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Cost and Coverage Impacts of Five Proposals to Reform the Colorado Health Care System

Appendix F: "Colorado Health Services Program" Single-Payer Proposal

Prepared for:

The Colorado Blue Ribbon Commission for Health Care Reform

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I. "COLORADO HEALTH SERVICES PROGRAM" SINGLE PAYER PROPOSAL

The Colorado Health Services Program (CHSP) is a single payer plan that would provide coverage to all Colorado residents, including state and local workers, and residents currently covered under Medicare, Medicaid/CHP+, TRICARE, Veteran's Health, Indian Health Services, community health clinics and Federal Health Benefits programs. The program would provide all eligible people with comprehensive health care benefits that cover the same list of services now covered under the Colorado Medicaid benefits package. Consumers would have their choice of providers and hospitals within the state.

No premiums would be required but there would be some point-of-service co-payments. The program would be financed partly with spending under current government programs that would be transferred to the single-payer program. The program would also include an employer payroll tax and an increase in the state income tax rate. The CHSP would be administered by a publicly owned non-for-profit governing board, responsible for establishing the benefit package and cost-sharing.

The CHSP single-payer proposal assumes that the federal government agrees to provide Colorado with a block grant equal to the amount of money the federal government would have spent on health benefits for Colorado residents in each year under current law. These include funding for Medicare, Medicaid, federal worker benefits and all other federal spending for direct services provided to Coloradans. Thus, for illustrative purposes, we assume that Congress acts to provide these block grants for Colorado.

We present the Colorado Health Services Single Payer Program in the following sections:

- Provisions of Colorado Health Services Program;
- Key Assumptions;
- Cost and Coverage Impacts; and
- Ten-Year Cost Projections

A. The Colorado Health Services Program (CHSP)

1. Coverage

All Colorado residents would be covered under CHSP regardless of their current source of coverage. Residents would be defined to include anyone who has resided in Colorado for at least 3 months or who works in the state of Colorado.

2. Covered Services

All individuals would be eligible for a comprehensive set of benefits, illustrated in ***Figure 1.*** For modeling purposes we used the list of services covered under Medicaid with added preventive care and restorative dental services for adults. Long term care services would be covered subject to the following:

Figure 1
Colorado Health Services Program (CHSP) Benefit Schedule

	Cost Sharing [a/]
Premium/Deductible	None
Max Annual Out-of-Pocket	None
Coinsurance/Co-pays [b/]	Limited co-pay for some services if enrolled in Primary Care Physician Program (PCPP). No co-pays if 18 or younger, pregnant or in a nursing home.
Lifetime Benefits Max Paid by Plan	No limit
Services	
Emergency Services	Covered in full-no co-pay
Emergency Transport-Ambulance Services	Covered in full-no co-pay
Inpatient Hospital Stay	$15/visit
Outpatient Ambulatory Surgery	$3/visit
Lab, x-ray and Diagnostic Services	Covered in full-no co-pay
Medical Office Visit	$2/visit
Preventive Services	Covered in full-no co-pay
Maternity Care	Covered in full-no co-pay
Neurobiologically Based Mental Illness	Covered in full-no co-pay
Other Mental Health Services	Covered in full-no co-pay
Alcohol and Substance Abuse Treatment	Covered in full-no co-pay
Physical, Occupational and Speech Therapy	Covered in full-no co-pay
Durable Medical Equipment	Covered in full-no co-pay
Prescription Drugs	$1 generic, $3 brand-name
Vision Services	$2/visit
Audio-logical Services	Covered in full-no co-pay
Transplant Services	Covered in full-no co-pay
Dental Care [c/]	Comprehensive dental for children. Basic preventive, restorative and surgical for adults.
Podiatry Services	$2/visit
Skilled Nursing Facility	Long term care-may have to pay portion of income
Hospice Care	Long term care-may have to pay portion of income
Home Health Care	Long term care-may have to pay portion of income
Spinal Manipulation	Excluded

a/ Kaiser Commission on Medicaid and the Uninsured. Benefits by State: Colorado 2004. See: www.kff.org, and the Colorado Department of Healthcare Policy and Financing (HCPF) www.chcpf.state.co.us/HCPF/elig/Q9.asp.

b/ For modeling purposes, the co-pays in this table would be applicable to individuals eligible for Medicaid and CHP+ under current law. Medicaid also waives co-pays if the individual is enrolled in an HMO. However, this is not applicable under the Single Payer as there would be no HMO—everyone is enrolled in the Single Payer.

c/ Colorado Medicaid currently does not cover dental services for adults except surgical services. The Single Payer proposal extends preventive and restorative dental services to adults.

Source: Colorado Department of Health Policy and Financing

- For nursing home eligible Medicaid recipients the program would cover both the medical component and room and board;
- For those who are not Medicaid eligible, the program would cover only the medical component of nursing home services; and
- In the first year there would be allowance for a 25 percent increase in home and community-based care.

In addition, the program can provide enhanced benefits depending on the specific needs of each of the five regions. Employers would also be permitted to provide additional coverage not provided under the CHSP benefit package.

3. Point-of-Service Co-payments

There would be no deductibles under this plan. Cost-sharing provisions for the general population would be:

- No co-pays for preventive services;
- $5 co-pay for office visits;
- $15 co-pay for urgent and emergency care; and
- $5 (generic)/$15 (brand name) co-payment for prescriptions.

Enrollees determined to be low-income would be required to make only nominal co-payments including:

- $2 for physician visits;
- $3 for hospital outpatient services;
- $1 (generic)/$3 (brand name) co-pays for prescriptions.

For modeling purposes we assume low-income people are defined to be those who would be eligible for Medicaid or CHP+ under current law. ***Figure 1*** above provides additional detail on the co-payments by service used in our analysis.

4. Financing

The CHS plan would be financed as follows:

- The CHSP single-payer proposal assumes that the federal government agrees to provide Colorado with an annual block grant equal to the amount of money the federal government would have spent on health benefits for Colorado residents under current law. These include funding for Medicare, Medicaid, federal worker benefits, TRICARE, Veteran's Affairs, Indian Health Services, community health clinics and all other federal spending for direct services provided to Coloradans.;

- All current State and Local government health spending would be transferred to the program including Medicaid, worker's compensation and other safety-net program funding;
- All employers and self-employed workers would pay a 6 percent employer payroll tax. This includes state, local and federal workers in the state;
- Individuals and families, including self-employed people, would pay an additional income tax. The Colorado personal income tax rate would be increased by 8.1 percentage points from its current level of 4.6 percent to 12.7 percent;
- Tobacco taxes would be increased from $0.84 to $2.00 per pack; and
- Alcohol taxes would be increased as follows:
  - Spirits from $0.60 to $5.63 per liter;
  - Wine from $0.07 to $0.66 per liter; and
  - Beer from $0.05 to $0.15 per 6-pack.

We assume that as part of enacting CHSP, the citizens of Colorado demonstrate approval of these revenue generating mechanisms by waiving these measures from the Colorado's Taxpayers Bill of Rights (TABOR) and the Arveschoug-Bird law; which limits new taxes without voter approval.

5. Provider Payment Levels

We assume that provider payment levels would be set at the average level of reimbursement across all payers for health care services under current law, including payments under public and private health plans. This is designed to assure that there is no net change in aggregate provider revenues for each unit of service in the first year of the program. However, we assume that provider payment rates for each service category would be adjusted to reflect the following:

- Near elimination of cost-shifting for uncompensated care (i.e., some uncompensated care would remain for undocumented immigrants); and
- Estimated administrative savings for providers resulting under the CHSP.

6. Administration of Program

The CHSP would be administered by a publicly owned non-for-profit board of trustees comprised of 15 members. The state would have regional offices under the governing board for the purpose of local administration, medical directorship, outreach, oversight of programs and delivery of care specific to the needs of each regional, and oversight of future benefits packages.

The Board would provide oversight and administrative direction for the CHSP. All decisions of the CHSP Board would be final in regard to administration and implementation of health care within the state unless otherwise directed by the courts or state statute. The board also would be responsible for conducting initial reviews of medical malpractice claims. The Legislature would not be able to remove funds allocated to the trust without the consent of the voters.

In addition, the CHSP would not operate in a deficit. For illustrative purposes, we assume that this means that the tax rates would be automatically adjusted over time to reflect changes program spending. Administrative overhead for the CHSP may not exceed 5 percent of total program expenditures.

7. Health Information Technology (HIT)

The CHS program calls for a statewide, fully integrated Information Technology network that can be expanded upon by the Colorado Health Regional Information Organization (COHRIO). However, the proposal does not specify the amount of funding for HIT development. HIT would include electronic medical records, billing, claims adjudication, and centralized data support.

