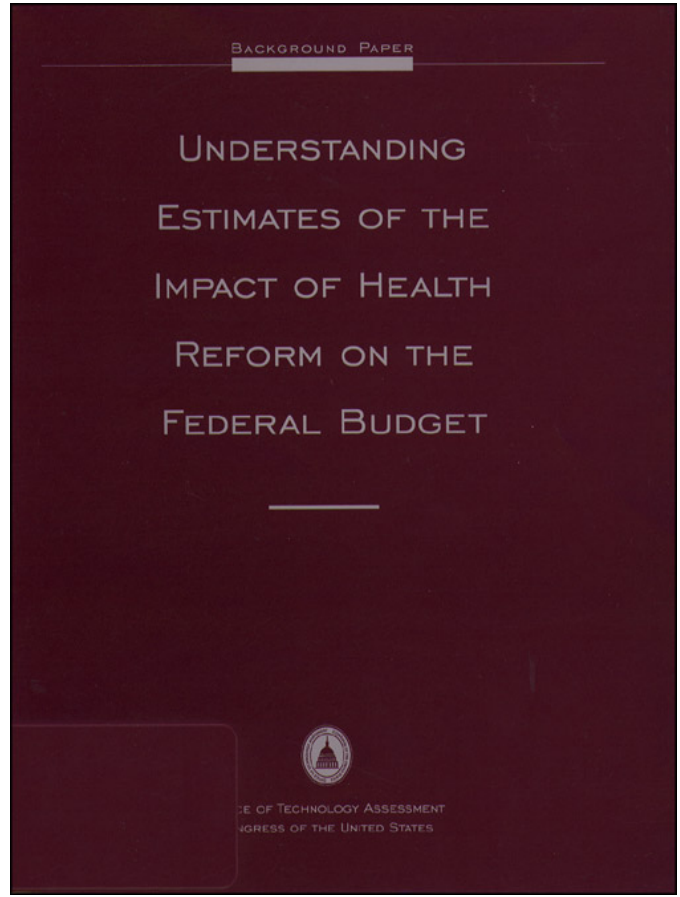
Understanding Estimates of the Impact of Health Reform on the Federal Budget

July 1994

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Foreword

Health care reform is at the top of the nation's domestic policy agenda, and numerous reform bills have been introduced in Congress. Each reform proposal takes a somewhat different approach to containing costs and providing insurance coverage to more people. A variety of organizations (for example, the Congressional Budget Office, the Administration, and private consulting firms) have estimated the economic effects of health reform on the federal budget. Because analysts often do not provide details about their estimation process, it is not always easy for people to understand why estimates differ.

This background paper describes and evaluates the sources of variation in analysts' estimates of the federal budget impacts of key reform provisions. In particular, it uses three different estimates of federal budget effects of the Health Security Act (from the Administration, the Congressional Budget Office, and Lewin-VHI, a private consulting firm) as an example of the types of factors that may cause analysts' estimates to differ. The paper also discusses potential variations in the estimates of federal budget effects of the American Health Security Act and the Managed Competition Act, and of health reform proposals in general. The background paper aims to improve understanding of the reasons for the differences among various estimates of federal budget effects under health reform.

This background paper is part of an OTA assessment, *Understanding the Estimates Under Health Reform,* that was requested by the members of the Technology Assessment Board (see inside front cover) and Senator Ted Stevens. OTA recently published the main report from the assessment, *Understanding Estimates of National Health Expenditures Under Health Reform,* which focuses on the assumptions used in estimates of national health expenditures under various reform proposals.

Numerous individuals, including an advisory panel chaired by Joseph Newhouse, assisted in the development of this report. OTA gratefully acknowledges the contribution of each of these individuals. As with all OTA publications, the final responsibility for the content of the background paper rests with OTA.



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Note: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this background paper. OTA assumes full responsibility for the report and the accuracy of its contents.

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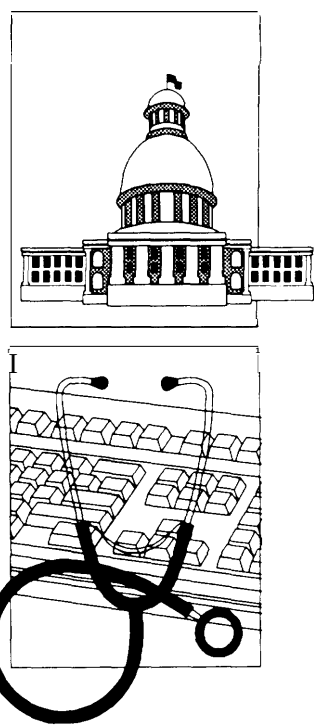
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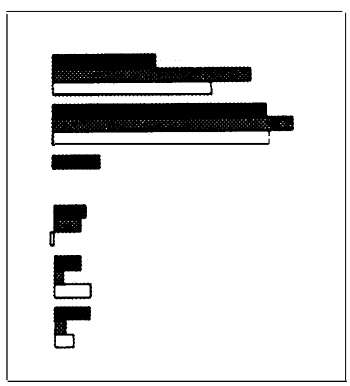
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Summary 1

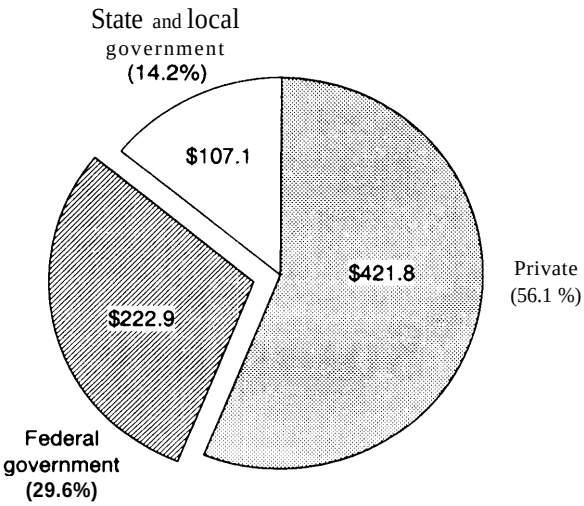
Currently, in the United States, the federal government directly finances various health insurance programs, such as Medicare, Medicaid, and CHAMPUS—the Civilian Health and Medical Program of the Uniformed Services. The government also indirectly finances the purchase of medical care and private health insurance through various forms of tax expenditures, such as the exclusion of employer-sponsored health benefits from the employees' taxable income.[1] In 1991, spending for all health programs constituted approximately 14 percent of the total $1.3 trillion in federal outlays (10,32,46). CBO has projected that, under current law, in 1998, federal spending for health will constitute 23.6 percent of total spending by the federal government (32).

Estimates of the effect of the health reform on the federal budget are an important part of the current health reform debate. Yet different analysts' estimates are not always in agreement and questions remain about the certainty of all of the estimates.



[1] *Tax* expenditures, as defined by the Congressional Budget and Impoundment Act of 1974 (Public Law 93-344), are "reductions in individual and corporate income tax liabilities that result from special tax provisions or regulations that provide tax benefits to particular taxpayers. These special tax provisions can take the form of exclusions, credits, deductions, preferential tax rates, or deferrals of tax liability." Examples of health care related tax expenditures prescribed by the Internal Revenue Code include: the exclusion of employer contributions to workers' health care benefits from employee taxable income (sections 105 and 106), the personal deduction of a specified portion of the health insurance premium paid by self-employed individuals (section 162), and the Schedule A deduction from personal income of a portion of the medical expenses over a specified proportion of adjusted gross income (section 213).

FIGURE 1-1: National Health Expenditures by Source of Funds, 1991 ($ billions)



SOURCE S W Letsch, H C Lazenby, K R Levit, et al , "National Health Expenditures, 1991 ," Health *Care Financing Review* 14(2). 1-30, 1992

This Office of Technology Assessment (OTA) background paper describes three estimates—by the Congressional Budget Office (CBO), Lewin-VHI, and the Clinton Administration-of the budget impact of the Health Security Act. The paper examines the major differences in analysts' estimates and the reasons for those differences.[2] The paper also describes more generally why estimates of health reform proposals might differ.

This background paper is published as part of the OTA's study *Understanding the Estimates Under Health Reform. The* study was requested in August **1993** by OTA's Technology Assessment Board and Senator Ted Stevens.

In a separate OTA report, *Understanding Estimates of National Health Expenditures Under Health Reform (45),* OTA examined estimates of the impact of various health care reform proposals on national health expenditures, as well as the assumptions behind the estimates. The effects of the reform proposals on the federal budget may not necessarily parallel their intended effects on national health expenditures. Specific provisions in the reform proposals may increase or decrease federal spending and receipts, independent of their effects on national health expenditures. As shown in figure 1-1, federal spending accounted for about 30 percent of the national health expenditures in 1991.

This paper does not compare or evaluate different reform proposals, nor does it provide new estimates of the effect of health reform on the federal budget.

KEY FINDINGS

I Major Areas of Difference in Estimates

Thus far, much policy discussion has focused on the aggregate "bottom line" estimates of health reform's impact on the federal budget. For example, the Clinton Administration projected that the Health Security Act would reduce the deficit by $58.5 billion, from 1995 through 2000. Lewin-VHI projected a much lower reduction of $24.6 billion. The Congressional Budget Office (CBO), by contrast, projected that the federal deficit would increase by $74 billion. In fact, these estimates of the aggregate budgetary effects may actually overstate the degree of consistency across analyses. Significant disparities may exist on the budgetary effects of certain reform provisions and these differences may be offsetting, thus agreement on the "bottom line" estimates may provide a false sense of consistency and certainty. This

2 OTA chose t. examine these three particular analyses because they provide separate estimates for specific budget items, not just an aggregate "bottom line" estimate. and OTA has relatively more information regarding the general methods used by these analysts. In addition, this is one of the relatively rare instances where analysts provide estimates for the same legislation. This condition is critical because estimates of federal budget impacts under health reform are sensitive to the specific provisions in the legislation. KPMG Peat MarWick, a private consulting firm, published its analysis of the Health Security Act on March 28,1994. OTA did not include the KPMG estimates in its analysis because they were not available until after OTA had completed its draft report. In addition, the KPMG analysis provided relatively less information regarding its estimates.

background paper evaluates the estimates of each of the bills' major provisions separately.

