket. We estimate that if these individuals were to become insured, utilization of health services would increase by about 67 percent (dollar weighted).

Utilization for Underinsured – Many of the insured have policies that do not cover certain services including prescription drugs, dental care and other services. In this analysis, we assume that utilization of these services by persons who are not covered for these services would increase to the levels observed among persons who are covered for these services with similar demographic and health status characteristics.

Elimination of Cost Sharing – The CHSP program would have no deductible or co-payment requirements as found in most health plans (e.g., \$10 per visit, \$10 per prescription etc.). Prior studies have shown that eliminating cost sharing results in increased utilization of health services. For example, the National Health Insurance experiment data developed by the Rand

Corporation showed that eliminating cost sharing increases physician utilization by about 31 percent and increases inpatient utilization by about 10 percent.¹

Also a comparison of health services utilization in Canada, where there is no cost sharing, with neighboring American states where cost sharing is common, indicates that physician utilization in Canada is about 30 percent higher than in the US.² A recent study from the Congressional budget Office (CBO) also showed that health services utilization among Medicare beneficiaries with supplemental coverage (i.e., Medigap) is about 28 percent higher than among those without supplemental coverage. In addition, studies have shown that even among HMOs, eliminating cost sharing can result in utilization increases ranging from 11 to 30 percent.

In this analysis, we assume that utilization of health services would increase for all people who do not currently have first dollar coverage. We assume that utilization of physician services would increase by 30 percent and that inpatient hospital utilization would increase by about 10 percent. We simulate no change in utilization for persons who already have a policy without cost sharing. These include Medicaid enrollees, aged persons with Medigap coverage (these policies typically pay anything not paid by Medicare for covered services), and persons currently enrolled in an HMO that does not have cost sharing.

Increased Emphasis on Primary Care – The CHSP enunciates an initiative to increase the use of primary care. This would be done by adjusting the financing of medical education to increase emphasis on primary care, implement a plan to redistribute physicians by area on the basis of need, and encourage the formation of group practices that would emphasize primary care delivery.

A shift to increased reliance upon primary care has the potential to reduce costs. Part of this is due to the fact that primary care providers tend to use less expensive diagnosis and treatment technology than do specialists. Also, it is widely accepted that proper use of primary and preventive care can reduce the incidence of disease with a reduction in high cost episodes of care. However, it is difficult to predict the amount of savings that could result.

The experience of HMOs provides an example of how increased reliance on primary care can affect costs. HMOs typically emphasize primary care as a means of controlling access to specialists and reducing costs, resulting in an overall reduction in utilization. Although the available evidence indicates that managed care plans achieve lower costs largely through selective contracting, utilization of health services is typically lower than in other types of plans. For example, one study showed that health services utilization in IPA HMOs is about four percent lower than in other types of health plans (IPA HMOs saved an additional 15 percent through selective contracting).³ The savings are thought to be higher in staff and group HMO models.

¹ W.G. Manning et., al., "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," *The American Economic Review*, vol.77, No. 3, June 1987, PP.251-277.

² Victor R. Fuchs and James S. Hahn, "How Does Canada Do It? A Comparison of Expenditures for Physician's Services in the United States and Canada," *New England Journal of Medicine*, Vol.323, September 27, 1990, N 13, pp. 884.

³ The Lewin Group, Inc., "New Evidence on Savings from Network Models of Managed Care," (a report to the Healthcare Leadership Council), Washington DC, May 1994.

For illustrative purposes, we assume that a shift to primary care would result in an overall reduction in utilization of about four percent. We applied this assumption to all Californians who are not already enrolled in an HMO.⁴ However, it will take some time for the proposed changes in medical education and redistribution of providers to have an effect. Moreover, it will take time for physicians to change their practice patterns. Consequently, we assume that these savings would be phased-in gradually over a period of 10 years.

Bulk Purchasing

Under this proposal, prescription drugs and durable medical equipment would be purchased using the federal supply schedule (FSS). Prices under the FFS for prescription drugs are estimated to be about 30 percent lower than the prices paid by Medicaid, even though Medicaid gets a rebate of about 22 percent in California.⁵ This compares with an average payer rebate of about 8 percent under private health plans.

We calculated the savings from using the FSS based upon these data. This results in savings of about 41 percent for drugs now purchased in the private sector and savings of about 30 percent for drugs now purchased through Medi-Cal. We assume that the percent savings for durable medical equipment under the FSS would be the same as for prescription drugs.

Administrative Costs

In this analysis, we estimated savings in administration based upon a prior Lewin Group study of the impact of a single-payer model on administrative costs, which we have updated to use recent data for California.⁶ These estimates were further adjusted to reflect the fact that because all providers are salaried under CHSP, there would be no claims processing costs. Thus the administrative savings under the CHSP model would be greater than under other single-payer models that retain the fee-for-service (FFS) payment system. These savings include:

- **Insurer Administration** -- The program would extend large-group economies of scale throughout the health care system by covering all individuals under a single insurance mechanism. This would eliminate the costs associated with underwriting, transition in coverage, and maintaining the administratively cumbersome linkage between employers and insurers. All claims processing costs would be eliminated. We assumed that the cost of insurer administration under the CHSP would be similar to administrative costs under the Medicare program. We adjusted these costs to reflect the elimination of claims processing. However, costs were also adjusted to reflect the cost of administering payroll and benefits for the providers who would now become employees of the program.