B. Key Assumptions

In this section, we describe the methods and assumptions used to simulate the impact of this proposal. A detailed discussion of the model is presented in ***Appendix H.***

1. Insurer Administration

The Single Payer program would extend large-group economies of scale throughout the health care system by covering all individuals under a single insurance program. This would eliminate the costs associated with underwriting, transitions in coverage, and maintaining the administratively cumbersome linkage between employers and insurers.

We assumed that the cost of insurer administration is similar to administrative costs under the fee-for-service Medicare program, which can be thought of as a single-payer program for the elderly and disabled. Medicare administrative costs for the fee-for-service Medicare program are equal to about 1.8 percent of covered benefits compared with an average of about 14 percent of covered benefits under private insurance arrangements in Colorado. We estimated the amount of insurer administrative savings based on the difference between total insurer and government program administrative costs under the current system, and estimated administrative costs under the program.

The Administrative cost estimates for fee-for-service Medicare (1.8 percent) and private insurance (14 percent) are fully comparable. The Medicare figure included claims processing, peer-review and other functions that are performed by contractors for Medicare. It also includes costs for administrative operations performed by the federal government including wages and salaries, health and other fringe benefits, and a "fair market" valuation of all offices and equipment used by federal Medicare employees. In addition, it includes the cost of research on quality, outcomes and provider payment systems.

Medicare claims and peer review functions are performed with a separate contractor in each state. Thus, the cost of administering Medicare is built-up from what are in effect fifty-one separate state programs (California has two fiscal agents). Thus the economies of scale in operating a single payer program in Colorado would be comparable to the cost of administering Medicare for an individual state.

We estimated administrative costs based upon a breakdown of Medicare administrative costs by function. Fee-for-service Medicare costs were about $115.77 per beneficiary, including both contracted costs and federal administration (***Figure*** **2**). We adjusted the claims processing and utilization review costs to reflect the lower levels of service utilization per-enrollee among the non-Medicare population. We assume that other agency administrative costs, which are related to overall project management, enrollment processing and tax functions, would decline in proportion to the decline in claims processing and utilization review costs. Using these assumptions, we estimate administrative costs for non-Medicare enrollees averaging about $69.46 per enrollee under the Colorado single payer program.

Figure 2
Derivation of Insurer Costs Per-Enrollee
under the Colorado Single Payer Program in 2006 [a/]

	Medicare Costs Per Enrollee	Costs for non-Medicare Enrollees Under CHSP [b/]	Total
Program Administrative Costs By Function			
Claims Processing	$64.45	$38.67	N/A
Utilization Review	$29.13	$17.48	N/A
Research/Demonstrations	$1.75	$1.05	N/A
Agency Administration	$20.44	$12.26	N/A
Total	$115.77	$69.46	N/A
Number People Enrolled (in thousands)	438.6	4,181	4,619
Total Administration Under CHSP Program in Colorado (in millions)	$50.78	$290.43	$341.20

a/ Insurer administrative costs were extrapolated from administrative costs for current the Medicare program, using data supplied by CMS.
b/ The number of health services used by the non-Medicare population is on average about 55 percent less than among the aged and disabled people covered under Medicare. We estimated this using the Medical Expenditures Panel Survey (MEPS) data for 1999 through 2001.
c/ Assumes administrative per-enrollee cost growth of 3.8 percent per year between 2003 and 2006 based upon the HCFA Implicit Medical Price Deflator estimated by the CMS Office of the Actuary.
Source: Lewin Group estimates.

2. Hospital Administrative costs

Figure 3 presents our estimates of hospital expenses for services and administration in Colorado for 2007/2008. We calculated hospital revenue and expenses using the Colorado Medicare Hospital Cost report data for 2004, which include data on hospital administrative costs by functional area. Because some hospitals reported the data in more detail than others, it was necessary to develop a method for allocating costs to detailed administrative functions based upon the allocation of costs reported by Colorado hospitals with full reporting. We then aged these data to 2007/2008 in proportion to the projected rate of growth in hospital spending in

Colorado over the 2004 through 2007/2008 period. The data and methods used to develop these estimates are presented in ***Appendix B.***

We estimated savings in each functional area as shown in ***Figure 3.*** Separating administrative costs into sub-functions enables us to distinguish those areas likely to be affected by CHSP from those functions that would not be affected. For example, we expect savings in credit and collections due to universal coverage, but do not anticipate CHSP to affect costs for laundry and food service. For each of these sub-functional areas, we estimated the percent savings that would be achieved under the CHSP for each affected area based upon interviews with industry experts.

Using this approach, we estimate that hospital administrative costs are equal to about 31.5 percent of hospital revenues. We estimate that physician administrative expenses would be reduced by 26.3 percent and hospital administrative costs would be reduced by 9.8 percent with savings of $322.2 million in 2007/2008.

Figure 3
Estimated Savings in Hospital Administrative Savings under CHSP for 2007/2008
(millions)

	Hospital Care Expense	Expenses Attributed to Patient Care	Value Allocated to Administration	Assumed Percent Admin. Savings	Savings under Program
Total Adjusted Hospital Operating Revenue	**$10,426.0**	**$7,139.7**	**$3,286.3**	**9.8%**	**$322.2**
Daily Hospital and Ancillary Services Cost	**5,119.6**	**5,119.6**	**0.0**	**--**	**--**
Research Costs	**137.4**	**0.0**	**137.4**	**0.0%**	**0.0**
Education Costs	**92.9**	**0.0**	**92.9**	**0.0%**	**0.0**
General Costs	**665.4**	**474.6**	**190.8**	**25.0%**	**47.6**
Non-Patient Food Services	3.8	0.0	3.8	0.0%	0.0
Dietary	147.6	147.6	0.0	0.0%	0.0
Laundry and Linen	30.5	30.5	0.0	0.0%	0.0
Social Work Services	19.1	11.5	7.6	50.0%	3.8
Purchasing and Stores	21.6	0.0	21.6	0.0%	0.0
Maintenance and Repairs	85.2	75.1	10.2	23.0%	2.3
Plant Operations & Maintenance	194.7	169.2	25.4	23.0%	5.9
Communications	20.4	0.0	20.4	0.0%	0.0
Data Processing	101.8	0.0	101.8	35.0%	35.6
Other General Services	40.7	40.7	0.0	0.0%	0.0
Fiscal Services	**433.8**	**0.0**	**433.8**	**38.0%**	**165.0**
General Accounting	17.8	0.0	17.8	0.0%	0.0
Patient Accounting	273.5	0.0	273.5	50.0%	136.8
Credit & Collection	17.8	0.0	17.8	90.0%	16.0
Admitting	30.5	0.0	30.5	40.0%	12.2
Other Fiscal Services	94.1	0.0	94.1	0.0%	0.0
Administrative Services	**706.1**	**0.0**	**706.1**	**13.8%**	**97.4**
Hospital Administration	334.6	0.0	334.6	25.0%	83.7
Personnel	1.3	0.0	1.3	0.0%	0.0
Medical Records	137.4	0.0	137.4	10.0%	13.7
Nursing Administration	87.8	0.0	87.8	0.0%	0.0
Other Administrative Services	145.0	0.0	145.0	0.0%	0.0
Unassigned Costs	**960.6**	**0.0**	**960.6**	**1.3%**	**12.1**
Depreciation and Amortization	376.6	323.9	52.7	23.0%	12.1
Insurance – Hospital and Prof. Malpractice	2.5	0.0	2.5	0.0%	0.0
Taxes	2.5	0.0	2.5	0.0%	0.0
Interest – Working Capital	2.5	0.0	52.2	0.0%	0.0
Interest - Other	52.2	0.0	75.1	0.0%	0.0
Employee Benefits (non-payroll related)	75.1	0.0	451.7	0.0%	0.0
Total Operating Expenses	**8,115.9**	**0.0**	**2,521.7**	**0.0%**	**0.0**
Net Operating Revenue	**$2,310.1**	**0.0**	**$764.6**	**0.0%**	**0.0**

a/ The allocation of hospital administrative costs by administrative function were estimated from the Medicare cost report data for Colorado hospitals.
Source: Lewin Group estimates based upon interviews with industry experts.

3. Physician Administrative Expenses

We estimated the distribution of physician administrative costs for Colorado based upon expense report data from the 2006 Medical Group Management Association (MGMA) cost survey (based on 2005 data) of physician practices ***(Figure 4).*** Because state-level data are not available from the survey, we used data for the west region of the country for the Colorado study. The survey includes responses from 335 physician practices nationwide. We used the distribution of operating costs for non-hospital or IDS (Integrated Direct Service) multi-specialty practices. To generate this distribution of costs by function, we allocated our estimates of total physician income in Colorado for 2007/2008 in proportion to the distribution of costs in the MGMA data for the Western region of the country. The data and methods used to develop these estimates are presented in ***Appendix B.***

We then developed assumptions on how much could be saved from simplified administration for each individual administrative function. For example, we anticipate that moving to a single insurer with uniform rules and procedures would reduce costs associated with patient accounting and claims adjudication, but would have little impact on such things as housekeeping and security. Our assumed percentage savings by functional category is based upon interviews with industry experts at the Lewin Group and elsewhere in the industry.

