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General Accounting Office  
Washington, D.C. 20548

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Human Resources Division

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February 20, 1992

The Honorable John Conyers  
Chairman, Committee on Government Operations  
House of Representatives

Dear Mr. Chairman:

As you requested, this letter responds to a January 1992 briefing paper prepared by the Republican staff of the Joint Economic Committee,<sup>1</sup> which criticized our report on Canadian health insurance.<sup>2</sup> Specifically, the briefing paper claimed that we overstated the potential administrative savings and understated the additional costs of adopting a Canadian-style health insurance system in the United States.

In our report, we estimated how national health care spending would change under a Canadian-style system. Key features of a Canadian-style system are universal insurance coverage, a single public payer for insured services, no patient cost sharing, and controls on reimbursement of physicians and hospitals. Our analysis sought to develop base-line cost and savings estimates for the United States tied to actual Canadian experience.

Two differences between our analysis and the briefing paper are in the estimates of (1) administrative savings and (2) new hospital and physician spending. In addition, the briefing paper contains several misstatements regarding our report on Canadian health insurance. The following discussion compares the two sets of estimates in more detail.

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<sup>1</sup>Joint Economic Committee Republican staff (JEC-GOP), "Problems With a Single Payer Health System: Reassessing GAO's Study of Canadian Health Care," Health Care Briefing Paper, No. 4, January 10, 1992.

<sup>2</sup>U.S. General Accounting Office, Canadian Health Insurance: Lessons for the United States (GAO/HRD-91-90, June 4, 1991).

GAO/HRD-92-20R, Canadian Health Insurance

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DIFFERENCES IN ESTIMATES OF  
ADMINISTRATIVE SAVINGS

We estimate that a Canadian-style system in the United States would save insurers and providers \$67 billion in administrative costs. The briefing paper's estimate of administrative savings is \$43 billion, one-third lower than our estimate. This difference appears to be due, in large part, to how we each defined administration. The briefing paper measured only savings attributable to the billing process under a single payer. We accounted for savings attributable to billing and other administrative expenses, such as record keeping and marketing.

In our report, we measured potential administrative savings in the insurance, physician, and hospital sectors. Table 1 summarizes our results and compares them with estimates made in the briefing paper.

Table 1: Estimated Administrative Savings Under a Canadian-Style System (Dollars in Billions)

	GAO	JEC-GOP
Insurance	\$33.9	\$21.9
Physicians	14.8	9.9
Hospitals	18.2	11.1
Total	\$66.9	\$42.9

Insurance Overhead

The estimates in our report and the briefing paper are not comparable because of the different methodologies used to derive the figures. To develop its estimate for insurance overhead savings, the briefing paper used cost data from the U.S. Medicare program and private insurers and assumed a single payer system modeled after Medicare. In the Medicare program there are administrative costs associated with eligibility determination, DRG-based hospital reimbursement, utilization review and copayment requirements, as well as claims processing.

We developed our estimate using cost data from Ontario's public and private insurance plans and assumed a single payer system modeled after the Ontario health insurance system. Our approach is consistent with our reporting objective of

examining the costs of adopting a Canadian-style system, not the cost of expanding the Medicare system. In Ontario, features such as universal access, single payer, and first-dollar coverage result in lower insurance overhead compared with Medicare. As we noted in the report's conclusions, however, operating a U.S. government-run insurance plan that forgoes some of the cost containment and quality control features in place in the United States may not be feasible or necessarily desirable.

Another difference between our methodologies is that the briefing paper calculated insurance administrative costs as a share of benefit payments, whereas we expressed insurance overhead as a share of national health expenditures.

Table 2: Estimated Administrative Savings in Insurance

GAO	JEC-GOP
Under a Canadian-style system, insurance overhead reduced from 5.8% to 1.2% of national health spending = \$33.9 billion	Under a Medicare-style system, insurance overhead as a share of benefits paid reduced to 4% = \$21.9 billion

#### Physician Administrative Savings

We disagree with the briefing paper's claim that we overstated administrative savings for physicians for two reasons. First, the briefing paper improperly attributes its assumption that, at most, one-fourth of nonmedical personnel costs could be saved to a "finding" by Fuchs and Hahn.<sup>3</sup> Second, the briefing paper estimated only payroll costs related to billing and did not consider other administrative expenses of U.S. physicians, such as physicians' time spent on insurance matters and the costs of outside billing services. This narrow definition of physician administrative cost differences conflicts with that of Fuchs and Hahn and other analysts.

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<sup>3</sup>Victor R. Fuchs and James S. Hahn, "How Does Canada Do It? A Comparison of Expenditures for Physicians' Services in the United States and Canada," New England Journal of Medicine, Vol. 323, No. 13, September 27, 1990, p. 888.