⁴ Because of this shift to primary care, we assume no increase in utilization for the population now enrolled in HMOs.

⁵ "Prescription Drug Coverage, Spending, Utilization, and Prices," (Report to the President from the Department of Health & Human Services), April 2000

⁶ Sheils, et al., "O Canada: Do We Expect Too Much From Its Health System", *Health Affairs*, Spring 1992;

- **Physicians Administration** -- The CHSP would virtually eliminate claims-filing costs for physicians by using a salaried system to compensate providers. We estimated administrative savings for physicians using data provided by the Medical Group Management Association (MGMA) which provides administrative costs data by function for physician practices. We used these data to identify the categories of administration that are attributed to the administrative functions that would be eliminated or simplified under the CHSP model.
- **Hospital Administration** -- The single-payer proposal would all but eliminate hospital administrative costs associated with filing claims because under the CHSP model, hospitals are given an annual operating budget covering all services provided by the hospital. However, hospitals would still need to submit claims for out-of-state patients. Our estimates of the savings in hospital administration are based upon detailed hospital spending data provided by the California Office of Statewide Health Planning and Development (OSHPD). These data show hospital costs in the state for over 25 separate categories of overhead and administration including fiscal services, data processing, billing, collections, education and research.

Program Spending

The program would have annual expenditure budgets for hospital operations, provider salaries, prescription drugs and durable medical equipment. It would also include payments for the buy-out of the California health care system. Implicit in our assumptions is that the state would purchase and maintain all medical facilities and that they would employ all health professionals in California. Spending would be determined as follows:

- **Hospitals** -- We assume that hospitals would be placed on a budget that is equal to what would have been spent for such services under current policy. This would be adjusted to reflect administrative savings under the program and the change in utilization for newly insured persons. It would also be adjusted to subtract all capital and debt service costs, which would now be covered under the state buy-out of the health system.
- **Physicians and Other Providers** -- We assume that in the first year of the program, budgets are adopted such that spending for physician services are set equal to what spending would have been for these providers under current policy from all sources. This would determine the level of salaries for physicians and the amounts spent for supplies and materials. This budget would be adjusted to reflect provider administrative savings and changes in utilization for newly insured persons. It would also be adjusted to subtract all capital and debt service costs, which would now be covered under the state buy-out of the health system.
- **Prescription Drugs and Medical Equipment** -- We assume that the budget for these services would be based upon the FSS, which represents a substantial reduction in the amounts spent on prescription drugs and durable medical equipment. This would be adjusted to reflect changes in utilization for newly insured persons. and the bulk purchasing savings discussed above.

Buy-out of the California Health Care System

We estimated the cost of purchasing the California health care system on a fair market value basis. Estimates were derived using methods typically used to value assets in the health care market. These estimates were done in a way that reflects the impact that requirements to rebuild certain facilities have on their values.

Using this approach, we estimate the fair market value of all assets in the health care industry (excluding nursing homes) is about \$42.1 billion. We assume that the state finances the purchases of the system with a bond issue to be repaid in installments over a 30-year period. The annual budget would include one year's payment under this arrangement, which we estimate to be about \$2.7 billion per year.

Much of the purchase price of \$42.1 billion includes payment of debt held by the current owners of the system, estimated to be about \$16.8 billion. The remaining \$25.3 billion would be the cost of purchasing the equity in these assets. As discussed above, we adjusted the operating budgets for hospitals and physicians to reflect the fact that existing debt service payments under the current system would be transferred to the state. This was necessary to eliminate a double counting of capital costs. The portion of this \$2.7 billion annual payment that represents a net increase in costs to the health care system is \$1.6 billion.

Employer Response

Our assumptions concerning the employer response to a single payer program include:

- **Employer supplemental coverage** – employers are assumed to provide supplemental coverage for services that they now cover under their plans which would not be covered under the CHSP program such as orthodontia and eye glasses.
- **Wage effects** – Increases in employer costs are assumed to be passed on to employees in the form of reduced wages. This automatically affects tax revenues from income and sales taxes.

Estimated Costs and Impacts

We present our estimates in two ways. First, we present estimates of the cost and coverage impacts of each provision of these proposals assuming full implementation in 2002. These estimates are useful for comparing program impacts at the current levels of the uninsured and health care costs. Second, for budgetary purposes, we also present year-by-year cost estimates for 2003 through 2012, which reflect the expected dates of program implementation.

Total Health Spending

In this analysis, we developed estimates of the impact of the CHSP Plan on health spending in California and health spending for major payers. Total health spending in California for all health services is projected to reach about \$151.8 billion in 2002, which includes spending for all health services paid by both public and private payers.⁷ Under the CHSP plan, we estimate that health spending in California would be reduced by \$7.5 billion (4.9 percent) if fully implemented in 2002.