Based upon this analysis, we estimate that physician administrative costs are equal to 36.8 percent of physician revenues. We estimate that administrative simplification would reduce physician administrative costs by 21.8 percent, with savings totaling $668.8 million if fully implemented in 2007/2008.

Figure 4
Estimated Physician Administrative Savings under CHSP in 2007/2008 (in millions)

	Total Revenues by Expenses	Direct Patient Care Expenses	Expenses attributed to Administration	Assumed Percent Reduction In Administration	Estimated savings under Program
Non-Physician Salaries & Benefits	**$2,831.6**	**$1,007.8**	**$1,823.8**	**23.0%**	**$420.2**
General administrative	226.9	0.0	226.9	25.0%	57.2
Patient accounting	211.9	0.0	211.9	12.5%	26.5
General accounting	47.6	0.0	47.6	12.5%	6.3
Managed care administrative	60.1	0.0	60.1	100.0%	60.1
Information technology	74.3	0.0	74.3	30.0%	22.3
Housekeeping, maint., security	31.7	0.0	31.7	0.0%	0.0
Medical receptionists	298.7	0.0	298.7	33.0%	98.6
Med secretaries, transcribers	69.2	0.0	69.2	33.0%	22.8
Medical records	111.0	0.0	111.0	10.0%	11.0
Other admin support	63.4	0.0	63.4	0.0%	0.0
Registered Nurses	219.4	197.5	21.9	66.0%	14.4
Licensed Practical Nurses	101.8	89.6	12.2	66.0%	8.0
Med assistants, nurse aides	318.7	283.6	35.1	66.0%	23.2
Clinical laboratory	141.8	141.8	0.0	0.0%	0.0
Radiology and imaging	151.8	151.8	0.0	0.0%	0.0
Other medical support services	143.5	143.5	0.0	0.0%	0.0
Total employee support staff benefits	457.2	0.0	457.2	12.5%	57.1
Tot contracted supp staff	101.8	0.0	101.8	12.5%	12.7
Total General Operating Cost	**2,467.9**	**1,466.6**	**1,001.3**	**16.2%**	**162.2**
Information technology	150.2	0.0	150.2	50.0%	75.0
Drug supply	382.1	382.1	0.0	0.0%	0.0
Medical and surgical supply	148.5	148.5	0.0	0.0%	0.0
Building and occupancy	545.6	409.2	136.4	17.0%	23.8
Furniture and equipment	99.3	76.4	22.9	16.0%	3.7
Admin supplies and services	164.4	0.0	164.4	16.0%	26.3
Prof liability insurance	192.7	0.0	192.7	0.0%	0.0
Other insurance premiums	15.9	0.0	15.9	0.0%	0.0
Outside professional fees	61.7	0.0	61.7	0.0%	0.0
Promotion and marketing	37.5	24.8	12.7	0.0%	0.0
Clinical laboratory	159.4	159.4	0.0	0.0%	0.0
Radiology and imaging	137.7	137.7	0.0	0.0%	0.0
Other ancillary services	128.5	128.5	0.0	0.0%	0.0
Billing purchased services	69.2	0.0	69.2	0.0%	0.0
Management fees paid to MSO	0.0	0.0	0.0	0.0%	0.0
Miscellaneous operating costs	176.0	0.0	176.0	19.0%	33.4
Total Operating & Non-Phys. Exp.	**5,299.5**	**2,474.4**	**2,825.1**	**20.6%**	**582.4**
Physician Expense	**3,043.5**	**2,800.0**	**243.5**	**35.5%**	**86.4**
Patient Care	2,878.2	2,877.1	1.0	0.0%	0.0
General Administration	99.2	0.0	99.2	25.0%	24.4
Medical Records	14.6	0.0	14.6	0.0%	0.0
Pre-Service Utilization Mgmt	14.6	0.0	14.6	30.0%	4.4
Utilization Review	63.8	0.0	63.8	0.0%	0.0
Claims Denial and Adjudication	86.0	0.0	86.0	67.0%	57.6
Total Net Patient Revenues	**$8,343.0**	**$5,274.4**	**$3,068.6**	**21.8%**	**$668.8**

a/ Estimates developed from data provided by the Medical Group Management Association.
Source: Lewin Group Estimates based upon interviews with industry experts.

4. Utilization of Health Services

The expansions in coverage and benefits under the program would result in increased utilization of health services. Utilization of services for uninsured and under-insured people would generally increase due to expanded access to services under the program.

We assume that uninsured people who become covered under the program would use health care services at the same rate as do insured people 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 avoidable emergency room visits and hospitalizations. Second, there would be a general increase in the use of such services as preventive care, corrective orthopedic surgery, advanced diagnostic tests, and other care that the uninsured often forego or delay.

We also simulate changes in utilization for currently insured people who are not covered for specific services under their current plan. These services include prescription drugs, dental care, and medical equipment. In this analysis, we assume that utilization of these services by people who are not currently covered for these services would increase to the levels observed among people with similar demographic and health status characteristics who do have coverage for these services.

5. Bulk Purchasing Savings

We assume that the state establishes central purchasing authorities responsible for negotiating favorable prices for prescription drugs and durable medical equipment. For illustrative purposes, we assume this would be aided by establishing a drug formulary that favors the use of lower-cost drugs when possible and contracts with durable goods manufacturers for reduced prices.

We assume that the program would use a prescription drug formulary to negotiate price discounts with drug manufacturers. The formulary would be developed by the single payer administrative authority. Under this system, specific drugs are selected for inclusion in the formulary for each type of medical therapy. This would typically include generic substitutes for brand-name drugs, and drugs selected by the state in negotiations with the pharmaceutical manufacturers. We assume that providers would not be permitted to prescribe off-formulary (usually higher cost) medications unless the formulary medication is ineffective or inappropriate for the patient due to side-effects.

In this analysis, we assume that Colorado would negotiate discounts with drug manufacturer that are equivalent to the discounts and rebates received by the Medicaid program for all people covered under the single payer plan. This is a discount of 20 percent which compares with an estimated average discount of 8 percent for existing private insurance plans.[1] Savings would be reduced or eliminated if a less restrictive formulary is used.

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[1] Medicaid law requires that prescription drug manufacturers charge Medicaid no more than the lowest amount charges to any customer nationwide.

6. Durable Medical Equipment Purchasing

The use of centralized purchasing for durable medical equipment would also reduce costs (i.e., wheelchairs, hearing aids, etc.). For illustrative purposes, the state would negotiate volume discounts from the various manufacturers through a process similar to that used for purchasing prescription drugs. To maximize savings we assumed an exclusive contracting approach where suppliers are selected on the basis of a competitive bidding process. Therefore a key element of the program is that medical durable products from higher cost suppliers would not be available to Colorado residents unless they purchase these items themselves.

This design is likely to give the state substantial leverage in negotiating prices with suppliers and manufacturers. In this analysis, we assume that the savings on durable medical equipment under the program would be similar to the percentage savings assumed for prescription drugs by the source of payment. Savings are likely to be reduced or eliminated if the exclusive contracting approach is not used.

7. Health System Fraud

The single payer could potentially reduce health system fraud through its subpoena powers. Government agencies typically have the power to subpoena provider records in investigations of possible fraud. Private carriers do not have these powers, so it is more difficult to investigate potentially fraudulent claims. This suggests that the single payer program could be more effective than private insurers in detecting and deterring fraud.

The literature on this subject indicates that about five percent of all health claims are "inaccurate." In this study, we assumed that fraud is reduced by about 20 percent among privately insured people who become covered under the CHSP for all services except hospital care. We assume that the savings would apply only to people who currently have private coverage because the state and federal governments already have subpoena powers for current government programs.

8. Employer Supplementation of Benefits

We assume that employers provide supplemental benefits to cover services that were covered by the employer plan that are not covered under CHSP. We estimated the cost of administering this supplemental coverage based upon the cost of administering these benefits under current ESI plans in Colorado.

9. Wage Effects

Under all of the reform proposals analyzed in this study, we assume that changes in employer costs for health benefits are passed-on to workers in the form of changes in wages. Thus, reductions in employer costs are assumed to be passed-on to workers in the form of increased wages while increases in health benefits expenses are passed-back to employees in the form of reduced wage growth. Our pass-through assumption is based upon the economic principle that

the total value of employee compensation, which includes wages, employer payroll taxes health benefits and other benefits, is determined in the labor markets. [2]

In this analysis, we define employer health benefits costs to include both health insurance and the cost of the payroll tax that would be used to fund the program. Thus, for firms that currently do not provide coverage, health benefits costs under the proposal are defined to be the payroll tax payment made by the employer to fund the program (i.e., 6 percent). For currently insuring firms, the employer cost under the program is defined to include the payroll tax and the cost of any supplemental health benefits provided by the firm.