The briefing paper states:

"Billing costs are the only area of overhead costs for which meaningful savings under a single government payer system can be expected. This assertion is backed by significant empirical data. For example, Fuchs and Hahn estimated that only about one-fourth of nonphysician medical personnel in U.S. physician offices were needed for billing tasks not performed by Canadian physicians."

However, the article by Fuchs and Hahn is more uncertain about the amount of potential savings on billing and clearly recognizes other sources of difference in administrative costs. The article states:

"The differences in billing undoubtedly account for some of the additional resources reflected in the U.S. data, but we do not know exactly how much . . . . If one-fourth of [personnel who are not medical doctors] are needed for billing tasks that are not required in the Canadian system, then 4 percent of U.S. expenditures can be explained by this factor. There are also additional billing costs for physicians' time, computers, stationery, and postage."

If only payroll savings are considered, our estimate comes closer to the hypothetical estimate of 4 percent given by Fuchs and Hahn. As shown in table 3, we estimate that the potential savings from a reduction in nonphysician office personnel would be \$8.1 billion, or 5.6 percent of total physician expenditures. This compares with the briefing paper's estimate of \$9.9 billion, or 7.2 percent of total spending on physicians.

In addition, we measured potential savings in physicians' time and contracted billing services.<sup>4</sup> We agree with Fuchs and Hahn that, compared with Canada, more of a U.S. physician's time is consumed with administrative aspects of insurance. Using data from a 1988 American Medical

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<sup>4</sup>We recognize that other costs, such as data processing, marketing, postage, and amenities, may also be reduced under a Canadian-style system. However, we believe that savings on such expenses would be offset by personnel costs associated with higher medical service intensity in U.S. physicians' offices.

Association survey,<sup>5</sup> we estimated that 3.4 percent of physicians' time could be saved. From the same survey, we also measured the savings for those U.S. physicians who meet some of their administrative requirements by contracting with an outside billing service.

Table 3: Estimated Administrative Savings for Physicians  
(Dollars in Billions)

	GAO	JEC-GOP
Nonphysician personnel	\$ 8.1	\$9.9
Physicians' time	4.9	0
Contracted billing services	1.8	0
Total	\$14.8	\$9.9

#### Hospital Administrative Savings

Both we and the briefing paper estimate that U.S. hospitals spend about 15 percent of total costs on administration. However, the briefing paper uses a narrow definition of administration in deriving its estimate of potential savings. It only accounts for billing expenses in its estimate of total administrative savings. Our estimate, on the other hand, includes potential savings in general accounting, admitting, medical records, purchases and stores, and data processing as well as billing.

Our estimate of reduced hospital administrative costs reflects various features of Canadian hospital financing that differ from the United States, including universal coverage, a single payer, and prospective global budgeting. If fully implemented in the United States, a Canadian-style system could generate savings in a number of hospital departments. Our calculation of potential hospital administrative savings is based on a comparison of U.S. and Canadian hospital cost data.

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<sup>5</sup>AMA Center for Health Policy Research, SMS Report, "The Administrative Burden of Health Insurance on Physicians," Vol. 3, No. 2, March 1989, pp. 2-4.

Table 4: Estimated Administrative Savings for Hospitals

GAO	JEC-GOP
Administration share of total hospital costs reduced from 15.4% under current system to 9.0% under Canadian-style system = \$18.2 billion	Administration share of total hospital costs reduced from 15% under current system to 11% under single payer (from savings in billing costs alone) = \$11.1 billion

Summary

The briefing paper identifies billing costs as the only administrative cost that would decrease under a single payer system. Our report goes beyond billing costs and the single payer feature of a Canadian-style system. Administrative savings under a Canadian-style system would reflect the adoption of universal access, global budgeting for hospitals, and uniform physician fees with no balance billing. Had savings from such features been recognized in the briefing paper, the difference between its estimate of \$43 billion and our estimate of \$67 billion would narrow significantly or disappear.

ADDITIONAL COSTS

Our estimate of new hospital and physician spending under a Canadian-style system (\$62 billion) is one-half that in the briefing paper (\$124 billion<sup>6</sup>). Most of this difference can be found in the estimates of the utilization response to first-dollar insurance coverage for physician services. We used the midpoint of a range of estimates, whereas the briefing paper used high estimates.

Cost of Extending Coverage to the Uninsured

Although both we and the briefing paper followed the same two-step approach to estimate the cost of extending first-dollar coverage to the uninsured, the disparity in our results is significant. We estimate the newly insured will

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<sup>6</sup>The briefing paper double counts almost \$8 billion of this total in the utilization response by including it for both the currently insured and the uninsured.

add \$17 billion, whereas the briefing paper estimates they will add \$37 billion.