We assume that under a program of universal insurance coverage, use of health services by those who would otherwise be uninsured would increase to levels reported by insured persons with similar age, sex, income and self-reported health status characteristics. Based on this assumption, we estimate that the net increase in health spending for previously uninsured persons would be about \$3.6 billion (*Figure 1*). This is an estimate of the net change in utilization for this group, which reflects reduced hospitalizations for preventable conditions offset by increased utilization of preventive care and increased use of elective procedures.

Figure 1
Changes in State Wide Health Spending Under CHSP Plan in 2002
(In millions)

	Amount in Millions
Current Health Spending ^{a/}	\$151,776
Increases in Utilization/Other Costs	
Utilization Change for Uninsured	\$3,555
Utilization Change for "Underinsured"	\$3,004
Elimination of Cost Sharing	\$8,378
Capital Acquisition Costs	\$1,647
Spending Offsets	
Shift to Primary Care	(\$3,198)
Bulk Purchasing	(\$3,797)

⁷ Smith, S., "The Next Ten Years of Health Spending: What Does the Future Hold?," Health Affairs, Volume 17, Number 5.

Prescription Drugs	(\$3,641)	
Durable Medical Equipment	(\$ 156)	
Administrative Costs		(\$17,162)
Insurer/Agency Administration	(\$7,542)	
Hospital Administration	(\$2,270)	
Physician Administration	(\$7,350)	
Total Before Global Budget Cap		
Provider Payment Reductions		n/a
Net Change in Spending with Budget Cap		
Net Change		(\$7,573)

^{a/} Excludes public health.

n/a – Not required to remain within global spending budget.

Source: Lewin Group estimates using the California version of the Health Benefits Simulation Model (HBSM).

There also would be an increase in utilization for previously “underinsured” persons. Many insured individuals do not have coverage for some of the services that would be covered under the uniform benefits package. For example, the current Medicare program does not cover prescription drugs. Many private plans also do not cover prescription drugs, psychiatric services, and preventive dental care. We assume that utilization of these services would increase to levels reported by persons who have coverage for these services with similar age, sex, income and health status characteristics. The net increase in spending for the underinsured would be \$3.0 billion in 2002.

As described above, we assume that utilization of hospital and physician services would increase for all people who currently do not have a policy without cost sharing. We estimate that the utilization increase for these services would be \$8.4 billion.

Under the CHSP Plan, the current California health care system would be purchased by the program. As described above, the purchase of the system would be financed with a bond issue to be repaid in installments over a 30-year period. As discussed above, the program would represent

a net increase in debt service payments of \$1.6 billion. The CHSP Plan enunciates an initiative to increase the use of primary care. A shift to increased reliance on primary care has the potential to reduce health care costs or reducing the use of costly specialist services. Using the assumptions described above, we estimate savings of \$3.2 billion due to a shift to increased use of primary care.

Under the CHSP program, prescription drugs and durable medical equipment would be purchased using the federal supply schedule (FSS). Using the assumptions described above, we estimate savings from bulk purchasing of prescription drugs to be \$3.6 billion, and another \$156 million in savings for the purchase of durable medical equipment.

The use of a single-payer system would result in a reduction in administrative costs of \$17.2 billion. The single-payer program would extend large-group economies of scale throughout the health care system by covering all individuals under a single program where there would be no claims processing costs. We estimate that insurer administrative costs would be reduced by \$7.5 billion under the program.

The single-payer program would also significantly reduce administrative costs for hospitals by eliminating claims filings and administering hospitals through annual operating budgets covering nearly all services provided by the hospital. The CHSP would also eliminate claims filing and adjudication costs by placing all providers on salary. In addition, the program would reduce provider administrative costs by eliminating the cost of negotiating selective-contracting arrangements. We estimate that hospital administrative costs would be reduced by \$2.3 billion and that physician administrative costs would be reduced by \$7.4 billion.

Program Costs and Revenues

Figure 2 presents our estimates of program costs under the CHSP plan. Total expenditures under the program would be about \$129.0 billion by 2002. This includes the cost of all services covered under CHSP, plus continuing spending for long-term care under what is now Medi-Cal and for programs for the physically and mentally disabled. We assume that these programs would come under the CHSP umbrella even though there would be no change in coverage for these services. This amount also includes the cost of administering these programs.