Figure 1-2 depicts the provisions in the Health Security Act (H. R.3600/S.1757) that differ the most across the various estimates.[3] The differences between the Clinton Administration, CBO, and Lewin-VHI's "bottom line" estimates of the federal budget effects of the Health Security Act result mainly from analysts' estimates of the following four specific budget items that differ most in absolute monetary terms:

- Costs of employer and family premium subsidies, especially subsidies for employers. In absolute terms this represents an area where analysts' estimates disagree most.[4] Lewin-VHI's and CBO'S estimates of the employer subsidies are 54 and 92 percent higher (respective y) than those of the Clinton Administration (nearly $50 billion and $86 billion higher, respectively, than the $93.1 billion projected by the Clinton Administration for period from 1995 through 2000). However, the Clinton Administration added a 15 percent contingency, equal to $41.2 billion, to the estimates of the premium subsidies. The Clinton Administration used the 15 percent as a "cushion" to cover potential behavioral responses that it believed difficult to model. The three estimates would be closer if the cushion were included (see Chapter 2).
- Potential revenues gained from the additional income and payroll taxes resulting from lower health care expenses and higher income due to universal coverage, subsidies, and cost containment. CBO'S estimates are only about 16 percent lower than the Clinton Administration's ($24 billion versus $28.4 billion for the period from 1995 through 2000), but Lewin-VHI'S estimates are 113 percent lower (i.e., Lewin-VHI projected a revenue loss, not gain, of $3.7 billion).
- Potential revenues gained from recovered tax expenditures by excluding health benefits from cafeteria plans. CBO'S and Lewin-VHI's estimates of these revenues are 68 and 46 percent lower, respectively, than those of the Clinton Administration ($10 billion and $17 billion versus $31.4 billion for the period from 1995 through 2000).
- Potential revenues gained from the 1 percent payroll tax for corporate alliances. CBO'S estimates are 67 percent lower than those of the Clinton Administration ($8 billion versus $24.2 billion for period from 1995 through 2000), while Lewin-VHI's estimates are 36 percent higher than the Clinton Administration ($33.0 billion versus $24.2 billion).

In general, CBO'S estimates of the Health Security Act tend to generate higher figures for expenditure items, and lower figures for revenue items than those of the Clinton Administration. Fewer consistent differences exist between the Lewin-VHI and the Clinton Administration estimates.

Determinants of the Difference in the Estimates[5]

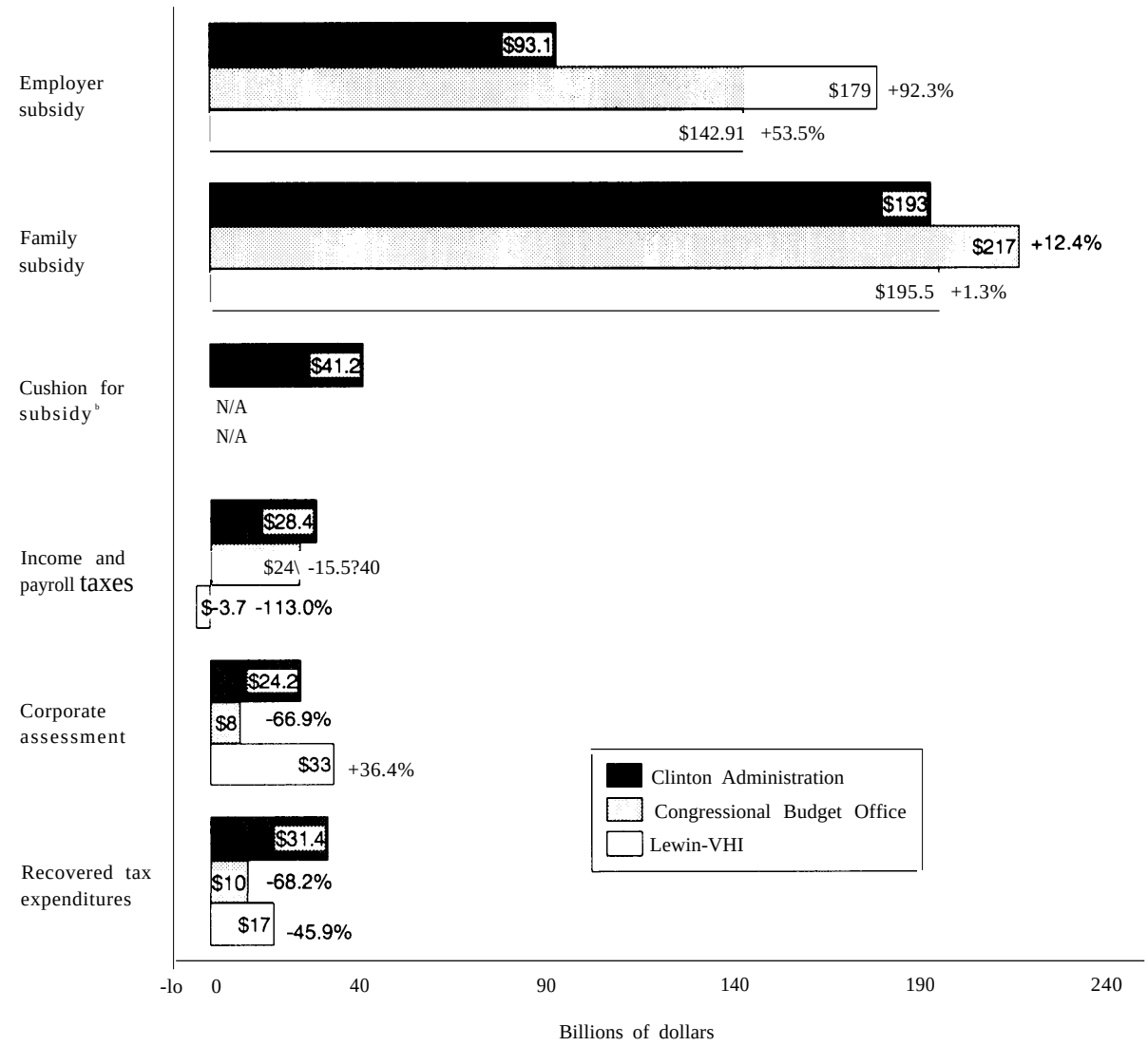
OTA found that inconsistencies between analyses often indicate that the data and research evidence necessary to make accurate predictions are lack-

[3] There are many ways to define the areas of greatest disparity across the estimates (e.g., in terms of absolute or relative terms), and the differences will depend on whose estimates are being compared. These areas were found to differ most in absolute terms when all possible comparisons are considered (i.e., CBO vs. the Clinton Administration, CBO vs. Lewin-VHI, Lewin-VHl vs. the Cl inton Administration). All the provisions identified differed by more than $20 billion (between at least two organizations).

[4] For example, differences in the estimated cost of the subsidies for employers account for approximately half the total difference between CBO's and the Administration's estimate.

[5] Since analysts typically do not publish information on the specific input parameters and algorithms (i.e., the basic calculation steps) used in their analyses, it is extremely difficult to assert with complete certainty what has contributed to the differences in analysts' estimates. OTA's analysis is based on its understanding of the general methods used by various analysts and analytically infers the major factors that may have contributed to the differences in estimates. This background paper was sent to the relevant analytic organizations for review.

FIGURE 1-2: Major Areas of Difference in Estimates of the Health Security Act (H.R. 3600/S. 1757), 1995-2000[a]



[a] The percentages shown in the figure are the differences relative to the Clinton Administration's projections.

[b] Note that the Clinton Administration's estimates for subsidies do not include the potential behavioral responses to the subsidies The Clinton Administration uses a separate "cushion" to cover the behavioral responses to subsidies. Neither CBO nor Lewin-VHI adopted such methodology in their estimates of the subsidies

SOURCE Off Ice of Technology Assessment, 1994

ing. Differences across estimates may also result from the nature of the legislation being estimated. Some legislation may not be specific enough to allow for exact and consistent estimation. In contrast, inconsistencies did not indicate that analysts' methods were incorrect or biased.

Table 1-1 summarizes the major factors that have contributed to the differences in analysts' estimates of various provisions under the Health Security Act. The factors fall into three major categories:

- Analysts estimates of the premiums for standard benefit packages under the regional alliances.
- Analysts' assumptions about behavioral responses to specific reforms. These include assumptions about individual and employer responses to changes in premiums (e.g., whether employers will opt for corporate alliances), to premium subsidies (e.g., whether employers will set up small low-wage subsidiaries to maximize the premium subsidies), and to changes in the tax treatment of health benefits (e.g., whether individuals will prefer tax-exempt benefits over additional wages).
- Baseline information on numerous household and firm-level economic variables. For example, information on the distribution of average payroll and employer spending on health benefits by firm size, and the distribution of medical expenses by household income, are essential for estimating the premium subsidies.