C. Cost and Coverage Impacts of the Colorado Health Services Program (CHSP)

In the following sections we present our estimates of the impact of the Colorado Health Services single payer proposal on employers, families and governments assuming full implementation in 2007/2008.

1. Transitions in Coverage

The single payer program would provide health insurance coverage for all Colorado residents. Some employers may provide supplemental coverage for services that are not covered under the single payer program. But the single payer program would be the primary source of coverage for all Colorado residents as shown in ***Figure 5***.

Figure 5
Transitions in Coverage under CHS Single Payer in 2007/2008 (thousands)

		Coverage under the CHSP Single Payer Proposal						
Current Law Primary Source of Coverage	Total	Single Payer Program	Private/ Employer	Private/ Non-Group	TRICARE	Medicare (excl. dual eligible)	Medicaid /CHP+	Uninsured
Employer	2,691.7	2,691.7	0.0	0.0	0.0	0.0	0.0	0.0
Non-Group	158.9	158.9	0.0	0.0	0.0	0.0	0.0	0.0
TRICARE	112.4	112.4	0.0	0.0	0.0	0.0	0.0	0.0
Medicare (excl. dual eligible)	413.0	413.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid / CHP+	452.1	452.1	0.0	0.0	0.0	0.0	0.0	0.0
Uninsured	791.8	791.8	0.0	0.0	0.0	0.0	0.0	0.0
Total	**4,619.9**	**4,619.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

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

[2] See, for example, Jonathan Gruber and Alan B. Kreuger, "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).

2. Impact on Statewide Health Spending

As discussed above, we estimate that health spending for Colorado residents will be about $30.1 billion in 2007/2008. This includes spending for all health services by all payers including Medicare, Medicaid, ESI, non-group insurance, workers compensation and various safety-net programs. Spending includes payments to providers for services and the cost of insurance and public program administration.

Figure 6 presents the sources of changes in statewide health spending under the proposal. Overall health spending would decline by $1.4 billion. We estimate an increase in health services utilization of $1.8 billion as all residents obtain comprehensive coverage under the program. Increased spending would be largely offset by the $2.8 billion in savings from administration and another $322 million from bulk purchasing of prescription drugs and durable medical equipment.

Under a program of universal coverage, providers would be paid for services they would have provided free for the uninsured under current law. The cost of these services is currently paid for with increases in private provider payment levels in a process called cost-shifting. However, we assume that provider payment rates would be adjusted under CHSP to eliminate this cost shift once all Colorado residents become covered under CHSP.

Figure 6
Changes in Statewide Health Spending under CHSP Single Payer in 2007/2008 (millions)

Current Statewide Health Spending for All Payers		$30,100
Change in Health Services Expenditures		**$1,774**
Change in acute care utilization for newly insured	$939	
Change in acute care utilization for currently insured	$70	
Change in long term care utilization	$765	
Reimbursement Effects		**$0**
Payments for previously uncompensated care	$682	
Reduced Cost Shifting [a/]	($682)	
Bulk Purchasing Discounts [b/]		**($322)**
Prescription Drugs	($290)	
Durable Medical Equipment	($32)	
Change in Administrative Cost of Programs and Insurance		**($2,847)**
Insurer Administration	($1,856)	
Hospital Administration	($322)	
Physician Administration	($669)	
Total Change in Statewide Health Spending		**($1,395)**

a/ Assumes change in provider payment resulting from previously uncompensated care are passed on to CHSP in the form of lower payment rates.
b/ Assumes 13 percent additional discount on drugs and medical equipment.
Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

3. *Impact on Provider Revenues*

We assume that currently uninsured people who become covered under the program would use health care services at the same rate as reported by currently insured people 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 avoidable emergency room visits and hospitalizations.
- Second, there would be a general increase in the use of more elective care such as preventive care, advanced diagnostic tests, and other care that the uninsured often forego or delay.

Using this methodology, we estimate that health spending among the currently uninsured population would increase by about $939 million in 2007/2008. Thus the increases in use of elective care would more than offset savings from improved primary care.

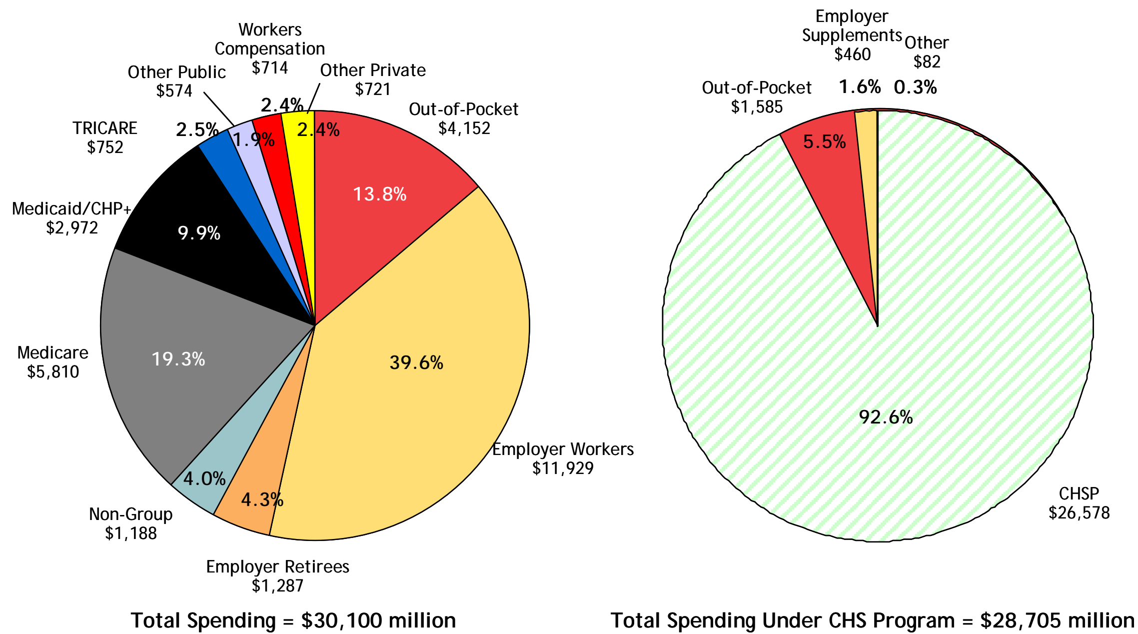
Similarly, utilization of services would increase among people currently insured in plans that do not cover prescription drugs, dental care and other services that would be covered under CHSP. Here again, we assume that utilization of these services would increase to the levels observed among those with similar demographic and health status characteristics who now have coverage for these services. This adds about $70 million in spending under the single payer plan.

The proposal also makes long term care services available to a broader range of people. Room and board and medical expenses would continue to be covered for the Medicaid and CHP+ eligible population in the Single Payer. However, for those who are not eligible under Medicaid and CHP+ eligibility guidelines, only the medical component would be covered. In these instances the individual would be responsible for room and board expenses. The proposal also requires a 25 percent increase in funding for home and community-based long term care services. We estimated that utilization of long term care services would increase by $765 million in 2007/2008.

4. *Spending by Payer Group*

The CHSP would cover 92 percent of all health spending in the state ***(Figure 7)***. The remaining 8 percent of spending would consist of out-of-pocket spending and supplemental coverage under public and private programs. Out-of-pocket spending would fall from $4.2 billion under current law to about $1.6 billion under the program. A small number of employers would provide supplemental coverage for services not covered under the CHSP at a cost of about $460 million.

Figure 7
Estimated Spending by Source of Payment in Colorado under Current Law and the Colorado Health Services Single Payer Program



Source: The Lewin Group estimates.

Statewide health spending under the CHSP in 2007/2008 would decrease by $1.4 billion from $30.1 billion under the current system to $28.7 billion (***Figure 8***). This reflects a reduction in insurer administrative costs of $1.9 billion and a net increase in provider payments of $464 million. These estimates reflect reductions in provider payment levels to eliminate the cost-shift for uncompensated care for the uninsured and anticipated reductions in provider administrative costs.