As discussed above, these estimates reflect our assumption that the program would be designed so that in the first year of the program, provider salaries and operating budgets would be equal to the average payment levels for covered services in the current system (i.e., averaging across

Figure 2
Sources and Uses of Funds Under the CHSP Program in 2002
(In millions)

Uses of Funds		Sources of Funds	
Salary, Benefits, and Supplies Cost	\$143,749	Medicare	\$27,124
Acute Care \$132,788		State employee and retiree health benefits ^{cl}	\$ 264
Medi-Cal long-term care \$5,526		Federal employee and retiree health benefits ^{cl}	\$ (254)
Other Institutionalized \$5,435			
Bulk Purchasing Savings	(\$3,797)	Champus/Military	\$3,314
Prescription Drugs \$3,641			
Durable Medical Equipment \$156			
Adjustments to Provider Payment Rates	(\$15,169)	Medi-Cal/Healthy Families	\$23,810
Allowance for Reduced Cost Shifting \$4,475		State Share \$10,913	
Hospital Administrative Savings \$2,270		Federal Share \$12,887	
Physician Administrative Savings \$7,350			
Retired Debt \$1,074 ^{a/}			
Program Administration	\$1,501	Workers Compensation	\$2,501
Capital Acquisition Payments	\$2,720	Safety-Net Savings	\$1,687
		Other State Programs	\$5,435
		Developmentally Disabled \$2,700	

		Department of Mental Health \$2,100 Department of Alcohol and Drug Abuse \$635	
Total Spending Before Budget Cap	\$129,004	Total Intergovernmental Transfers	\$63,881
Budget Cap Adjustment	N/A	New Revenues	
		Tobacco Tax (\$1.00 per pack)	\$1,011
		Payroll Tax	\$64,726
		Employer Share (7.41%) Employee Share (2.50%)	
		Income Tax to Fund Remainder^{1/}	(\$614)
		Wage Effect Revenue Loss (\$614) Tax Rate Increase - Not Required	
		Total New Revenues	\$65,123
Total Program	\$129,004	Total Sources of Funds	\$129,004

^{a/} Costs reflect the fact that the program has assumed responsibility for about 1.1 billion in debt service on health assets throughout the system.

^{b/} For purposes of this analysis, Medi-Cal long-term care spending is included as a cost under the CHSP program, as is spending for the physically and mentally disabled. Total spending for these services under current law will be about \$136.4 billion in 2002.

^{c/} Includes Health benefits for state/federal employees and retirees, net of employer payroll taxes.

N/A – Adjustment not needed to remain in budget.
Source: Lewin Group estimates

Medicare, Medi-Cal, private insurance, self-pay, etc.). We assumed that these amounts would be adjusted to reflect the reduction in provider uncompensated care expenditures that would occur with universal coverage. Similarly, we adjusted operating budgets to reflect the reduction in administrative costs and the retirement of debt for those health system assets purchased by the state under this plan.

Under these assumptions total program expenses before adjustments (estimated at current provider reimbursement levels) would be \$142.5 billion, which reflects the increase in utilization for previously uninsured persons discussed above. Provider salaries and operating budgets would be reduced by \$14.1 billion to reflect services counted as uncompensated care under current policy as well as administrative savings that would be realized by providers under the CHSP program.⁸ Total debt service payments under the program would be \$2.7 billion.⁹ The program would cost about \$1.5 billion to administer.

As discussed above, program spending in the first year of the program would be capped not to exceed the amount that would have been spent under the current health care system under current law in that year. If necessary, this would be accomplished by reducing expenditures for supplies and equipment and/or reducing provider salaries and hospital budgets. However, our analysis indicates that most program costs in the first year would be within the budget cap. Thus, no such adjustment would be needed.

The program would receive funds that otherwise would have been used to fund health care benefits under public programs. Specifically, funds from Medicaid, Medicare, and various federal and state programs would be used to cover program costs. Total funding from these sources would be \$63.9 billion in 2002 (*Figure 3*).

The remainder of the program would be financed with new tax revenues. The plan would be funded primarily with a payroll tax that we estimate would be 9.9 percent if implemented in 2002. Payroll tax revenues would be \$64.7 billion. In addition, the increased tax on tobacco products (i.e., \$1.00 per pack) would provide about \$1.0 billion in revenues. Any additional revenues required would be collected through an increase in the California income tax. However, our analysis indicates that the payroll tax would sufficiently fund the program.

Private Employer Impacts

⁸ This adjustment is needed to account for the fact that uncompensated care is currently financed through the cost shift.

⁹ As discussed above, about \$1.2 billion is used to retire existing debt in the system. Thus the net increase in debt services costs would be about \$1.7 billion per year.

Private employer health spending is projected to reach \$32.7 billion in 2002 (i.e., private employer premiums less employee contributions).¹⁰ This includes \$30.5 billion in spending for workers and dependents, and \$2.2 billion in spending for retirees. (*Figure 3*).

¹⁰ Lewin Group estimate using the Health Benefits Simulation Model (HBSM)

Figure 3
The Impact of the CHSP Proposal on Private Employer
Health Spending for Workers:
Assuming Full Implementation in 2002: Before Wage Effects
(In millions)

	Firms That Now Offer Insurance	Firms That Do Not Now Offer Insurance	All Firms
Spending Under Current Policy			
Workers and Dependents	\$30,537	---	\$30,537
Retirees	\$2,200	---	\$2,200
Current Spending	\$32,737	---	\$32,737
Spending Under Reform			
Wrap-Around Coverage			
Workers and Dependents	\$124	---	\$124
Retirees	\$3	---	\$3
Payroll Tax ^{a/}	\$32,406	\$8,143	\$40,549
TOTAL	\$32,533	\$8,143	\$40,676
Change in Employer Costs			
Net Change	(\$204)	\$8,143	\$7,939

a/ Assumed to be equal to the amount needed to fully fund the program.