TABLE 1-1: Major Determinants of Differences in Estimates of the Health Security Act (H.R. 3600/S. 1757)

Federal budget-related provisions	Factors accounting for differences in estimates
Expenditures for family and employer subsidies	Premium level and growth Baseline estimates of families and firms eligible for subsidies Behavioral responses to premium subsidies
Expenditures for Medicare drug benefit	Baseline expenditures for prescription drugs among beneficiaries Additional demand due to the benefit coverage Participation rate among eliglble beneficiaries
Expenditures for long-term care benefit	State spending on optional Medicaid services
Savings from Medicare and Medicaid	Growth rates of Medicare and Medicaid baseline expenditures Decreased demand for certain services due to cost-sharing
Taxes on corporate and personal income	Baseline spending on health benefits and health care Estimated spending on health benefits and health care under Teform
Taxes on tobacco products	Baseline expenditures on tobacco products Reduction in tobacco consumption due to higher taxes (i.e., elasticity of demand)
Assessment for corporate alliances	Participation rate of corporate alliances Baseline employer spending on health benefits Estimated employer spending on health benefits under reform
Recovered tax expenditures (from cafeteria plan provision)	Baseline tax expenditures associated with health benefits under cafeteria plan Behavioral responses to changes in income tax code

SOURCE Office of Technology Assessment, 1994

[6] In this background paper, the term baseline means the state of the system before any proposed policy change or reform. It is a benchmark for measuring the effects of the proposed policy changes. It can refer to the expenditures, the demographic compositions, or the underlying macroeconomic factors that are generally used as the input parameters in estimating the effects of reform.

Both CBO and Lewin-VHI projected higher premiums than the Clinton Administration. Higher premium estimates will lead to higher subsidy estimates. In part, the difficulty in estimating the premiums is a product of the multiple sources of financing for people currently without insurance. For example, under the current system services used by people without insurance are partially financed through cost-shifting to private health insurance premiums. Analysts differ in their estimates of the size of uncompensated care and of the effect that eliminating uncompensated care will have on premiums. Differences also reflect a lack of consensus over the appropriate data for pricing benefits (e.g., the national health accounts or private health insurance claims data) and over the effect of HMOs on premiums.

Analysts' assumptions about the behavior of individuals and employers under reform also contributed to the differences in the estimates. For example, as the premiums for the standard benefit package under regional alliances increase and become more burdensome to employers, employers may be more likely to find ways to meet the eligibility criteria for the subsidy program (i.e., to "game" the system). However, analysts differ in their assumptions about the magnitude of such responses and, at this time, no good evidence exists on how employers will respond to the incentives inherent in the subsidy program.

In some cases differences across the estimates resulted from a lack of data on certain key elements necessary to arrive at the estimates, or from a lack of consensus about the appropriate data sources. OTA's review of various estimates suggests that data on expenditures and utilization in public health insurance programs are usually readily available. However, there is no consensus about the appropriate sources of data for expenditures in private-sector fins, such as the distribution of average payroll and health benefits by firm size. To date, the federal government has collected health-related data primarily through household surveys.[7] Better firm-level data maybe warranted if health care reform is to be built upon the existing structure of employment-based private health insurance.[8]

ORGANIZATION OF THE REPORT

This introductory chapter provides a summary of the findings about major areas of disparity, and the determinants that may account for those differences, across various estimates of the federal budget effects of the Health Security Act. Chapter 2 uses various estimates of the Health Security Act to illustrate how estimates of federal budget effects of health reform might differ and the factors most likely to contribute to the differences in analysts' estimates. The discussion focuses on three different estimates of the Health Security Act, by the Clinton Administration (51), CBO (38), and Lewin-VHI, a private health care consulting firm (13).

Chapter 3 describes more generally how federal expenditures and receipts are likely to be affected by reform provisions that seek either to expand or limit the federal government's presence in the health care sector. The main objective of chapter 3 is to identify, more generally, relevant determinants and assumptions that are most likely

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7 Within the U.S. Public Health Service, *the* National Center for Health Statistics (NCHS) is currently coordinating a National Employer Health Insurance Survey cosponsored by the Health Care Financing Administration and the Agency for Health Care Policy and Research. The survey, which will sample a nationally representative 51,000 establishments, is designed to be representative of employers in the nation, as well as by region, state, standard industrial classification, and size. The data are scheduled to be publicly available by 1995 (26).

8 There are currently some firm-level data on employment-based health insurance and benefits from numerous private sector trade associations and benefit consulting firms. For example, before 1993 the Health Insurance Association of America conducted an annual survey of employer-sponsored health benefits. Major benefit consulting firms, such as Hay/Huggins, A. Foster Higgins, and KPMG Peat MarWick, all have their own annual health benefits survey of various size of employers. However, there are some weaknesses (e.g., representativeness of the sample design, inadequacy of the instrumentation, low item response rate) in these survey data that limit their reliability and accuracy in estimating the effects of employer premium subsidies (26).

to affect analysts' estimates for major categories of federal outlays and revenues under health care reform.

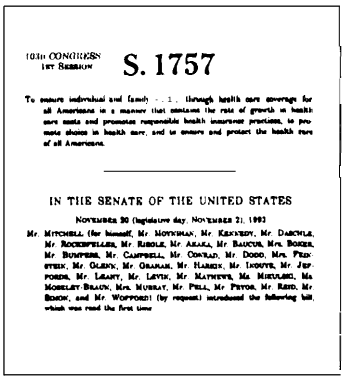
Chapter 4 provides a brief review of CBO's estimates for the American Health Security Act (H.R. 1200/S.491) and the Managed Competition Act of 1993 (H. R.3222/S.1579), and discusses areas that are likely to be subject to some uncertainty in the estimates. Finally, since the federal budget process largely affects how executive and congressional agencies estimate the impact of statute changes, a general description of the process is included as appendix B. Appendix C provides an overview of the data sources analysts generally use to derive the necessary baseline information about insurance coverage, health expenditures, employment and income, and demographic compositions, which are essential for their estimates.

Estimates of the Health Security Act

2

Estimates of different reform provisions present different challenges for analysts. In some cases, estimates of the effect of certain reform provisions on the federal budget are relatively straightforward because only a few factors are necessary for estimates and good data and research exist on critical inputs and assumptions. In other cases, the estimates are complicated by the large number of factors involved, the scarcity and quality of data, and the lack of information on behavioral responses to various changes under the reform. Under such circumstances, analysts often have to make subjective or somewhat uncertain assumptions in the estimation process. Differences in assumptions and data sources are often the major reason why analysts' estimates differ. Although different methods of estimation may also lead to variations in estimates across analysts.

This chapter reviews various estimates of the Clinton Administration's Health Security Act to examine in more detail how and why analysts' estimates differ. The Health Security Act has various provisions that would affect both government spending and receipts, and therefore serves as a useful example of how health reform might affect the federal budget. [1] The chapter will describe three much-discussed estimates of the act: by the Clinton Administration (50,51), by the Congressional Budget Office (CBO) (38), and by Lewin-VHI (13), a private consulting firm.



103D CONGRESS
1ST SESSION

S. 1757

To ensure individual and family ... through health care coverage for all Americans in a manner that contains the rate of growth in health care costs and promotes responsible health insurance practices, to promote choice in health care, and to ensure and protect the health care of all Americans.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 20 (legislative day, NOVEMBER 21, 1993

Mr. MITCHELL (for himself, Mr. MOYNIHAN, Mr. KENNEDY, Mr. DASCHLE, Mr. ROCKEFELLER, Mr. RIEGLE, Mr. AKAKA, Mr. BAUCUS, Mrs. BOXER, Mr. BUMPERS, Mr. CAMPBELL, Mr. CONRAD, Mr. DODD, Mrs. FEINSTEIN, Mr. GLENN, Mr. GRAHAM, Mr. HARKIN, Mr. INOUYE, Mr. JEFFORDS, Mr. LEAHY, Mr. LEVIN, Mr. MATHEWS, Ms. MIKULSKI, Ms. MOSELEY-BRAUN, Mrs. MURRAY, Mr. PELL, Mr. PRYOR, Mr. REID, Mr. SIMON, and Mr. WOFFORD) (by request) introduced the following bill, which was read the first time

[1] So far, the Clinton Administration's Health Security Act has received the most publicly available program-specific analyses of its federal budgetary effects.

Much attention has focused on the Clinton Administration's estimate that the Health Security Act would reduce the federal budget deficit by $58.5 billion, while Lewin-VHI projected a much lower reduction of $24.6 billion, and CBO projected that the net effect would be a deficit increase of $74 billion from 1995 through 2000. It should be noted, however, that estimates of the aggregate budgetary effects may overestimate the degree of consistency across analyses. Analysts can come up with different estimates of specific reform provisions, but arrive at similar aggregate budgetary effects. For example, an analysis with relatively higher estimates of both federal expenditures and revenues may have the same aggregate level budgetary impact as any analysis with relatively lower estimates for both expenditures and revenues.

The analysis in this chapter will be organized around the specific reform provisions in the Health Security Act. Since the Health Security Act contains a relatively large number of reform provisions that will directly or indirectly affect federal outlays and receipts, the discussion will focus on three major areas of federal outlays:

- expenditures associated with employer and family subsidies;
- expenditures associated with Medicare prescription drug benefits and the long-term care program for severely disabled individuals; and
- savings from Medicare and Medicaid.

It will also focus on three major areas of federal' revenues:

- new taxes on tobacco products, additional revenue from income and payroll taxes, taxes on corporate alliances and an early retiree assessment;
- recovered tax expenditures from limiting the tax exclusion of health benefits; and
- revenue loss from new tax expenditures associated with the tax deduction for self-employed health insurance premium.

Estimates for other reform provisions such as the various public health initiatives, new administrative and start-up functions and savings from the VA, the Department of Defense, and federal employee health programs that will also affect federal outlays and receipts are not examined in detail. The choice of specific reform provisions discussed in this report is based on the relative size of the expenditures or revenues involved. The provisions reviewed make up more than 85 percent of the estimated federal budget effects (both in terms of additional outlays and revenue). Figure 2-1 provides an overview of analysts' estimates of the act's major reform provisions.