Most of this discrepancy stems from different estimates of the cost of closing the insurance gap. Facing barriers in access to care, the average uninsured person spends less on health care than the average insured person. Both our estimate of the amount the uninsured currently spend for hospital and physician services and our estimate of the cost of extending typical insurance coverage to the uninsured are lower than those in the briefing paper.

Based on a 1990 study by Lewin/ICF,<sup>7</sup> we estimate that the uninsured currently spend about \$32 billion on health services and would spend an additional \$13 billion if covered by a typical insurance plan. This estimate of induced demand assumes that utilization by the newly insured would increase to levels reported by insured persons with similar demographic characteristics. Expenditures for hospital and physician care would increase by about 40 and 42 percent, respectively.

The briefing paper assumes that the uninsured currently spend about \$36 billion on hospital and physician services. It estimates that if insured, such spending by this group would increase by \$24 billion, or 66 percent. This calculation assumes that spending by a newly insured person would rise to the level of utilization of an average insured person. However, as noted in the Lewin/ICF study, because the uninsured tend to be younger than the insured population, if they were to become insured, their per capita spending can be expected to be lower than average.

The remainder of the difference is found in the estimate of additional utilization stemming from elimination of copayments. Our assumption of the amount of induced demand for physician services is significantly below that in the briefing paper. (This is discussed further in the following section.) Having calculated a very high level of spending after closing the insurance gap, the briefing paper compounds this overestimate by applying a high estimate of induced demand under "free care."

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<sup>7</sup>Lewin/ICF, The Health Care Financing System and the Uninsured (prepared for the Health Care Financing Administration), April 4, 1990.

**Table 5: Estimated Additional Hospital and Physician Costs for the Newly Insured (Dollars in Billions)**

	GAO	JEC-GOP
Closing the insurance gap	\$13.1	\$24.0
Eliminating copayments	5.7	12.7 <sup>b</sup>
Administrative adjustment <sup>a</sup>	(1.5)	----
Total	\$17.3	\$36.7 <sup>b</sup>

<sup>a</sup>The higher hospital and physician utilization would be accompanied by lower administrative costs for providers under a Canadian-style system, as discussed earlier.

<sup>b</sup>\$7.8 billion of this amount is also included in the estimates shown in table 6.

To put these estimates in context, our estimate of \$17 billion in additional costs generated by the uninsured under a Canadian-style system is consistent with an estimate of \$12 billion to \$20 billion made by the Office of Management and Budget (OMB).<sup>8</sup>

#### Utilization Response by the Currently Insured

The briefing paper estimate of the cost of eliminating deductibles and coinsurance for the currently insured is \$88 billion, nearly double our estimate of \$45 billion. In estimating new hospital expenditures, both we and the briefing paper assume that utilization by the currently insured would rise by 10 percent with the elimination of deductibles and coinsurance. We estimate an increase in hospital spending of \$25 billion, and the briefing paper estimates \$28 billion.

Our figures differ most widely from those in the briefing paper in the estimate of induced demand for physician care. We note in our report that this estimate is the most

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<sup>8</sup>Office of Management and Budget, "Comprehensive Health Reform: Observations About the Problem and Alternative Approaches to Solution," presented to the House Committee on Ways and Means by Richard Darman, October 10, 1991, appendix 2.



uncertain element in our cost calculations because empirical evidence in the literature is scant. The briefing paper assumed the currently insured would increase spending by 43.5 percent, or \$60 billion, using data from the Rand health insurance experiment of the 1970s. We assumed a 17-percent increase based on information from both the Rand study and estimates from the actual response of Canadians to publicly funded medical care insurance.

We examined a number of previous studies of consumer responsiveness to "free" care and found none satisfactory. The Rand study provided several estimates based on different types of insurance plans with various levels of cost sharing.<sup>9</sup> To estimate the costs of moving from our system to a Canadian-style system, we selected the Rand 25-percent coinsurance scenario, the one most consistent with current U.S. insurance patterns. The Rand data indicated that persons under a free care plan spent 31 percent more for physician services than persons under a typical insurance plan. We believe this estimate could be too high, in part because the most comparable Rand plan had a coinsurance rate higher than is typical today. In addition, because families were enrolled in plans for 3- to 5-year periods, participants in the free care plan may have been motivated to use more services during the limited time of the experiment.

We also examined Canadian empirical data, which showed an increase in the utilization of physician services of about 3 percent following the expansion of national health insurance to physicians' services. However, we did not rely completely on this estimate either. Canadians, already receiving publicly funded hospital care, may have had some physician services performed in hospitals. This could have dampened the effect on increased physician utilization when national health insurance expanded to medical care.