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

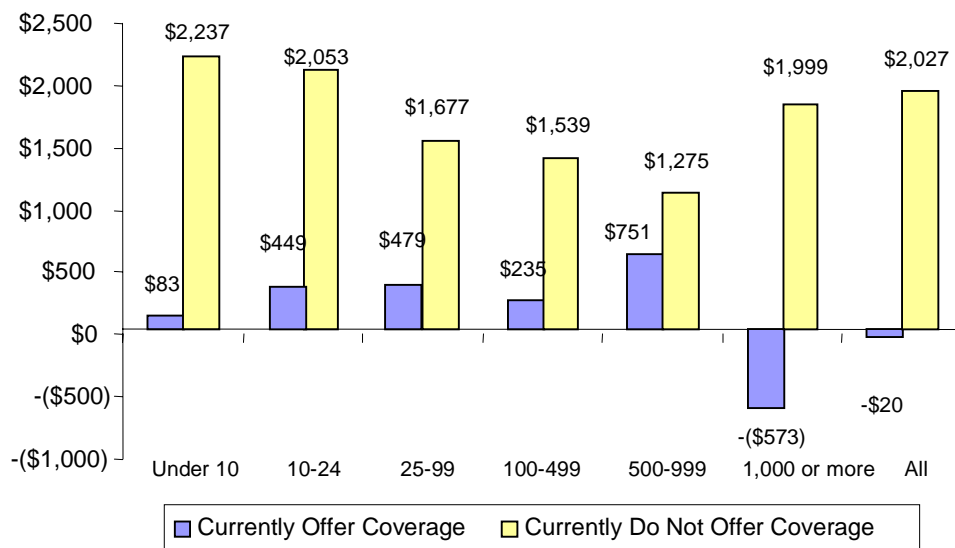
Under the CHSP program, total private employer spending would increase by \$7.9 billion. This includes a \$8.1 billion increase in spending in firms that do not now offer coverage and a net decrease in spending among employers that now offer coverage of \$204 million.¹¹

The average increase in private employer spending per worker would be \$2,027 for firms that do not now offer coverage. Spending in firms that currently provide coverage would decrease by an average of \$20 per worker. *Figure 4* presents our estimates of the average increase in employer health spending by firm size.

¹¹ The increases in spending for firms that now offer coverage reflects the fact that employers would be required to pay the payroll tax for employees including those that these employers do not cover such as part-time and temporary workers.

Empirical evidence indicates that employers are likely to pass on much of the increase in employer costs to employees in the form of reduced wages or lost jobs.¹² Employers are typically limited in what they can charge for their goods and services in the market place necessitating changes in other compensation costs as employer payroll taxes are increased. The economics literature indicates that much of the cost of increased health care spending has historically been passed on to workers.¹³ Based upon a review of the literature, we assume that 88 percent of the change in employer costs due to the payroll tax will result in changes in wages to the employee.¹⁴

Figure 4
Change in Private Employer Health Spending Per Worker by Firm Size and Current Insuring Status Under the CHSP Proposal in 2001: Before Wage Effects^a



^{a/} Assumes Full Implementation in 2002
 Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Impact on Household Spending

We estimate that household health spending would decline by \$19.7 billion under the CHSP program (**Figure 5**). This includes a reduction of household premium payments for private health insurance (\$17.0 billion) and reduced household out-of-pocket payments for health services

¹² See, for example, Jonathan Gruber and Alan B. Krueger, "The Incidence of Mandated Employer-Provided Insurance: Lessons from Workers Compensation Insurance," in *Tax Policy and the Economy* (1991); Jonathan Gruber, "The Incidence of Mandated Maternity Benefits," *American Economic Review*, (forthcoming); and Lawrence H. Summers, "Some Simple Economics of Mandated Benefits," *American Economic Review* (May 1989).

¹³ See, for example, James Heckman, "What Has Been Learned About Labor Supply in the Past Twenty years?" *American Economic Review*, (May 1993).

¹⁴ This estimate is consistent with estimates found in the literature. For example, Gruber and Krueger, op. cit., find that about 85 percent of the costs of mandated worker's compensation benefits are shifted to employees in the form of reduced wages, while Gruber, op. cit., found that virtually all of the employer's cost of mandated maternity benefits are shifted to the employee.

(\$19.8 billion). These savings would be largely offset by increased tax payments of \$17.4 billion resulting in a net savings of \$19.7 billion.