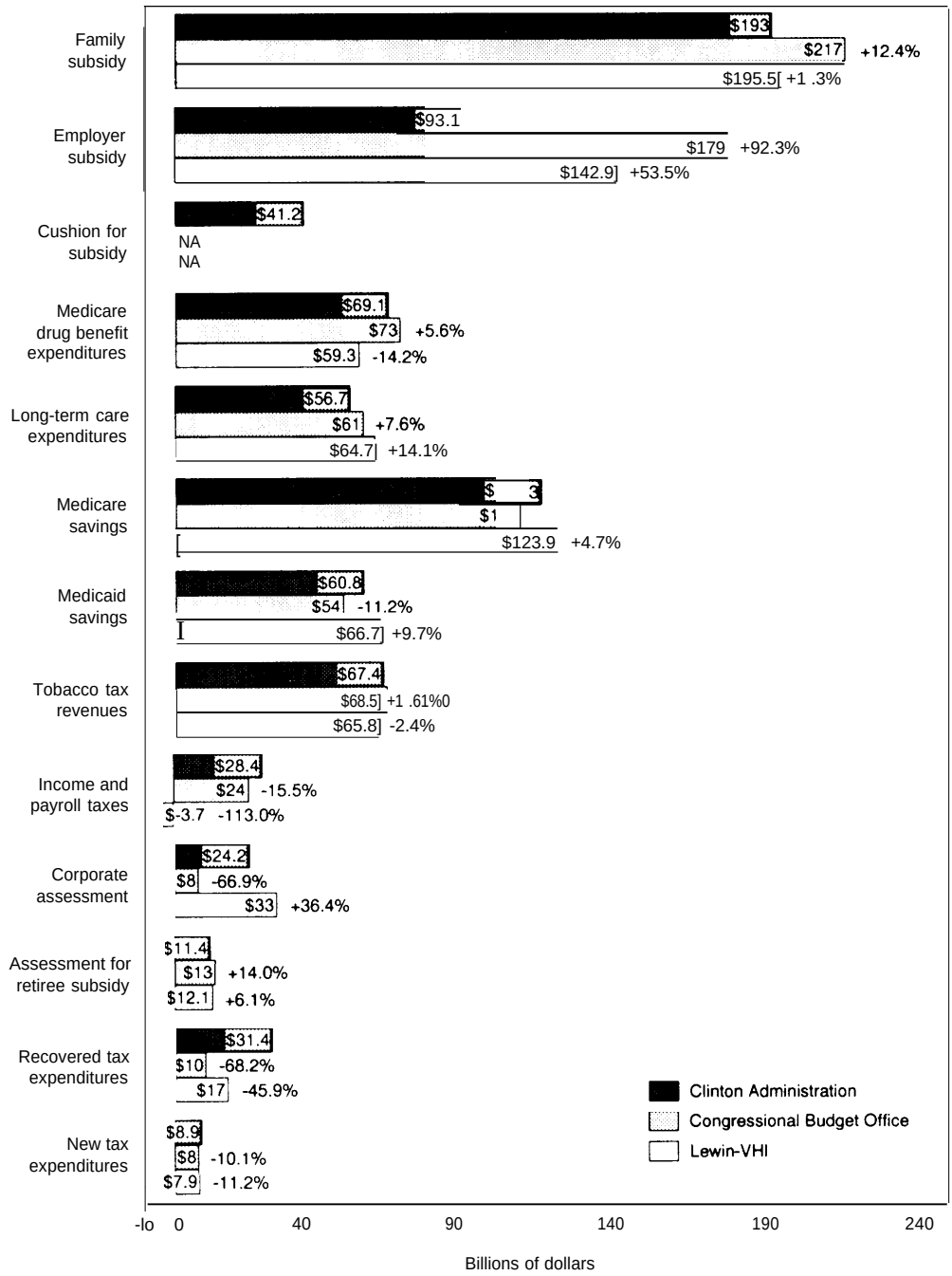
SOURCES OF INFORMATION

Since the introduction of its health care reform proposal in September 1993, the Clinton Administration has released four major documents depicting its estimates of the effect of the Health Security Act on the federal budget.

The Health Security Act of 1993: Documentation of Federal Budget Effects (50), released by the Office of Management and Budget (OMB) in December 1993, provided estimates for all major reform provisions that affect federal spending. Based on the same expenditure estimates, Rivlin, Cutler, and Nichols, all officials of the Clinton Administration, published an article, "Financing, Estimation, and Economic Effects," in the spring 1994 issue of *Health Affairs (* 18). The article provides the same set of estimates as the December 1993 OMB document, but it contains additional discussion of the general methodology that the Clinton Administration used to arrive at its estimates.[2] Additionally, the Office of Tax Analysis in the Treasury Department also prepared a docu-

2There is also various Congressional testimony by Clinton Administration officials regarding the projections and financing issues. All of the testimony relied on the same set of expenditure estimates, which appeared in the December 1993 OMB documentation, and they will also be referred to as the Clinton Administration's December 1993 estimates.

FIGURE 2-1: Projections of Federal Budget Effects Under the Health Security Act (H.R. 3600/S. 1757), 1995-2000[a]



a The percentages shown in the figure are the differences relative to the Clinton Administration's projections

KEY NA = not applicable

SOURCE Office of Technology Assessment, 1994

ment, Estimating the Impact of Health Reform on Federal Receipts, describing the general methodology used by the Clinton Administration in its estimates of the revenue effects under the Health Security Act (49).[3]

Another document containing the Administration's most recent estimates was the FY1995 budget proposal, *Budget of the U.S. Government, FY95 (51).* Because the underlying assumptions about the future of the economy and related factors used in the Clinton Administration's estimates were changed between December 1993 and February 1994, there are some differences in the Clinton Administration's two estimates of the federal budget effects of health reform.[4] The revision is an example of how an overall estimate may change due to new projections of inflation, interest rates, and other macroeconomic factors. This background paper deals with the most recent estimates.

OTA'S analysis of CBO's estimate of the Health Security Act is based mainly on a CBO report, *An Analysis of the Administration's Health Proposal,* released in February 1994 (38) and a related revenue estimate released by the Joint Committee on Taxation, *Summary and Estimated Revenue Effects of Tax Provisions of the Administration's Health Security Act (43).*

OTA's analysis of Lewin-VHI's estimate is based on a Lewin-VHI report, *The Financial Impact of the Health Security Act,* released in December 1993 (13).

Compared with analyses of other major legislation, federal analysts have released relatively more information about the methodology used to estimate the effects of health reform (7). However, most of the information federal and private analysts have released so far provides only a general description of their methodology. With a few rare exceptions, analysts typically do not publish information on the specific input parameters and algorithms (i.e., basic analytic steps) that they used.

Without such information, it is extremely difficult to account for the differences in analysts' estimates. In most instances, OTA can only infer the major factors that may have contributed to the differences based on its understanding of the general methodology.

ESTIMATES OF FEDERAL OUTLAYS

I Expenditures for Subsidies/Discounts

To ease the burden of insurance costs on individuals and expand insurance coverage, the Health Security Act would provide subsidies for premiums and cost-sharing to early retirees, low-income families, and employers. Employer subsidies would be determined by firms' h-ms' health insurance costs, payroll, and size. Specifically, the Health Security Act would place limits on insurance payments by employers in regional alliances on a sliding scale from 3.5 to 7.9 percent of the payroll, depending on the size and average wage of the firm.

Differences in Analysts' Estimates

Analysts' estimates of federal subsidies represent the single largest budgetary item in the estimated additional Federal expenditures under the Health Security Act (from 40 to 60 percent, depending on different analysts' estimates). The estimates also account for the greatest variation across analysts' estimates of federal budget effects. In absolute monetary terms, the largest difference in analysts' estimates is the employer subsidies, with the difference between CBO and the Clinton Administration amounting to approximately $86 billion for the six-year period 1995 to 2000. Table 2-1

3 In this background paper, OTA does not distinguish between documents with the same estimates and will refer to them as the Clinton Administration's December 1993 estimates.

4 The Clinton Administration attributes the differences in two estimates to the fact that its most recent projections are based on the economic assumptions in the 1995 budget proposal, while the earlier projections are based on the economic assumptions in the 1993 midsession review (51).

Table 2-1: Estimates of Federal Expenditures for Premium Subsidies, 1995 to 2000 ($ billions)

Premium subsidy estimates	Clinton Administration	Congressional Budget Office	Lewin-VHI	CBO vs. Clinton Administration $ (%)	Lewin-VHI vs. Clinton Administration $ (%)	Lewin-VHI vs. CBO $ (%)
Family subsidy	$1930	$217	$195,5	$24 (12,4 %)	$25 (1 3%)	-$21.5 (-99%)
Employer subsidy	931	179	1429	859 (92 3)	49.8 (53 5)	-361 (-20.2)
"Cushion"	412	NA	NA	NA	NA	NA
Total gross subsidy	3274	396	3384	686 (21)	11 (34)	-576 (-14 5)

KEY . NA = not applicable

SOURCE Office of Technology Assessment, 1994, based on data from Lewin-VHI, Inc., The Financial Impact of the *Health Security Act* (Fairfax VA. Dec. 9, 1993), U S Congress, Congressional Budget Office, *An Analysis of the Administration's Health Proposal* (Washington, DC February 1994), U S Executive Office of the President, Off Ice of Management and Budget, *Budget of the U.S. Government,* FY95 (Washington, DC U S Government Priting Office, February 1994)

provides a detailed comparison of analysts' estimates for the various types of subsidies.

The estimates of federal premium and out-of-pocket subsidies essentially are determined by three critical factors:

- the estimated premium levels in the first year of reform for health plans in regional alliances,
- assumptions about the growth rate of premiums, and
- the baseline estimates of eligible families and firms, assumptions about future eligibility, and assumptions about the behavioral responses to the subsidies.