Figure 8
Distribution of Statewide Health Spending under CHSP Single Payer in 2007/2008
(millions)

	Benefits Payments	Administrative Costs	Total Spending
Change in Statewide Health Spending under CHSP			
Current Statewide Health Spending for All Payers	$27,838	$2,262	$30,100
Change in Statewide Health Spending under CHSP	$461	($1,856)	($1,395)
Statewide Health Spending under CHSP program	**$28,299**	**$406**	**$28,705**
Distribution of Spending Under CHSP Program			
Benefits Covered under CHSP	$26,237	$341	$26,578
Household out-of-Pocket Payments [a/]	$1,332	--	$1,332
Supplemental Insurance	$730	$65	$795
Total	**$28,299**	**$406**	**$28,705**

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

5. Sources and Uses of Funds under the Single-Payer

Figure 9 presents our estimates of sources and uses of funds under the single payer program. Total program spending would be about $26.6 billion in 207/2008, including provider payments of $26.3 billion and program administrative costs of $341 million. This would be funded in-part by redirecting spending under current public health benefits programs to the single payer program including $3.1 billion in state spending and $8.4 billion in federal spending for Coloradans. Another $15.0 billion in funding would be raised through new taxes including $8.2 billion in personal income tax payments, $6.5 billion in employer payroll tax revenues, and $336 million in alcohol and tobacco taxes.

a. Program Spending

Our estimated program cost of $26.6 billion reflects a number of adjustments to provider payments to reflect unique aspects of the program. We estimate that $322 million will be saved in 2006 from bulk purchasing discounts on prescription drugs and durable medical equipment. We also estimate a savings of $682 million in hospital and physician payment adjustments for anticipated provider administrative savings and the elimination of provider cost-shifting for uncompensated care. We estimate that administrative savings for providers would be $322 million for hospitals and $669 million for physicians.

Figure 9
CHSP Single Payer Costs and Revenues in 2007/2008 (millions)

Uses of Funds				Sources of Funds		
CHSP Acute Care Benefits Costs		**$23,255**	**State & Local Government Program Savings**			**$3,072**
Benefits costs at current payment rates	$25,250		Medicaid / CHP+	$1,427		
Bulk Purchasing Savings	($322)		Employee and Retiree Benefits [/a]	$378		
Reduced Cost Shifting	($682)		Workers Compensation	$702		
Hospital Admin. Savings	($322)		Other Safety-net Programs [/b]	$565		
Physician Admin. Savings	($669)		**Federal Government Transfers**			**$8,425**
CHSP Long Term Care Benefits Costs		**$2,982**	Medicaid / CHP+	$1,545		
Nursing Home	955		Medicare	$5,810		
Home & Community Based Services	$1,276		TRICARE	$752		
Home Health	$751		Indian Health Service	$40		
			FEHBP (employees & retirees) [/a]	$278		
CHSP Program Administration		**$341**	**Taxes to Fund Program**			**$15,025**
			Employers (6% payroll tax)		$6,513	
			Increase personal income tax rate by 8.1%		$8,176	
			Tobacco Tax Increase [/c]		$210	
			Alcohol Tax Increase [/c]		$126	
			State Income Tax Gain/(Loss) from Wage Effects			**$56**
Total Costs		**$26,578**	**Total Revenues**			**$26,578**

a/ Includes net savings after additional benefits for employees and retirees and payroll taxes.
b/ Includes care currently paid for by other safety-net programs. These estimates include some federal funding for Medicaid DSH and community health centers. These include funds provided by the federal Public Health Services Grants to fund underserved areas in Colorado. Assumes waiver is approved to allow state to continue to receive Federal DSH funding to be used for the program.
c/ Increase in tobacco taxes from $.84 up to $2.00 per pack; and increase in alcohol taxes as follows: spirits - from $.60 to $5.63 for a liter; wine - from $.07 to $.66 per liter; and beer - from $.05 to $.15 per 6-pack.
Source: The Lewin Group estimates using the Health Benefits Simulation Model.

b. Program Funding

We assume that both state and federal funding for Medicaid and CHP+, including long term care, would be transferred to the state to help fund the CHSP, totaling $3.1 billion in 2007/2008. We also assume that funding for the Medicare eligible population would be transferred to the state, totaling $5.8 billion.

In addition about $1.1 billion in federal government funding of other health benefits for Colorado residents would be transferred to the CHSP. This includes spending for military dependents and retirees under TRICARE, Native Americans through the Indian Health Service, federal employee and retiree health benefits, and other funding. We estimate total revenue transfers from the federal government would be $8.4 billion in 2007/2008.

The program raises another $15.0 billion in revenues for the CHSP. This includes $8.2 billion in new income taxes from increasing the state's income tax rate from its current level of 4.6 percent to 12.7 percent of income. The employer payroll tax of 6.0 percent would raise an additional $6.5 billion and the alcohol and tobacco tax increases would raise $336 million. Also, savings to employers that are passed on as increased wages would result in additional state income tax revenues of $56 million. Total new revenue to fully fund the program would be about $26.6 billion in 2007/2008.

6. Impact on State and Local Budgets

As discussed above, all state and local funding for health benefits programs would be transferred to the CHSP. State spending for Medicaid and CHP+ (i.e., state share), as well as state and local government spending for safety-net programs, and worker's compensation totaling about $2.7 billion under current law would be transferred to the Single Payer (***Figure 10***).

Figure 10
Changes in State and Local Government Spending under CHSP in 2007/2008 (millions)

		Change in Spending
Public Program Funding		($2,694)
Medicaid / CHP+	$1,427	
Workers Compensation	$702	
Other Safety-net Programs	$565	
Savings in State and Local Worker Health Benefits		($378)
Workers and Retirees	($1,149)	
Payroll Taxes to fund CHSP	$771	
Tax revenue Gain Due to Wage Effects [a/]		$56
Total Savings		($3,128)
State Transfer to CHSP		$3,128
Net Cost/(Savings) to State and Local Government		$0

a/ An Increase in tax revenue is counted here a reduction in State health spending.
Source: The Lewin Group estimates using the Health Benefits Simulation Model.

While there would be no net change in spending for public health benefits programs, there would be substantial savings for state and local worker coverage for employees and retirees. This results mostly from the fact that early retirees (i.e., pre Medicare) would largely become covered under the single payer program. Because employers are not required to pay a payroll tax for the early retirees that they cover, the state, as an employer, saves the full cost of covering this population.

Savings in state and local government worker benefits would be about $1.1 billion, which would be largely offset by payroll tax payments made by the state and local governments for workers (i.e., 6 percent). The net savings to state and local government workers would be $378 million, all of which would be transferred to CHSP.

Increased income tax revenues resulting from wage increase due to employer health benefits savings would be $56 million. We assume that this amount would be transferred to the single-payer as well. The total amount transferred to CHSP from state and local governments would be about $3.1 billion in 2007/2008.

7. *Change in Federal Government Health Spending*

The single payer model would require the federal government to agree to provide all of the funding for Medicaid and other programs in the form of a block grant paid as a lump sum directly to CHSP. Turning the federal share of Medicaid spending into a block grant would eliminate the need to separately determine eligibility of each individual, resulting in substantial administrative savings. The amount of the funding would be indexed over time to reflect the expected growth in funding that would have occurred under current law.

However, there would be a net gain in federal tax revenues for Colorado residents due to the single payer program. The reason for this is that savings to employers under the program would be passed on to workers as increased wage growth, resulting in increased income and payroll tax payments. The resulting gain in federal revenue due to the wage effect would be about $607 million (***Figure 11***).

Figure 11
Changes in Federal Government Spending under CHSP Single Payer in 2007/2008
(millions)

		Change in Spending
Federal Program Costs/(Savings)		
Savings to Public Programs		($8,147)
Medicaid / CHP+	($1,545)	
Medicare	($5,810)	
TRICARE/VA	($752)	
Indian Health Service	($40)	
Savings to FEHBP		($278)
Workers and Retirees	($545)	
Payroll Taxes to fund CHSP	$267	
Total Federal Program Costs/(Savings)		($8,425)
Federal Programs Transfers and Offsets		
Transfers to CHSP to fund program		$8,425
Tax Revenue (Gain)/Loss Due to Wage Effects [a/]		($607)
Net Cost/(Savings) to Federal Government		($607)

a/ An Increase in tax revenue is counted as a reduction in Federal health spending.
Source: The Lewin Group estimates using the Health Benefits Simulation Model.

The federal government would save about $545 million in health benefits expenses under the Federal Employees Health Benefits Program as their Colorado based workers and retirees become covered under CHSP. This would be largely offset by payroll tax payments by the

federal government for their workers in Colorado of about $268 million. The net savings to the federal government under FEHBP would be $278 million. As discussed above, the full amount of these savings would be passed-on to the CHSP under the proposal.

8. Impact on Private Employers

Private employers in Colorado will pay about $8.0 billion for health benefits in 2007/2008 under current law, including $7.7 billion in benefits for workers and dependents and $350 million in retiree health benefits (***Figure 12***). These estimates include employer spending for all covered workers, dependents and retirees living in Colorado, even if the employer is based outside the state. It excludes federal workers and state and local government employees, which were discussed above. This estimate includes only the employer share of coverage costs.