Figure 5
Impact of the CHSP Proposal on
Households: Assumes Full Implementation in 2002
(In millions)

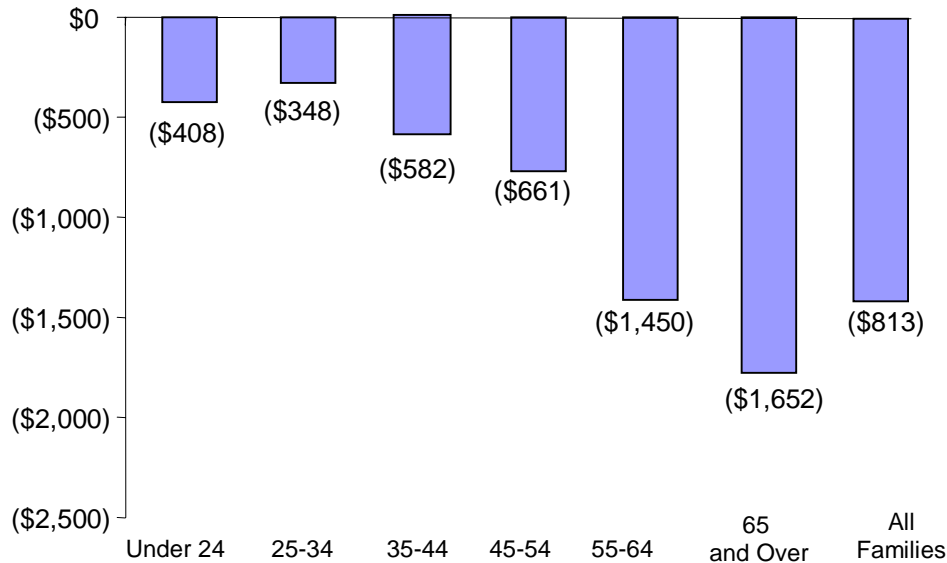
	Without Wage Effects	With Wage Effects
Premium Reductions	(\$17,204)	(\$17,204)
Reduced Out-of-Pocket Spending for Acute Care	(\$19,854)	(\$19,854)
Dedicated Program Tax Payments	\$17,400	\$17,400
After-Tax Wage Effects	N/A	\$5,197
Net Change in Household Spending		
Net Impact on Household Spending	(\$19,658)	(\$14,461)

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

We estimate that these net savings in health spending would be largely offset by the loss of wages to households (after tax offsets) of about \$5.2 billion as employers pass on the increased cost of complying with the payroll tax to workers in the form of reduced wages. We treat this wage loss as an increase in health-related costs for households. The net impact of the CHSP proposal would be a reduction in household spending after wage effects of \$14.5 billion.

Overall, we estimate that households would see health spending decline by an average of about \$813 per family under the single-payer model in 2002 including the wage effects. Savings under the plan would tend to be greatest for older individuals. For example, families headed by an individual age 65 or older would save about \$1,652 per family (*Figure 6*). Average health spending would also decrease, by a lesser degree, for most younger families.

Figure 6
Change in Average Family Health Spending by Age of Family Head Under the CHSP Proposal in 2002: After Wage Effects^{a/}



^{a/} Assumes Full Implementation

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

In general, the CHSP Plan would tend to reduce health care costs for lower- and middle-income families while increasing health related costs for persons in higher income groups. For example, families with under \$100,000 in annual income would, on average, see savings. However, health spending for families with \$150,000 or more in income would increase by about \$2,795 per family (*Figure 7*). This reflects the fact that the program would shift the state from a premium-financed system to a tax-financed system where total family health spending would generally be in proportion to family earnings.

Federal Spending Impact

The CHSP Plan was designed to be budget neutral for Federal government in terms of health spending. This was done by assuming that all of the federal funds for existing programs would be transferred to the state to contribute to the overall cost of running the CHSP program.

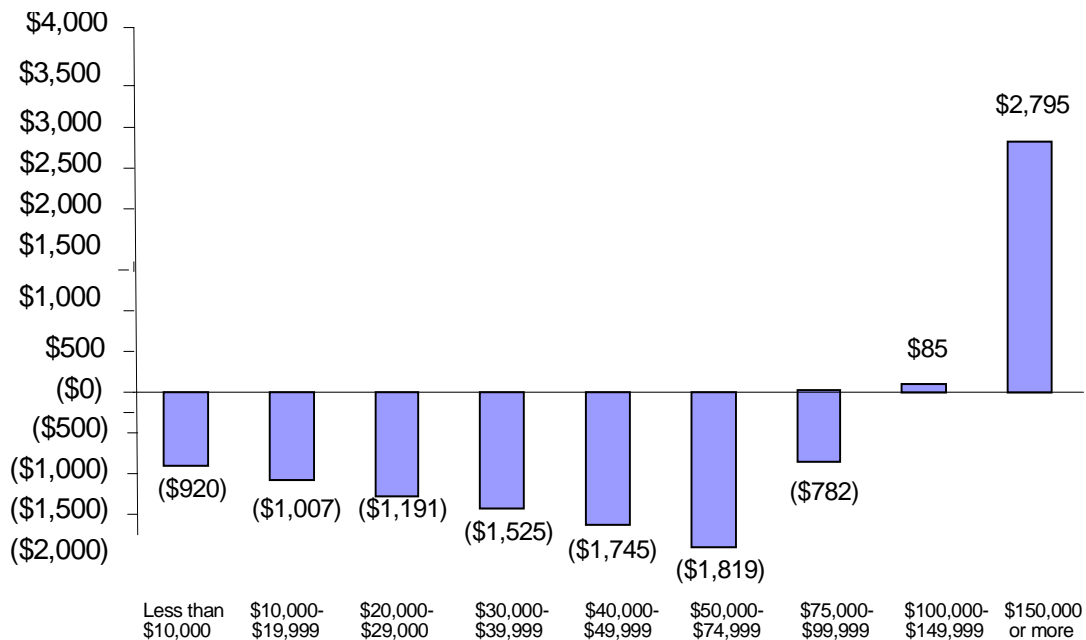
However, the use of a payroll tax on employers would reduce the amount of federal payroll and income taxes collected for Californians. This is because we assume that increases in employer health spending would be passed on to workers in the form of lower wages. This loss of wages to the worker would be partly offset by a reduction in the amount of taxes paid which would cushion the impact of this wage loss. Thus, the federal government would indirectly subsidize the cost of the program for workers by absorbing this tax loss. We estimate a reduction in federal taxes of about \$218 per family due to the wage effects of the single-payer program.