The Estimated Premium Level

The relationship between the regional alliance premium and the estimates of federal premium subsidies is intuitive. Higher premium levels will lead to an increase in premium subsidies for both employers and families, other things being equal. Because of the uncertainty of determining, a priori, the premiums for the "standard benefit package" and thus the cost of the subsidy program, the Health Security Act capped the amount of total federal payments for premium subsidies to the regional alliances (section 9102).[5] The act also specifies the method for estimating the average premium level for the "standard benefit package" under the regional alliances (section 6002) and establishes limits on the growth rate of regional alliance average premiums.

The general methodology used to estimate the premiums takes into account the baseline spending for the covered benefits, the inducement effects among the previously uninsured and underinsured individuals, and the number of persons with different family structures covered by regional alliances.

The premiums CBO estimated were on average 15 percent higher than those of the Clinton Administration and about the same as those estimated by Lewin-VHI. Table 2-2 shows a comparison of the average premium levels under the regional alliances estimated by the three analytical groups. Differences in the methods and data used account for the differences in premium estimates.

[5] In many instances, the Clinton Administration's reform proposal has placed a cap on federal spending for specific programs (e.g., long-term care grants to states and premium subsidy payments to regional alliances). Other analysts mayor may not accept the capped amount in the legislation as a "reasonable" estimate for the specific federal spending, The spending caps specified in the legislation are based on what the Clinton Administration has projected the spending levels would be to achieve its policy objectives. Other analysts might contest whether the projections are based on "appropriate" data and/or methodologies. In the case of the premium subsidy, for example, CBO'S estimates suggest that it believes the Clinton Administration has underestimated the premium costs under the reform as well as the size of the population eligible for the premium subsidies.

TABLE 2-2: Estimates of Average Annual Regional Alliance Premiums Per Worker[a]

	Clinton Administration 1994 dollars	CBO 1994 dollars	Lewin-VHI 1998 dollars
Single person	$1,933	**$2,100**	$2,732
Married couple	3,865	4,200	5,464
One-adult family	3,894	4,095	5,172
Two-adult family	4,361	5,565	5,975

[a]The Clinton Administration and CBO's estimates are for average premiums in 1994, whereas Lewm-VHI's premiums reflect the average regional alliance premiums in 1998, taking into account the effect of premium cap prescribed in the-Health Security Act

SOURCE. Office of Technology Assessment, 1994, based on data from A.M. Rivlin, D .M. Cutler, and L .M. Nichols, "Financing, Estimation, and Economic Effects, " *Health Affairs 13(1) 30-49, 1994,* Lewin-VHI,, Inc , The *Financia/ Impact of the Hea/th Security Act* (Fairfax, VA. Dec. 9, 1993), U.S. Congress, Congressional Budget Off Ice, An Analysis *of the Administrations Hea/th Proposa/* (Washington, DC. February 1994)

The Clinton Administration's premium estimates are based on the March 1992 Current Population Survey (CPS) and the expenditure and utilization data reported in the 1987 National Medical Expenditure Survey (NMES).[6] Since the sum of health care expenditures reported in the NMES is less than the comparable totals reflected in the National Health Accounts (NHA), the expenditure data are adjusted to be in line with the 1994 NHA. To estimate expenditures under reform, analysts at the Health Care Financing Administration (HCFA) further adjust the predicted utilization and expenditure figures to account for the changes in health insurance coverage and out-of-pocket costs for health care among the uninsured and underinsured population that would occur under the Health Security Act. Finally, to account for the fact that uncompensated care is expected to disappear with universal coverage, **the** estimated premiums are adjusted downward to reflect the effect of reduced cost-shifting (18).

CBO provided only brief discussion in its report on how it derived its estimates of the premiums under the Health Security Act. No information on the data sources for the estimates was presented in their report. However, CBO analysts indicated to OTA that the premium estimates were based on the March 1993 CPS (which provided demographic and income data) and the 1987 NMES (which provided information on the use of health care services) (9).

According to CBO, the premium estimates were derived from baseline spending on private health insurance premiums and all other health care spending for individuals who could be covered by regional alliances under the Health Security Act. The baseline spending was then adjusted for two factors. First, CBO increased the baseline spending in proportion to the anticipated changes in utilization by currently uninsured people. Second, CBO increased the base amount by another 5 percent to reflect its assumption that the standard benefit package would be 5 percent more expensive than the current average benefit package for insured people. In comparing its own premium estimates with those of the Clinton Administration, CBO suggested that the Clinton Administration's calculation did not include certain public spending such as state and local subsidies to public hospitals for the uninsured people. Also, the Clinton Administration estimate was not adjusted to reflect private health insurance data.

Lewin-VHI derived its premium estimates using the expenditure data reported in the 1987

6 Both the HCFA and the Agency for Health Care Policy and Research (AHCPR) within the Clinton Administration have developed their own estimates of the premiums under the reform. The Clinton Administration used the HCFA premiums in all of its estimates of the subsidies as well as the federal budgetary and national health expenditure effects of the reform, therefore the discussion here will foeus only on HCFA'S analysis.

NMES and then adjusted the NMES data on household health care spending to reflect the comparable totals in the NHA. The NMES health care spending data were further adjusted to reflect higher premium payments and cost-sharing requirements reported in the 1991 Health Insurance Association of America (HIAA) employer survey. Based upon a review of documentation provided by the Clinton Administration, Lewin-VHI suggested that five factors account for the fact that its premium estimates are 15 to 17 percent higher than the Clinton Administration's:

- the fact that Lewin-VHI accounted for aging of the baby boom population (i.e., a faster growth of the elderly population that tends to use more health services), while the Clinton Administration did not,
- Lewin-VHI's assumption that HMO premiums would be higher than the fee-for-service premiums because HMOs require little patient cost-sharing,
- Lewin-VHI lower adjustment for uncompensated care,'
= the fact that Lewin-VHI estimated higher unit costs for care to newly insured persons, and
- the fact that Lewin-VHI made additional adjustments of the NHA (which was used as a benchmark for current spending) with private-sector data sources *(22).*

The Growth Rate of Premiums

In addition to the differences in premium estimates in the first year of reform, another issue is the growth rate for premiums. If the growth in premiums is much higher than projected, the federal subsidies will increase substantially. The Health Security Act would cap on the growth rate of premiums for the standard benefit package under the regional alliances such that it would not exceed the population growth and inflation factors specified in the legislation.

The Clinton Administration's subsidy estimates were based on the assumption that under reform premiums would grow only at the rates specified in the Health Security Act. CBO also assumed that the growth rate of premiums under the regional alliances would not exceed the legislated level. In other words, the premium limit set forth in the Health Security Act would be 100 percent "effective." Although CBO discussed the uncertainty of the impacts of the limits on the quality of care and access to care it did not elaborate on why it assumed the premium limit would be 100 percent effective.[8]

As detailed in a separate OTA report (45), Lewin-VHI assumed the premium cap would be about 85 percent "effective" (21). According to Lewin-VHI, the aging of the baby boom generation and the higher failure rate of health plans in the regional alliances would force the premiums to grow above the proposed target rates.

Analysts' assumptions about the effectiveness of the premium limit were based large] y on a judgment of how the various cost control mechanisms are designed and whether they will support the limit specified in the legislation. As discussed in the previous OTA report *Understanding the Estimates of National Health Expenditures Under Health Reform,* there is evidence that some government cost-control mechanisms have reduced the growth of certain type of expenditures (45). Analysts may have taken this evidence into con-

[7] Currently, private sector premiums reflect some of the costs to providers of uncompensated care due to cost-shifting. Presumably, with universal coverage these costs would no longer exist. In their calculation, Lewin-VHI assumed that only hospital uncompensated care would disappear under reform while the Clinton Administration assumed that both hospital and physician uncompensated care would disappear.

[8] CBO's rationale for the l(X) -percent effectiveness rating may be based on the fact that the Health Security Act not only specified the process for setting the initial premiums and the premium targets in subsequent years, it also went further to define the "penalties" for breaching the premium targets.

sideration. However, there is currently no direct empirical evidence to validate the effectiveness of premium limits per se in containing the growth of health care costs, or, more specifically, the increases in health alliance expenditures.

Eligibility and Behavioral Responses to Subsidies

Estimates of total federal subsidies also hinge on assumptions about the behavioral responses to the subsidies, which in turn affects the estimates of the numbers of families and firms eligible for subsidies. These issues place a great demand on the data system, especially in the case of estimates of employer subsidies.[9] There is, however, no consensus among analysts on the appropriate sources for firm-level data for the estimation of employer subsidies.

To estimate the employer subsidies, the Clinton Administration used the CPS and imputed an average wage per worker (50). In contrast, CBO obtained the firm-level payroll information from the Census Bureau's 1990 County Business Patterns data, adjusted for the growth in employment and wages over time (38). CBO suggested that the Clinton Administration's method of imputation understates the variation in average wages among firms and led to an underestimate of the baseline number of workers in the firms eligible for subsidies (38). Lewin-VHI has suggested that CBO'S method overestimates the costs of the subsidies by underestimating the number of low-wage workers who are in single family households (and therefore would receive lower subsidies).

CBO assumed that the subsidy provisions would create incentives to cluster, or sort, low-wage workers into firms with lower average payroll to minimize premium payments and maximize federal subsidies.[10] Although empirical research is lacking, CBO assumed that such sorting would affect 20 percent of the workers potentially eligible for the subsidies within the 10-year period after reform. CBO did not present any additional rationale for this particular assumption.