Benefits cost for workers and dependents would be nearly eliminated under the program, although some employers would continue to provide wrap-around coverage for services not covered by the single-payer (e.g., orthodontia). Benefits savings for currently insuring employers would be partly offset by the 6.0 payroll tax, resulting in a net savings to currently insuring employers of $3.5 billion. Firms that do not now offer coverage would pay about $1.1 billion in payroll taxes. Employers overall would save about $2.3 billion.

Figure 12
Changes in Private Employer Health Benefits Cost under the CHSP Single Payer in 2007/2008 (millions)

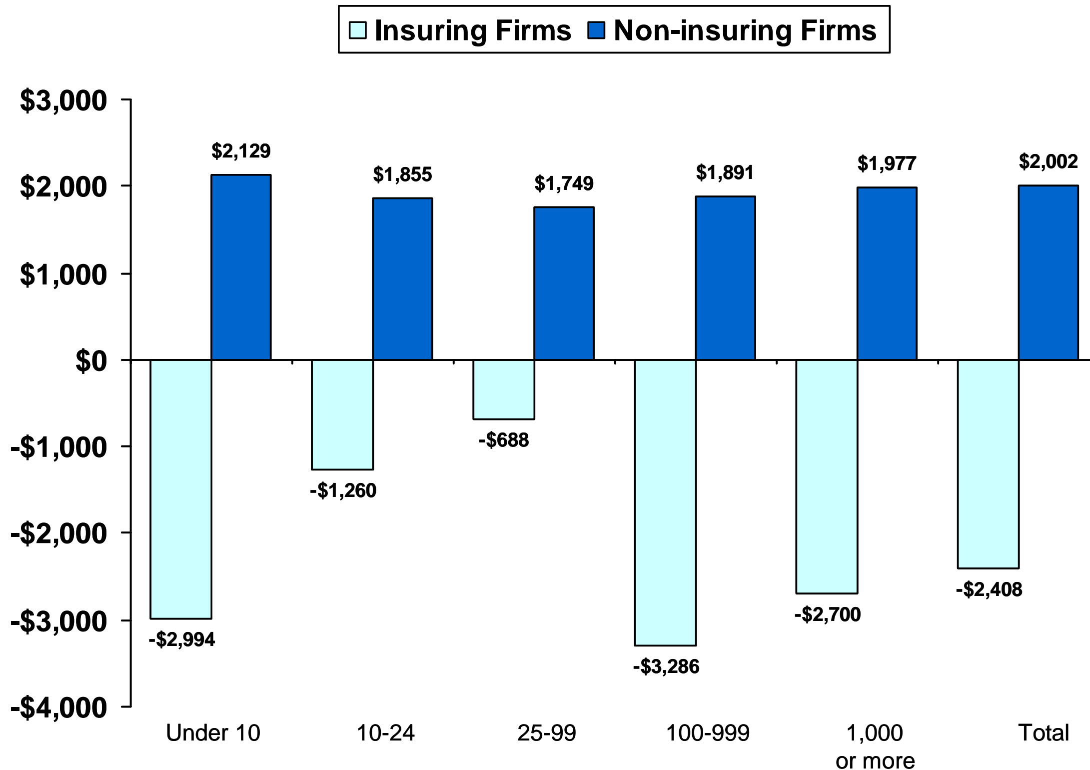
	Currently Insuring Employers	Currently Non-Insuring Employers [a/]	All Employers
Private Employer Spending Under Current Law			
Current			
Workers & Dependents	$7,720	--	$7,720
Retirees	$350	--	$350
Total	**$8,070**	--	**$8,070**
Private Employer Spending Under the Policy			
Wrap-around coverage			
Workers & Dependents	$248	--	$248
Retirees	$11	--	$11
Payroll Taxes (6% to fund CHSP)	$4,344	$1,131	$5,475
Total	**$4,603**	**$1,131**	**$5,734**
Net Change (before wage effects)	**($3,467)**	**$1,131**	**($2,336)**

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

Private employer spending for firms that now provide coverage would decrease by about $2,408 per worker per year (***Figure 13***). For firms that do not now provide coverage, there would be a net increase in health spending of $2,002 per worker per year due to the payroll tax. Currently insuring firms with 10 or fewer workers would save an average of about $2,994 per

worker. Costs for non-insuring firms with ten or fewer workers would average about $2,129 per worker.

Figure 13
Change in Private Employer Health Spending Per Worker by Current Insuring Status under the CSHP Single Payer in 2007/2008



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

9. *Impact of CHS Single Payer on Family Health Spending*

Under the single payer program, family premium payments would decline by about $4.5 billion (***Figure 14***). Family out-of-pocket spending would drop by an additional $2.8 billion. Family income taxes would increase by $8.2 billion and alcohol and tobacco taxes would increase spending by $336 million. Increases in after tax wages that result from reduced costs to employers are counted as a reduction in family health spending of $1.3 billion. Overall, family health spending would decrease by $187 million under the CHSP in 2007/2008.

Figure 14
Impact of the CSHP Single Payer on Family Health Spending in 2007/2008 (millions)

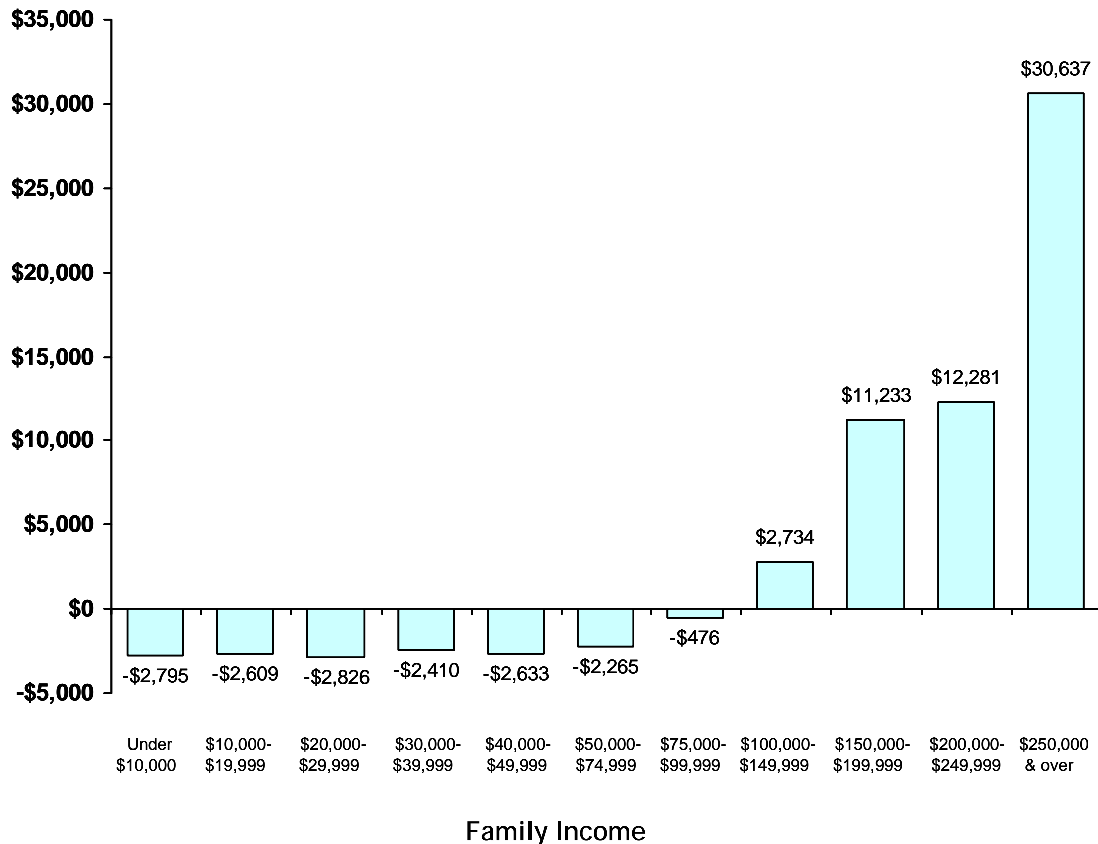
		Change in Spending
Change in Premiums		($4,545)
Change in Out-of-pocket Payments		($2,820)
Increase Individual Income Tax by 8.1%		$8,176
Tobacco Tax Increase [a/]	$210	$336
Alcohol Tax Increase [a/]	$126	
After Tax Wage Increase Counted as Offset to Family Spending [b/]		($1,334)
Net Change		($187)

a/ Increase in tobacco taxes from $.84 up to $2.00 per pack; and increase in alcohol taxes as follows: spirits - from $.60 to $5.63 for a liter; wine - from $.07 to $.66 per liter; and beer - from $.05 to $.15 per 6-pack
b/ The increase in after-tax wage income resulting from reduced costs to employers is $1.3 billion. These wage increases are counted here as a reduction in family health spending.
Source: the Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Families with incomes below $100,000 would on average see savings averaging up to $2,800 per family in the lowest income group (under $10,000). Health spending would on average increase for those with incomes over $100,000 (***Figure 15***). This reflects that the program moves Colorado from a premium financed system, where premiums vary relatively little by income, to a tax financed system where payments to the healthcare system are in proportion to income.