Costs in Future Years

As discussed above, the analyses presented here assume that the program is fully implemented in 2002. Annual growth in total program expenses would be constrained to the growth in state gross domestic product (GDP). Total health spending would increase from \$165.0 billion in 2003 to \$303.4 billion in 2012 under current policy (*Figure 8*). Spending under the CHSP program would reduce health spending to \$160.4 billion in 2003. Spending would then grow at the rate of growth in the state GDP, reaching \$258.1 billion in 2012.¹⁵ Total savings in 2012 would be \$45.3 billion. These estimates reflect the ten year phase-in of savings due to increased emphasis on primary care.

Figure 9 presents estimates of spending and revenues under CHSP for 2003 through 2012. *Figure 10* presents projected spending for CHSP covered services for 2003 through 2012 under current trends and under the CHSP program.

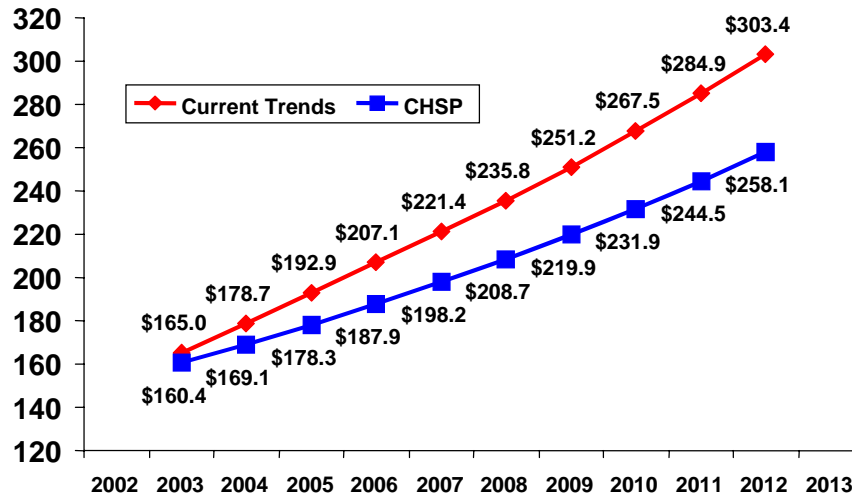
Figure 7
**Average Change in Family Health Spending Under CHSP by Income in 2002:
After Wage Effects**



Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

¹⁵ State GDP is estimated to grow at about 5.5 percent per year.

Figure 8
Projected Growth in State Health Spending for Covered Services Under Current Trends
and CHSP Compared 2003-2012^{a/}
(In billions)



a/ Excludes public health

b/ Reflects the 10 year phase-in of savings due to increased use of primary care

Source: Lewin Group estimates

Figure 9
Estimated Costs and Net Revenue Requirements Over the 2003 through 2012
Period (billions) ^{a/ b/}

	Total Program Costs	Intergovernmental Transfers	Net Revenue Requirement ^{c/}
2003	\$143.7	\$69.0	\$74.7
2004	\$151.0	\$74.5	\$76.5
2005	\$157.7	\$80.5	\$77.2
2006	\$165.8	\$86.9	\$78.2
2007	\$174.5	\$93.8	\$80.7
2008	\$183.5	\$100.8	\$82.7
2009	\$192.9	\$108.2	\$84.7
2010	\$203.2	\$116.1	\$87.1
2011	\$213.8	\$124.6	\$89.2
2012	\$225.5	\$133.7	\$91.8