The Clinton Administration, in its estimates of the cost of the subsidies, did not directly model the effect of behavioral responses to the subsidies. Rather, its estimates rely upon a separate allowance, or "cushion," equal to 15 percent of the estimated total subsidy. The Clinton Administration suggested that this 15-percent contingency would cover potential behavioral responses to the subsidies. There is, however, no explanation in the Clinton Administration's document why it chose this particular figure. In a personal correspondence with OTA analysts, a Clinton Administration official indicated that the 15 percent figure was derived from two factors. First, an assumption that under health reform there could be changes in employment patterns such as greater "outsourcing." Second, the potential impacts on subsidy costs were estimated with an alternative assumption of 2 percent unemployment under health reform (6).[11]

Lewin-VHI's document did not clearly indicate whether it incorporated behavioral responses in its estimates of the employer subsidy.

1 Expenditures for New Benefit Programs

The Health Security Act would establish two major new benefits: prescription drug reimbursement under Medicare Part-B and federal grants to the states to provide community-based long-term care for individuals with severe disabilities. The degree of variation across analysts' estimates of the cost of new benefits depends, in part, on the

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9 Because the Health Security Act capped employers' premium spending on the basis of average payroll and firm size, information on the distribution of average payroll across different firm size is a crucial element in *the* estimates of employer subsidies.

10 This is because the Health Security Act capped the employers' premium payments (to the regional alliances) on a sliding scale from 7.9 to 3.5 percent of the payroll. As the size and average payroll of the firm decreased, the levels of federal premium subsidies would increase.

11 The Administration correspondence, however, did not identify the magnitude of the outsourcing effect that the Clinton Administration had assumed to formulate the level of "cushion." Additionally, the 2 percent unemployment effect does not reflector capture the (specific) behavioral responses pertinent to the premium subsidies,

way the programs are designed and the payment mechanisms specified in the legislation.

Differences in Analysts' Estimates: Medicare Drug Benefit

Analysts' estimates of the Medicare Part-B prescription drug benefit represent less than one-fifth of the estimated new federal expenditures proposed under reform. In absolute monetary terms, the largest difference in analysts' estimates is less than $14 billion for the six years from 1995 through 2000. In relative terms, as shown in table 2-3, the Clinton Administration's estimated costs of the Medicare drug benefit program are much higher than Lewin-VHI's, and slightly lower than CBO'S.

The estimates of federal outlays for the Medicare Part-B prescription drug benefit are determined by three factors:

- the baseline expenditures for prescription drugs by the potential beneficiaries,
- the assumption about the demand elasticity for prescription drugs (i.e., the inducement effect due to insurance coverage), and
- the number of eligible beneficiaries and the participation rate of the eligible population.

The estimates of the Medicare drug benefit illustrate how even when analysts' estimates are close, they may still be subject to some uncertaint y. The Clinton Administration, for example, used a lower baseline expenditure for prescription drugs but a much larger demand inducement effect than CBO. Although both inputs differ from CBO'S inputs, they tend to offset each other and thus CBO and the Clinton Administration arrived at similar estimates. Using the Clinton Administration's lower baseline expenditures and CBO'S lower demand inducement effect would result in a lower projection of the federal expenditures than the Clinton Administration has estimated. Similarly, using CBO'S higher baseline expenditures and the Clinton Administration's higher demand inducement effect would result in a projection of expenditures even higher than the $73 bill ion estimated by CBO.

Baseline Expenditures for Prescription Drugs

Analysts' estimates of baseline spending for prescription drugs by Medicare beneficiaries are based on data reported in the 1987 NMES. The figures are adjusted for the increases in prices and/or utilization between 1987 and the base year of

TABLE 2-3: Estimates of Federal Expenditures for New Benefit Programs, 1995-2000 ($ billions)

Benefit provisions	Clinton Administration	Congressional Budget Off ice	Lewin-VHl	CBO vs. Clinton Administration s *(“/0)*	Lewin-VHl vs. Clinton Administration *$ (“/0)*	Lewin-VHl vs. CBO *$ (%)*
Medicare prescription drug benefit	$691	$73	$593	$39 (56 %)	-$98 (-14 2%)	-$137 (-18 8%)
Community-based long-term care benefit program	567	61	64.7	4.3 (7.6)	80 (14 1)	37 (6 1)
Total	1258	134	124,0	82 (66)	-18 (-1 ,4)	-lo (-7 5)

SOURCE Off Ice of Technology Assessment, 1994, based on data from Lewm-VHl, Inc , The Financial Impact *of the Health Security Act* (Fairfax, VA. Dec 9, 1993), U S Congress, Congressional Budget Office, *An Ana/ysls of the Administrations Health Proposal* (Washington, DC February 1994), U S Executive Office of the President, Off Ice of Management and Budget *Budget of the U S Government,* 1795 (Washington, DC U S Government Printing Office, February 1994)

the projection.[12] Since all analysts have obtained the **data** on prescription drug spending from the same data source, their estimates of baseline expenditures presumably would not differ significantly. CBO, however, reported that its estimated baseline expenditures are higher than those of the Clinton Administration (38). CBO'S higher baseline prescription drug expenditures may result from its adjustment for underreporting that it believed existed in the 1987 NMES data. Neither the Clinton Administration nor Lewin-VHI reported making any sort of adjustment for underreporting of prescription drug expenditures.

Demand Elasticity for Prescription Drugs

Not all Medicare Part-B beneficiaries have private supplementary insurance that covers prescription drugs. Thus, analysts have to account for the additional demand for prescription drugs that insurance would induce among those previously without prescription drug coverage. Analysts differed, however, in how they accounted for this inducement effect.

The Clinton Administration assumed that each dollar of new Medicare prescription drug coverage would induce an additional 60 cents of prescription drug spending (50).

CBO based its estimate on its earlier study of the Medicare catastrophic drug insurance program (28), which suggested that different "inducement effects" must be considered for three separate groups of Medicare enrollees: 13

- ~ Those who already have prescription drug coverage, either through Medicaid or private supplementary insurance, would not increase their utilization of prescription drugs.
- Those with supplementary insurance to cover the copayment and deductible for physician services but no drug coverage would increase their use by 7 percent.
- 8 Those without any supplementary insurance would increase their use by 60 percent.

Clearly, the Clinton Administration has assumed a much higher inducement factor than CBO for Medicare beneficiaries who currently have supplementary insurance to cover the copayment and deductible for physician services but no coverage for prescription drugs (60 versus *7* percent). There are no differences between the Clinton Administration and CBO in their assumptions about the inducement effects for the other two groups.

Lewin-VHI used a somewhat different approach to estimate the additional demand and spending for prescription drugs by Medicare beneficiaries currently without drug coverage. Lewin-VHI used information on prescription drug utilization by Medicare beneficiaries who had private prescription drug coverage before the reform as a reference to adjust for the prescription drug utilization of those previously without prescription drug coverage.[14] The different approach adopted by Lewin-VHI may account for the difference between Lewin-VHI's estimate and those of CBO and the Clinton Administration (nearly$14 billion and $10 billion). However, Lewin-VHI did not report the inducement effect implied by their analysis so the source of the difference is difficult to isolate.

Participation Rate Among Potential Beneficiaries

The Clinton Administration assumed that 500,000 high-income Medicare beneficiaries would disenroll from Medicare Part-B because of the proposed increase in premiums, while all of the re-

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12 Analysts have used different years as their base year for projection. Both the Clinton Administration and CBO used 1994 as their base year. Lewin-VHI adjusted its 1987 expenditures to 1992 figures.

13 The 1989 CBO study based its conclusions on the Rand Health Insurance Experiment. See CBO (28) for details.

14 Lewin-VHI based its estimates on the Health Benefits Simulation Model (HBSM) it had developed. Depending on whether any actual service utilization occurred, the adjustment of utilization can either be based on a *her-decking* technique or on a *duplicating* approach. For a detailed description of the Health Benefits Simulation Model, see Lewin-VHI (13).

maining beneficiaries would be covered by the new prescription drug benefit. Neither CBO nor Lewin-VHI considered the possible disenrollment effect, but rather assumed that all Medicare Part-B beneficiaries would remain in Medicare Part-B and accept and participate in the drug benefit program.

Differences in Analysts' Estimates: Long-Term Care Benefit

As in the case of estimates for the Medicare drug benefit, analysts' estimates of the proposed community-based long-term care program represent less than one-fifth of the estimated additional federal expenditures under the Health Security Act. As shown in table 2-3, in absolute terms, the largest difference among analysts' estimates is $8 billion for the period from 1995 through 2000.

There is, however, one major difference between the Medicare prescription drug benefit and the new long-term care program for severely disabled individuals. The former is essentially part of an entitlement program, while the latter is designed as a federal grant program to states. The total amount of federal appropriation and the phase-in schedule for the long-term care program are specified in the Health Security Act. For the fiscal years from 1995 through 2000, the states would receive $4.5 billion, $7.8 billion, $11.0 billion, $14.7 billion, and $18.7 billion, for a six-year capped total of $56.7 billion. 's The Clinton Administration used these figures as its estimates of the federal outlays for the long-term care program.

Since total federal spending for the program would be capped, one might assume that the estimates of federal expenditures would be the same. CBO, however, stated that federal spending for the long-term care program would be higher than the amount prescribed in the legislation. According to CBO, states would spend about one-fourth of their savings from the elimination of their long-term care expenditures under Medicaid on other optional Medicaid services not mandated by the federal government. As a result, the government would have to spend more matching funds on the Medicaid program. Whether states would actually respond as CBO assumed is not certain.

Lewin-VHI stated that its figures for the long-term care program expenditures were the amounts budgeted in the legislation. Nevertheless, Lewin-VHI'S numbers differ from those in the legislation by $8 billion. One explanation for the discrepancy is that Lewin-VHI's figures include other outlays, such as tax incentives for long-term care and other provisions that liberalize the Medicaid personal needs allowance. Another explanation is that the figures represent Lewin-VHI's own estimates of federal expenditures for the program instead of the budgeted amounts stated in the legislation as suggested in the Lewin-VHI document.