Families with incomes between $100,000 and $150,000 would see an increase averaging $2,734, while families with incomes between $200,000 and $250,000 would spend an average of $12,281 more under the program. Families with incomes of more than $250,000 would spend $30,637 more on average, primarily due to the increase in the personal income tax rate.

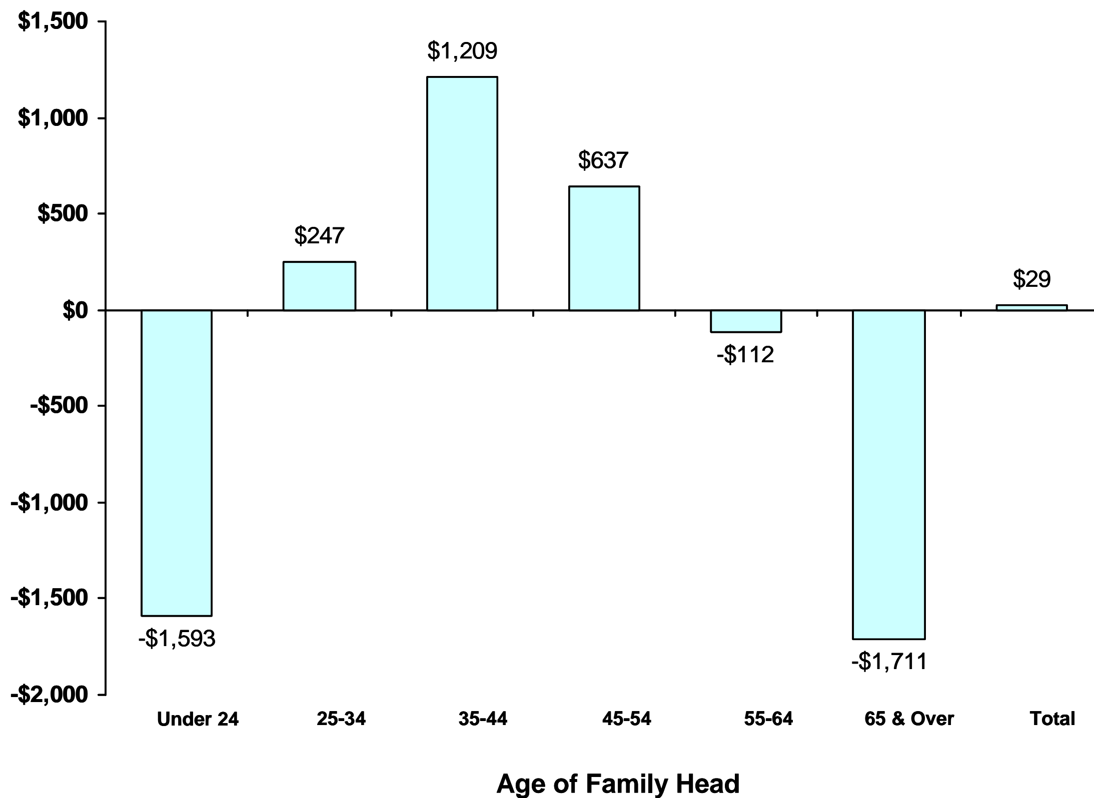
Figure 15
Change in Average Family Health Spending by Income Group under the CSHP Single Payer in 2007/2008



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

Figure 16 presents the change in family health spending by age of family head. Families headed by someone age 65 years and older would save $1,711 per family in 2007/2008. Families headed by someone under the age of 25 would save $1,593 per family. However, families headed by someone between the ages of 35 and 44 would see an average increase in spending of $1,209. This reflects that these are prime working-age people who typically would see the largest increases in income tax payments.

Figure 16
Change in Average Family Health Spending by Age under the CSHP Single Payer in 2007/2008

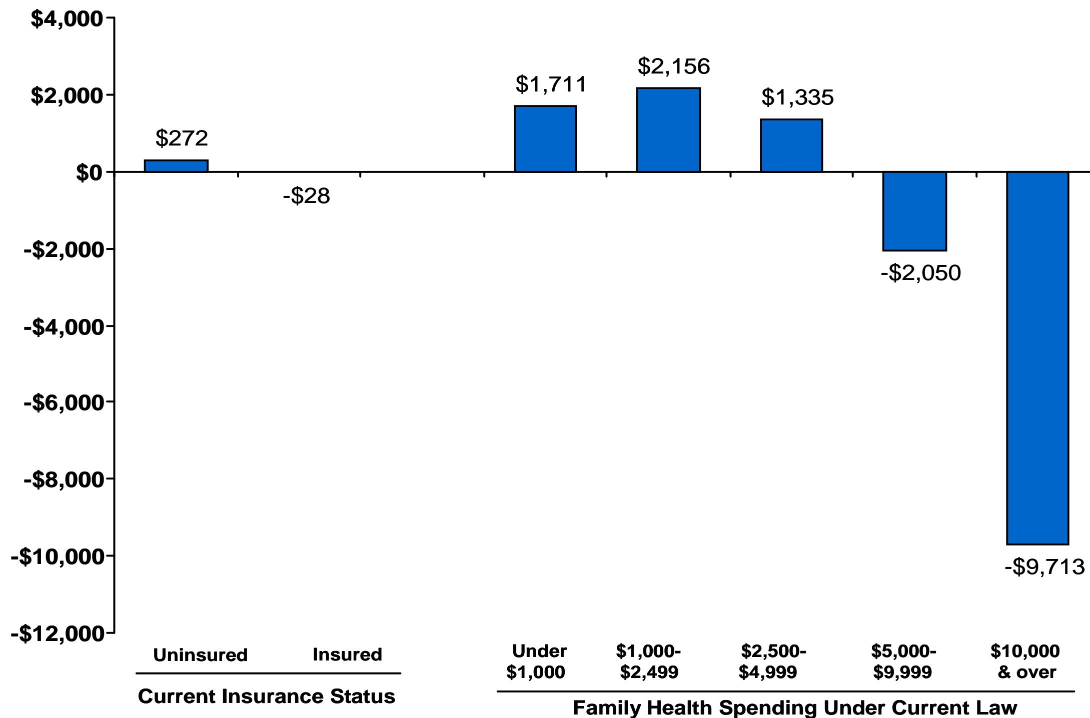


Source: The Lewin Group estimates using the Health Benefits Simulation model (HBSM)

As illustrated in ***Figure 17***, currently uninsured families would see spending increase by $272 per family while those who currently have insurance would save an average of about $28. The increase in spending for currently uninsured people reflects that the uninsured are typically younger than the insured population and often have little or no health spending. Under the CHSP, these individuals are required to pay into the system through the various taxes regardless of whether they are users of health services.

Families who will spend $5,000 or more on health care under current law would typically see savings under the CHSP single payer. We estimate that families currently spending between $5,000 and $10,000 on health care would save about $2,050 on average, and those currently spending $10,000 or more would save an average of $9,713.

Figure 17
Change in Average Family Health Spending by Current Law Insurance Status and Family Health Spending Under the CHSP in 2007/2008 (Excludes Changes in LTC Spending)



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

Figure 18 shows the distribution of families in Colorado by the amount by which family health spending would change. This reflects changes in premiums, out-of-pocket spending, subsidies, taxes used to fund the program and changes in after-tax wages. About 47.0 percent of all Colorado families would see a net increase in health spending of $20 or more. About 52.0 percent of families would see a net decrease in spending of $20 or more. Only about 1.0 percent of the population would be unaffected (i.e., changes of less than $20).