Because of these data limitations, we used 17 percent, the midpoint between the Rand and Canada figures, to estimate

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<sup>9</sup>Cost-sharing levels varied by required enrollee coinsurance and by out-of-pocket limits. Coinsurance rates were 0, 25, 50, and 95 percent. Limits on annual out-of-pocket expenses were 5, 10, or 15 percent of family income up to a maximum amount. An individual deductible plan required a 95-percent coinsurance payment (with limits) for physician care and free inpatient care. See: Willard G. Manning, and others, "Health Insurance and the Demand for Medical Care: Evidence From a Randomized Experiment," American Economic Review, Vol. 77, No. 3, June 1987, pp. 251-277.

induced demand. Our estimate of additional hospital and physician costs to be generated by the currently insured under a Canadian-style system totaled \$45 billion. OMB, for example, estimates a utilization response of \$40 billion to \$90 billion; Lewin/ICF estimates \$50 billion.<sup>10</sup>

**Table 6: Estimated Additional Costs for the Currently Insured (Dollars in Billions)**

	GAO	JEC-GOP
Hospitals	\$26.4	\$27.7
Physicians	22.4	59.9
Administrative adjustment <sup>a</sup>	(4.0)	----
Total	\$44.8	\$87.7 <sup>b</sup>

<sup>a</sup>The higher hospital and physician utilization would be accompanied by lower administrative costs for providers under a Canadian-style system, as discussed earlier.

<sup>b</sup>Includes \$7.8 billion in induced demand for physician and hospital services by the uninsured.

#### **MISSTATEMENTS**

The briefing paper also makes a number of assertions about our methodology and sources that are wrong or inappropriate. For example:

- The briefing paper faults our use of Ontario health care cost data, asserting that they were selected to make the Canadian health program appear more attractive.

Our selection of Ontario as a benchmark province for comparison with the United States was based on the fact that Ontario accounts for nearly 40 percent of Canada's population, physicians, and health expenditures. In addition, per capita health expenditures in Ontario are slightly above the Canadian average, while the health share of gross domestic product in Ontario is slightly below the national average.

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<sup>10</sup>Lewin/ICF, National Health Spending Under a Single-Payor System: The Canadian Approach, November 21, 1991, p. 8.1.

- The briefing paper said that in estimating insurance savings we used overhead and profit figures from a "speculative 1987 cost estimate published by advocates of national health insurance." It also said that we based our estimate of insurance overhead savings on U.S. cost data from California--a high-cost state.

We did not use these data in our cost estimates. Rather, we used published national data from the U.S. Health Care Financing Administration (HCFA) and Health and Welfare Canada to estimate savings in insurance overhead.

- The briefing paper said that we erroneously included premium taxes (\$6.5 billion in 1990) paid by insurance companies to state governments in our estimate of administrative savings.

Health insurance premium taxes are far lower than the amount cited in the briefing paper. In 1990, premium taxes were over \$6.5 billion from all lines of insurance, including life, health, automobile, workers' compensation, general liability, homeowners, and other products. Of this total, we estimated health insurance premium taxes to be \$1 billion. We included this amount in our estimate of savings under a Canadian-style system because it is included in HCFA data on health care expenditures.

- The briefing paper said that most other estimates of physician administrative cost savings are lower than ours, including estimates prepared by Woolhandler and Himmelstein and Lewin/ICF.

Our estimate of administrative savings for physicians is \$15 billion. When inflated to 1991 dollars, the estimate of physician savings made by Woolhandler and Himmelstein range from \$22 to \$41 billion.<sup>11</sup> Lewin/ICF's most recent estimate of physician savings is \$11 billion.

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<sup>11</sup>Steffie Woolhandler and David U. Himmelstein, "The Deteriorating Administrative Efficiency of the U.S. Health Care System," New England Journal of Medicine, Vol. 324, No. 18, May 2, 1991, pp. 1253-1257. Data presented in this article are reported in 1987 U.S. dollars; we converted them to 1991 dollars using the consumer price index of medical care.

- The briefing paper states that we estimated the administrative share of hospital costs to be 20.2 percent.

We did not use that figure in our savings estimate. As indicated in our report, we estimated 15 percent for hospital administration, an estimate that the briefing paper agrees with.

- The briefing paper obtains higher estimates for the utilization response to publicly funded physician care by averaging the results of "studies" done by Rand and by Fuchs and Hahn.

Fuchs and Hahn indicated no independent study of physician utilization response. They cited Rand data.

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If you or your staff have any questions concerning this letter, please contact me on (202) 275-5470. Copies will be provided to other interested parties upon request.

Sincerely yours,

*Lawrence H. Thompson*

Lawrence H. Thompson  
Assistant Comptroller General

cc: Richard K. Armey  
Ranking Minority Member  
Joint Economic Committee