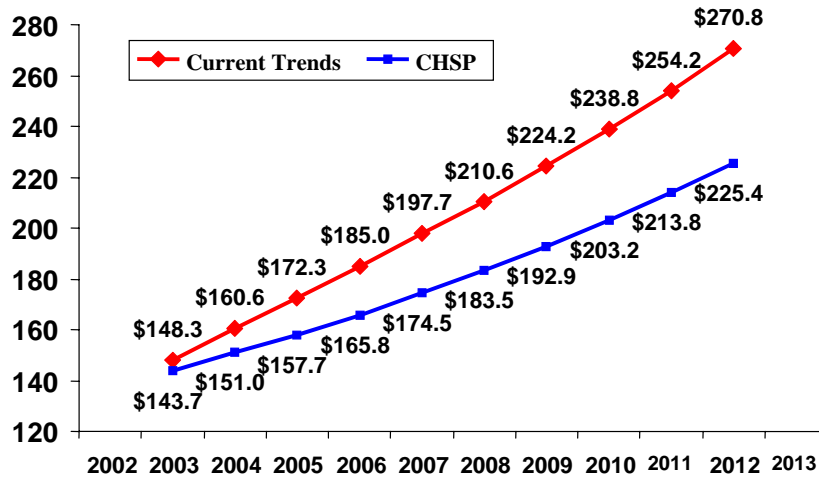
a/ Includes CHSP covered services plus spending for state health benefits programs that would continue under this proposal (with no changes in coverage) including Medi-Cal long-term care and services for the physically and mentally disabled. Excludes public health.

b/ Reflects the 10 year phase-in of savings due to increased use of primary care

c/ Includes payroll tax payments, and tobacco tax.

Source: Lewin Group estimates.

Figure 10
Projected Growth in State Health Spending for CHSP Covered Services Under
Current Trends and CHSP Compared ^{a/ b/}
2003-2012 (in billions)



a/ Includes CHSP covered services plus spending for state health benefits programs that would continue under this proposal (with no changes in coverage) including Medi-Cal long-term care and services for the physically and mentally disabled. Excludes public health
b/ Reflects the 10 year phase-in of savings due to increased use of primary care
Source: Lewin Group estimates

6. Alternative Financing Arrangement and the Impact on Household Spending

We estimated the impact on household health spending under the CHSP program using an alternative financing arrangement. As described above, the program would be financed using savings from existing public programs, a payroll tax on employers and employees, and an increase in tobacco taxes. Under this alternative financing arrangement, the employer and employee payroll tax is replaced with an increase in income taxes.

We estimate that household health spending in California would increase by about \$390 million if the program is financed through increased income taxes (**Figure 11**). This compares to a decrease of \$15.0 billion in household spending under a program financed by employer and employee payroll taxes. Under the income tax financed system, households would be required to provide about \$62.1 billion in additional income tax revenue.

Under the CHSP program, employers would no longer provide health insurance (except for wrap around coverage for services not covered under CHSP). Under an income tax financed system, employers would no longer contribute to the financing of the program and would realize large savings. We assume that employers (both private and public) would pass on much of these savings to employees in the form of higher wages. As described above, we assume that 88

percent of these savings are passed on to their workers. We estimate the increase in after tax wages to be about \$24.7 billion.

The increase in employee wages would provide an increase in state income tax revenues of about \$2.2 billion. We assume that these additional income tax revenues are used to help finance the CHSP program. However, the increase in employee wages would also provide an increase in federal income taxes and FICA taxes of about \$10.7 billion, which we assume would not be available to help finance the program. As described above, employers would not pass on the entire savings on to their employees but only about 88 percent of these savings. Thus, about \$4.8 billion in previous employer contributions to health care would be lost from the system.

Figure 11
Impact of the CHSP Proposal on
Households: Assumes Full Implementation in 2002
(In millions)

	Financing Using Payroll Taxes (Includes Wage Effects)	Financing Using Income Taxes (Includes Wage Effects)
Premium Reductions	(\$17,204)	(\$17,204)
Reduced Out-of-Pocket Spending for Acute Care	(\$19,854)	(\$19,854)
Dedicated Program Tax Payments	\$17,400	\$62,120
After-Tax Wage Effects	\$5,197	(\$24,672)
Net Change in Household Spending		
Net Impact on Household Spending	(\$14,461)	\$390

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Overall, we estimate that households would see health spending increase by an average of about \$31 per family under the income tax financed CHSP model in 2002 including the wage effects. This compares to a saving of about \$1,014 under a payroll tax financed program. *Figure 12* compares the average household health spending under the two financing arrangements.

Figure 12
Change in Average Family Health Spending by Age of Family Head and Family Income Under the CHSP Plan Under Various Financing Arrangements

Age of Family Head / Family Income Range	Average Household Spending (Payroll-Tax Based System)	Average Household Spending (Income-Tax Based System)
Age of Family Head		
Under 25	(\$509)	(\$632)
25-34	(\$434)	(\$199)
35-44	(\$726)	\$477
45-54	(\$824)	\$697
55-64	(\$1,808)	(\$148)
65 and Over	(\$2,060)	(\$637)
Family Income		
Under \$10,000	(\$1,147)	(\$1,274)
\$10,000-\$19,999	(\$1,256)	(\$1,727)
\$20,000-\$29,999	(\$1,485)	(\$2,187)
\$30,000-\$39,999	(\$1,902)	(\$2,541)
\$40,000-\$49,999	(\$2,176)	(\$2,518)
\$50,000-\$74,999	(\$2,268)	(\$2,311)
\$75,000-\$99,999	(\$975)	\$63
\$100,000-\$149,999	\$106	\$3,575
\$150,000 and Above	\$3,485	\$14,000
Total	(\$1,014)	\$31

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).