Potential Variations in Estimates of the Long-Term Care Program

Although the long-term care program is not an entitlement program for individuals under the Health Security Act, the Clinton Administration has based its capped budget amount on the assumption that

[15] This capped budget amount does not include the effect of state transfers of Medicaid enrollees to the new program, which was estimated separately to have a $13 billion to $14 billion offset effect. The capped budget amount also does not include the additional federal outlays from tax incentives for long-term care and other provisions that liberalize the Medicaid personal needs allowance, which the Clinton Administration projected at approximately $5.5 billion from 1995 through 2000(5 I).

the program would provide benefits to all participating eligible individuals.[16] The expenditures were derived from the estimated participation rates and average annual costs across population groups with different underlying disabil- ities. However, all the input parameters in the Clinton Administration's estimates, especially the size of the severely disabled population, are likely to be subject to uncertainty.[17] If analysts used different assumptions for any of the input parameters, they would arrive at different estimates of the expenditures for the long-term care program.

The three estimates reviewed here suggest that analysts do not perceive the long-term care benefit as an entitlement program. Because the long-term care benefit is a capped federal-to-state grant program, assumptions about eligibility, utilization, and costs per unit of service are not relevant toestimate federal spending. However, if the size of the eligible population is understated while federal funding is capped, services for part of the eligible population would have to be denied, or the states would have to decide whether to provide the benefits out of their own funds. Hence, the initial estimates of the size of the eligible population could become extremely important for federal and state policy makers.

I Savings from Existing Public Programs (Medicare and Medicaid)

To provide funding for the new benefit programs, the Health Security Act would increase Medicare Part-B premiums, establish a new Medicare Hospital Insurance (HI) tax for state and local government employees, reduce Medicare payments to hospitals and physicians through numerous changes in the current reimbursement formulas, and increase Medicare patient cost-sharing for certain services.[18]

Medicaid would be substantially restructured under the Health Security Act. Current Medicaid noncash recipients would be excluded from Medicaid coverage and incorporated into the regional alliance health plans (with income-based premium subsidies from the federal government). The individual mandate provision would require individuals who are no longer eligible for Medicaid coverage and not covered by employment-based insurance to purchase private health insurance. Most other beneficiaries would maintain their Medicaid coverage under a capitated payment system in the regional alliance health plans. The growth of Medicaid costs would be limited to the growth of insurance costs in the private sector

16 The Clinton Administration estimated that there are 3.1 million severely disabled individuals who would be eligible for the long-term care benefit, with the elderly accounting for about 73 percent of the eligible population, the mentally disabled 9 percent, and others about 18 percent (50).

17 Many factors, including the validity of the survey data used to identify and project the population with Severe disability, and the Stringency and enforcement of eligibility criteria, would affect the baseline estimates of how many individuals among different population groups would be eligible for the benefit. OTA is currently conducting a separate study on the eligibility criteria of the federally-mandated long-term care program.

18 Major changes in Medicare payments to providers prescribed in the Health Security Act include: reducing capital payments to hospitals; lowering indirect medical education adjustment payments to hospitals; reducing in the hospital market basket index update factor; and limiting the growth of physician payments to the growth rate of gross domestic product. In addition, payments for disproportionate share hospitals, which are additional payments to hospitals that serve a disproportionate share of low-income beneficiaries, under Medicare (and Medicaid) will be eliminated due to universal coverage. The Health Security Act would also impose a 20-percent and 10-percent patient cost-sharing for laboratory and home health services, respectively.

TABLE 2-4: Estimates of Federal Savings from Medicare and Medicaid, 1995-2000 ($ billions)

Medicare and Medicaid savings	Ciinton Administration	Congressional Budget Office	Lewin-VHI	CBO vs. Clinton Administration $ (%0)	Lewin-VHI vs. Clinton Administration S (%)	Lewin-VHI vs. CBO $ (%)
Reduced payments to providers (Medicare)	$88 4a	$81	$79.9	-$74 (-84%)	-$85 (-9.6%)	-$1.1 (-1 4%)
Additional Part-B premium/Hl tax (Medicare)	17 6[a]	15	14,9	-26 (-15)	-2.7 (-15)	-01 (-o 1)
Imposing patient cost-sharing (Medicare)	162	15	270	-12 (-74)	108 (66 7)	12 (80)
Others (Medicare)	22a	3	2.1	08 (364)	-01 (-4 5)	-09 (-30)
Total Medicare savings	1183	1 12b	1239	-63 (-53)	56 (4 7)	$11.9 (106)
Total Medicaid savings	608	54	667	-68 (-11 2)	59 (9 7)	$127 (235)

[a] The Clinton Administration's February 1994 document did not provide information on these separate sources of savings For Illustrative purposes, the three iftgures shown here are drawn from the Administration's December 1993 estimates Figures from the February 1994 estimates, if available, would be lower than what are shown here

[b] Total savings shown are lower than the sum of individual savings sources due to rounding

SOURCE Off Ice of Technology Assessment, 1994, based on data from Lewln-VHl, Inc., The *Fmancial Impact of the Health Security Act* (Fairfax, VA Dec. 9, 1993), U S Congress, Congressional Budget Office, *An Analysis of the Administration's Healfh Proposal* (Washington, DC February 1994), U S Executive Off Ice of the President, Off Ice of Management and Budget, Budget of the *U.S. Government,* FY95 (Washington, DC U S Government Printing Office, February 1994)

because the beneficiaries would be insured through the health plans within the regional alliances. Disproportionate share hospital payments (DSH) would be eliminated.[19] States would be required to return to the federal government savings realized from transferring certain beneficiaries out of Medicaid to the regional alliances.

Differences in Analysts' Estimates

Medicare and Medicaid savings represent a significant portion (about one-half) of the estimated source of funds under reform. As shown in table 2-4, the Clinton Administration, CBO, and Lew in-VHI estimates of savings from both Medicare and Medicaid are reasonably close. CBO'S and the Clinton Administration's estimates of Medicare savings differ by only approximately $6 billion, or 5 percent, while their estimates for Medicaid savings differ by approximately $7 billion, or 11 percent, for the period from 1995 through 2000.

There are, however, some variations in the projected savings from specific sources. Lewin-VHI, for example, projected substantially higher Medicare savings from patient cost-sharing for laboratory or home health services than either the Clinton Administration or CBO. Lewin-VHI's higher estimates of Medicare savings from patient cost-sharing may have resulted from a much larger demand elastic it y for the laboratory and home health services than that assumed by the Clinton Administration and CBO. However, none of the three indicated what demand elasticity they used.

[19] Disproportionate share hospital (DSH) payments are payments provided by Medicare and Medicaid to hospitals that serve a disproportionate share of low-income beneficiaries. The Health Security Act proposes the elimination of payments for DSH based on the assumption that under reform insurance coverage will be universal and hospitals will not be burdened by uncompensated care for the uninsured population. Hence, there will be no need for the special payment factor currently added to the payment formula for the DSH hospitals.

The Clinton Administration projected much higher Medicare savings from reducing payment to providers than CBO and Lewin-VHI. It may be that the Administration assumed higher growth rates for the Medicare baseline expenditures than CBO and Lewin-VHI and thus estimated greater savings from the reduced payments.

ESTIMATES OF FEDERAL REVENUES[20]

| Revenues from New Taxes

The Health Security Act is expected to bring in additional tax revenues from:

- a 75-cent per pack increase in the federal excise tax on cigarettes and an additional excise tax of $12.5 per pound of tobacco content for other tobacco products;
- additional individual and corporate income taxes because of higher individual income and corporate profit resulting from lower health insurance premiums and lower out-of-pocket health care expenses;
- I -percent payroll assessment from corporate alliances; and
- a temporary assessment on employers for early retiree subsidies.

Differences in Analysts' Estimates: Tobacco Taxes

Analysts' estimates of the additional federal revenues from tobacco taxes represent an important funding source under the Clinton Administration's reform proposal (15 to 20 percent, depending on different analysts' estimates). Table 2-5 provides an overview of three different estimates of various new tax revenues under the act. As shown in this table, analysts' estimates of tobacco tax revenues are basically the same. CBO and Lewin-VHI's estimates only differ by 1 to 2 percent from those of the Clinton Administration.

The estimation of tobacco tax revenues is essentially based on three major pieces of information: baseline tobacco consumption, the new product prices resulting from additional taxes, and the reduction in tobacco consumption following higher prices. The major source of uncertainty in this case is how consumers will respond to higher prices.

Lewin-VHI suggested that, based on an estimated -0.4 price elasticity of demand for cigarettes, the additional tax would decrease demand for cigarettes by 18 percent. Although neither the Clinton Administration nor CBO indicated what they assumed about the price elasticity of demand for tobacco products, the agreement of the three estimates suggests that analysts adopted similar assumptions about the magnitude of consumer response.

Even though analysts appeared to agree on their estimates of the revenue effects of a 75-cent excise tax on cigarettes, one should view the estimates with caution. First, a 75-cent per pack or larger tax increase falls outside the range of current U.S. tax rates on tobacco products. Extrapolating consumer behavioral responses (with a constant elasticity assumption) outside the existing tax rate range may underestimate the decline in consumption because the elasticity of demand for cigarettes presumably would fall with higher prices (i.e., a demand elasticity of less than -0.4 may have to be assumed). As a result, analysts' estimates of the

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20 The estimates of federal revenues within the federal agencies are generally performed by different agencies that generated estimates for expenditures. Within the executive branch, revenue projections are traditionally done by the Treasury Department. Within the legislative branch, revenue projections are performed by the Joint Committee on Taxation (JCT). Since the discussion of health care reform has largely been focused on the expenditure-related issues, substantially less information is available regarding the revenue effects under the Health Security Act. *The* Clinton Administration's primary documentation on the federal budget effects of the act (50), for example, was devoted in its entirety to expenditure-related items. A recent document released by the Treasury's Office of Tax analysis, *Estimating the Impact of Health Reform on Federal Receipts* (49), discusses only the general methodology of revenue projection used by the Department. The document provides no actual projection figures. This OTA report draws the Clinton Administration's revenue projections from the FY 1995 budget proposal (51). CBO's estimates of the revenue effects under the Health Security Act actually come from the JCT analysis, *Summary and Estimated Revenue Effects of Tax Provisions of the Administration's Health Security Act (43). The* JCT analysis, however, provides only limited information about how analysts derived the estimates.