Figure 18
Distribution of Families by the Amount of the Change in Total Family Health Spending Under the Colorado Health Services Program

	PERCENT DISTRIBUTION OF FAMILIES											
	ALL FAMILIES	INCREASE IN FAMILY HEALTH COSTS					NO CHANGE	REDUCTION IN FAMILY HEALTH COSTS				
	TOTAL	$1,000 +	$500-$999	$250-$499	$100-$249	$20-$99	+/- $20	$20-$99	$100-$249	$250-$499	$500-$499	$1,000 +
Family Income												
< $10,000	176607.9	0.8	3.9	10.3	14.5	10.3	6.2	3.1	5.3	3.8	5.4	36.5
$10K-$19,999	225278.6	6.5	15.1	6.0	6.0	5.5	1.0	2.2	2.5	3.2	6.6	45.5
$20K-$29,999	229048.7	18.8	9.4	2.9	1.9	1.9	1.1	1.0	2.0	2.8	8.7	49.6
$30K-$39,999	237519.9	23.0	5.8	3.3	2.2	0.5	0.2	2.2	1.4	3.0	6.1	52.3
$40K-$49,999	200288.9	24.5	5.1	2.1	1.7	0.5	0.4	1.7	1.6	0.9	4.1	57.4
$50K-$74,999	316232.1	28.2	4.2	1.8	1.4	0.7	0.1	0.5	1.1	3.0	3.7	55.2
$75K-$99,999	238563.4	39.6	4.0	3.4	0.9	0.9	0.9	0.9	1.3	2.4	5.2	40.7
$100K-$149,9	190449.2	70.1	4.0	2.1	0.2	0.3	0.3	0.4	0.4	1.5	2.9	17.9
$150,000 +	177815.6	95.2	0.3	0.2	0.2	0.0	0.1	0.4	0.1	0.0	0.5	3.0
Income as a Percent of the FPL												
Below Poverty	225931.2	1.5	8.9	9.9	12.6	9.1	5.0	2.6	4.7	3.0	4.8	37.8
100%-199%	333666.2	11.6	10.2	3.9	4.0	3.5	0.6	1.5	1.9	3.7	6.0	53.0
200%-299%	319529.9	18.7	5.3	2.2	1.5	1.2	0.8	0.9	1.5	2.6	7.8	57.5
300%-399%	284848.4	18.2	4.6	3.5	2.2	0.2	0.1	2.2	1.2	2.2	5.6	59.9
400%-499%	221889.0	30.9	5.7	2.2	1.7	0.8	0.5	1.7	1.5	1.9	4.2	48.8
500% +	605939.7	70.5	3.3	1.8	0.4	0.6	0.4	0.5	0.7	1.6	2.7	17.5
Age of Family Head												
Under 25	211676.5	17.1	9.1	4.3	5.2	2.6	2.5	1.1	2.2	3.8	4.7	47.3
25 - 34	417966.1	35.4	6.3	4.3	2.8	1.6	1.0	1.5	1.4	1.5	6.6	37.6
35 - 44	425342.2	41.2	6.0	2.5	1.8	0.9	0.3	1.6	2.0	1.9	3.8	38.2
45 - 54	413248.7	40.0	4.5	2.6	2.3	1.4	0.8	0.8	0.7	2.6	3.3	41.2
55 - 64	257395.7	30.2	5.0	3.9	3.5	2.4	0.8	0.7	1.8	2.3	3.9	45.5
65 and Older	266175.3	17.5	5.6	3.7	3.9	5.3	1.6	2.4	2.5	3.3	7.7	46.6
Family Out-of-Pocket Spending under Current Law												
Below $1,000	455032.7	41.6	13.5	7.1	8.7	5.3	2.8	2.3	3.5	2.2	3.8	9.1
$1,000-$2,499	431783.1	39.2	6.2	3.7	2.3	2.8	0.8	1.8	1.5	3.9	7.5	30.2
$2,500-$5,000	529014.4	32.1	3.8	3.5	1.6	0.8	0.5	1.2	1.6	2.7	5.9	46.2
$5,000-$9,999	422722.5	23.3	1.9	0.4	0.2	0.3	0.2	0.2	0.3	1.3	3.5	68.5
Over $10,000	153251.8	14.0	0.5	0.0	0.3	0.1	0.2	0.4	0.7	0.8	1.3	81.8
Family Members with Health Insurance												
1+ Uninsured	385868.6	41.3	12.1	5.3	4.3	0.9	1.5	1.4	2.4	2.2	3.6	25.1
no Uninsured	1605935.9	30.5	4.4	3.0	2.7	2.4	0.9	1.3	1.5	2.4	5.2	45.7
All Families												
Total	1991804.4	32.6	5.9	3.4	3.0	2.1	1.0	1.3	1.7	2.4	4.9	41.7

Source: Lewin Group Estimates Using the Health Benefits Simulation model (HBSM)

D. Ten-Year Spending Projections

The level of health spending in Colorado would be determined through the CHSP budgeting process. Each year, the state would need to determine the appropriate basis for annual increases in provider payment levels. If the state wishes to limit the rate of growth in health spending, it could delay or reduce these increases, resulting in substantially lower levels of health spending than would occur under the current system.

However, limiting provider payment levels could have a negative impact over-time on the quality of health care in Colorado. For example, one of the primary drivers of health care cost growth is the adoption of new medical technologies. Limiting health spending could slow the use of new technology in Colorado resulting in diminished capacity. Moreover, limiting health spending could cause some physicians to relocate to states where provider incomes are not constrained by the government. It is possible that increased emphasis on prevention and primary care under the CHSP would slow the rate of growth in health spending. However, most countries are experiencing substantial growth in spending, even in countries with similar single-payer programs.[3]

For illustrative purposes, we assume that the level of spending under CHSP would grow at roughly the same rate as health spending in the rest of the nation. We assume that costs under the CHSP would grow at the same rates projected nationally by the Office of the Actuary (OACT) of the Centers for Medicare and Medicaid Services (CMS). This results in an average rate of growth in CHSP spending of about 6.9 percent per year through 2017/2018. By comparison, using OACT figures wages would grow by about 4.5 percent per year, which assumes average real growth in earnings of about 1.0 percent, population growth of about 0.5 percent and a consumer price index of about 3.0 percent per year over the 2008/2009 through 2017/2018 period.[4]

At these projected rates of growth, the CHSP tax rates would need to be increased each year to accommodate health care cost growth. The income tax rate under the program would grow from 12.7 percent in 2007/2008 to 17.0 percent by 2017/2018. The CHSP employer payroll tax rate would need to increase from 6.0 percent in 2007/2008 to about 8.0 percent by 2017/2018 (***Figure 19***).

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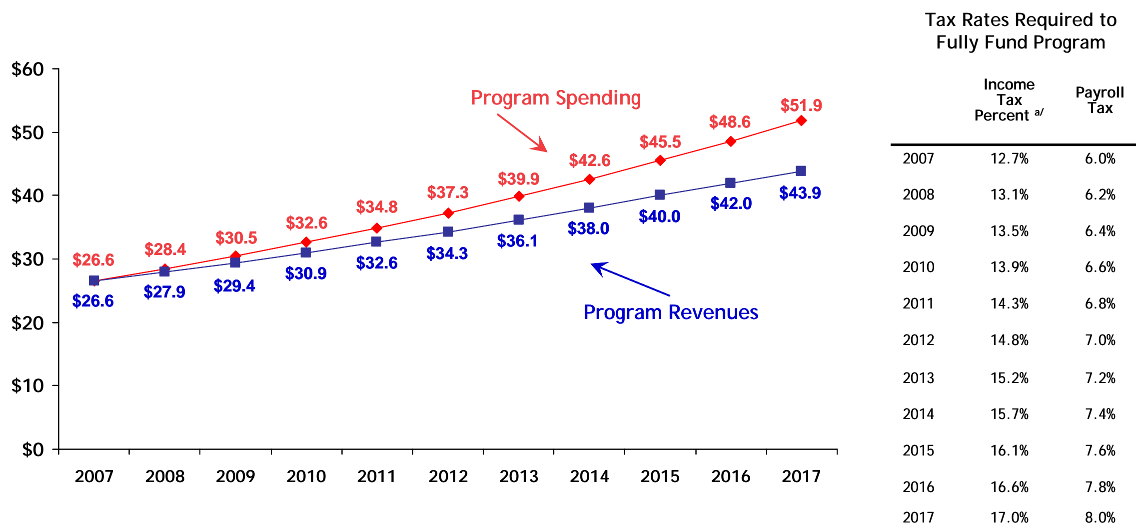
[3] Organization for Economic Co-operation and Development. See: http://www.oecd.org/maintopic/0,3348,en_2649_201185_1_1_1_1_1,00.htm

[4] Estimates based upon data provided by the National Health Expenditures Projections provided by the Office of the Actuary (OACT), Centers for Medicare and Medicaid Services (CMS).

Figure 19
Projected Spending and Revenues under CHSP and Tax Rates Required to Fully Fund the CHSP at the National Rate of Spending Growth:2007/2008 – 2017/2018



Tax Rates Required to Fully Fund Program

	Income Tax Percent a/	Payroll Tax
2007	12.7%	6.0%
2008	13.1%	6.2%
2009	13.5%	6.4%
2010	13.9%	6.6%
2011	14.3%	6.8%
2012	14.8%	7.0%
2013	15.2%	7.2%
2014	15.7%	7.4%
2015	16.1%	7.6%
2016	16.6%	7.8%
2017	17.0%	8.0%

a/ The income tax rate in Colorado is about 4.6 percent under current law.
Source: Lewin Group Estimates using the Health Benefits Simulation Model (HBSM)