TABLE 2-5: Estimates of New Tax Revenues from Income, Payroll, and Tobacco Products, 1995-2000 ($ billions)

New tax revenues	Clinton Administration	Congressional Budget Office	Lewin-VHI	CBO vs. Clinton Administration $ (“/0)	Lewin-VHI vs. Clinton Administration $ (Y”)	Lewh-VHI vs. CBO $ (%)
Excise tax on tobacco products	$67,4	$68.5	$658	$11 (1 .6%)	-$16 (24%)	-$27 (-39%)
Effects of universal coverage, cost containment, and premium subsidy	284	24	-37	-44 (-1 5.5)	-32.1 (-1 13.0)	-27.7 (-1 154)
Assessment for corporate alliances	242	8	330	-16.2 (66 9)	88 (364)	25,0 (312.5)
Assessment for retiree subsidy	114	13	121	16 (14)	O 7 (6 1)	-09 (-69)

SOURCE Office of Technology Assessment, 1994, based on data from Lewin-VHI, Inc , The *Financial Irnpact of the* Health *Security Act* (Fairfax, VA Dec. 9, 1993), U S Congress, Congressional Budget Office, An *Analysis of the Administration's Health Proposal* (Washington, DC February 1994), US. Executive Office of the President, Office of Management and Budget, Budget of the U.S. Government, FY95 (Washington, DC. U S Government Printing Office, February 1994)

revenues that would be produced by additional tobacco excise taxes may be overstated.

In addition to the effect of higher prices, smoking may also be affected by antismoking regulation. A recent study by Wasserman and colleagues, suggests that smoking behavior responds to regulation (52). As antismoking regulations (e.g., restrictions on smoking in public places) increase, cigarette consumption may decrease further. Furthermore, since smoking is an acquired habit both price and regulation may work not only to reduce the tobacco consumption of current smokers but also to decrease the smoking population in the long run by reducing the number of new smokers .21

Differences in Analysts' Estimates: Taxes on Individual or Corporate Income

Taxable income, from individual wages or corporate profits, is expected to rise if health reform reduces the growth of employer spending on health benefits and insurance premiums (which currently are excluded from employee's taxable income). However, the variation in the estimates of additional tax revenues expected under the Health Security Act illustrate the uncertainties underlying the estimation process. Analysts' projections of tax revenues from income changes differ by more than $32 billion (or, in relative terms, by more than 110 percent) for the period from 1995 through 2000. As shown in table 2-5, both the Clinton Administration and CBO estimate that *a* substantial amount of additional tax revenues would be generated ($28.4 billion and $24 billion, respectively) because of higher taxable incomes resulting from cost containment, lower premium spending, and universal coverage.[22] Lewin-VHI, by contrast, projects no additional tax revenues and that the federal government would in fact experience a $3.7-billion loss in tax revenues.

[21] If the smoking population decrease overtime, tobacco taxes may not be a sustainable source of revenues over an extended period of time. The Congressional Research Service (CRS) recently undertook an economic analysis of cigarette taxes and health care reform. CRS's study suggests that since young smokers are more price sensitive than older smokers, long term cigarette tax revenues will fall to two-thirds of the level of current estimates in all analyses (41).

[22] The actual figure listed in CBO's report *is* $25 billion, which results from rounding the JCT's estimate for each year (38). The $24 billion tax revenue reported here is derived from JCT's more detailed analysis (43).

Estimates of the potential additional tax revenues from higher personal or corporate income can be ascertained by comparing current employer health spending and estimated employer health spending under the Health Security Act.[23] Analysts may differ in their estimates of spending under both the current system and under reform.

The Clinton Administration estimated that, without comprehensive reform, employer spending on health insurance premiums would increase from $180 billion in 1994 to $303 billion in 2000. Under the Health Security Act, employer premium payments would be only $276 billion in 2000, or $27 billion less than under current law. Similarly, CBO calculated that all businesses together would pay $20 billion less for employee health benefits in 2000 under the act (38). It is assumed that all the savings in premium payments would then be subject to either corporate or personal income taxes.

Lewin-VHI estimates that under the current system private employer health spending would increase from $185.0 billion in 1994 to $254.2 billion in 1998 and to $293.2 billion in 2000. Under the Health Security Act, employer spending would be $283 billion in 1998 and $309 billion in 2000. Thus, contrary to what the Clinton Administration and CBO estimated, Lewin-VHI estimated that employers would actually spend $29 billion and $16 billion more on health benefits in 1998 and 2000, respectively. Compared with the other two analyses, Lewin-VHI has assumed lower employer premium spending under the current system and a higher employer spending under the reform.[24] Since it is assumed that employers will offset the higher spending with wage reductions, higher premium costs result in a loss of both income and payroll taxes.[25]

Differences in Analysts' Estimates: Corporate Assessment

Under the Health Security Act, large employers, those with 5,000 or more employees, may elect not to participate in the regional alliances and form their own corporate alliances. These corporate alliances would be subject to a 1-percent payroll assessment because they presumably would benefit from reduced cost-shifting resulting from the universal coverage provision of the Health Security Act. According to the Clinton Administration's estimates, the assessment on corporate alliances represents more than 6 percent of the total expected revenues to be used to fund the reform.

As shown in table 2-5, CBO'S estimate of the revenues from the corporate assessment is nearly 67 percent less than the Clinton Administration's, while Lewin-VHI's estimate is about 36 percent more than the Clinton Administration's. In absolute monetary terms, estimates of additional revenues from the 1-percent payroll tax range from CBO'S $8 billion and the Administration's $24.2 billion to Lewin-VHI's $33.0 billion.

Estimates of revenues from the corporate payroll assessment hinge on analysts' assumptions about the participation rate of corporate alliances. This in turn is determined by each firm's own evaluation of the relative costs of the two options (i.e., regional versus corporate alliances), as well

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23 Depending on the assumption of how the potential savings would be distributed between employers and employees, the savings can be subject to either corporate or individual income taxes. In the latter case, the estimation of tax revenues would require additional information on the distribution of taxable income across income tax brackets.

24 Lewin-VHI's baseline estimates of employer spending apparently were based on a slower average annual growth rate than that used by the Clinton Administration (approximately, 8.0 percent versus 9.1 percent, according to OTA's calculation). Lewin-VHI also assumed a 17 percent higher initial premium level and a higher premium growth rate than the Clinton Administration.

25 It should be noted that although Lewin-VHI *estimated* that the higher premium costs and employer mandate would result in a $17.9 billion loss of federal tax revenues, they estimated that universal coverage and premium subsidies would have a positive effect on income and are expected to generate $14.2 billion in tax revenues. Taken together, however, Lewin-VHI estimated that the federal government would still face a $3.7 billion loss in tax revenues from changes in premiums under the regional alliances, cost containment, premium subsidies, and universal coverage.

as such factors as corporate philosophy about employee benefits and the fact that a decision to participate in a regional alliance is irreversible. The costs under the regional alliances reflect analysts' estimates of average health plan premiums given reform, while the costs under the corporate alliances reflect analysts' estimates of baseline employer health spending and additional administrative costs. Analysts who assumed relatively high regional alliance premiums and relatively lower baseline employer health spending estimate a relatively larger number of corporate alliances.

The Clinton Administration did not indicate exactly what participation rate it assumed but said that it assumed that "most" of the eligible employers would elect to form their own corporate alliances and thus be subject to the payroll tax.

CBO est i mated that onl y a relative] y small portion of the eligible firms would find corporate alliances financially attractive. According to CBO, a typical firm would have to be able to save at least $800 per employee for health benefits, compared with the standard benefit package in 1996, to consider forming a corporate alliance financially more attractive than joining a regional alliance. Based on data from the March 1993 CPS, CBO estimated that the firms meeting the corporate alliance criterion employ only 23 percent of the employees in eligible large firms, and the percentage would decline further in later years.

Lewin-VHI assumed that all unionized workplaces eligible to choose corporate alliances would do so. while the participation rate among the non-unionized firms would depend on the relative costs of the two options.[26] Overall, Lewin-VHI assumed that 60 percent of the eligible employers would still find corporate alliances a financ ially more attractive option than regional alliances. Given the similarity of their premium estimates, one plausible explanation for why Lewin - VHI and CBO estimated different participation rates in corporate alliances is that Lewin-VHI assumed lower current employer benefit expenses than CBO and thus higher expected savings under the corporate alliances.

Differences in Analysts' Estimates: Retiree Assessment

Under the Health Security Act. early retirees aged 55 to 64 who are not working full time and are eli - gible for Medicare at 65 would receive special subsidies covering their employer share of the premiums. From 1998 through 2000, employers who benefit from the subsidy because they no longer have to pay for these benefits directly are required to "return" to the federal government some of the savings realized. Specifically, the Health Security Act would impose a temporary assessment on employers with base period retiree health costs. The assessment would equal 50. percent of the greater of: 1) the adjusted base period retiree health costs for a given calendar year, 2) the amount by which the employer applicable retiree health costs were reduced due to the enactment of the Health Security Act.

Compared with other sources of funding for reform. the potential revenues from the temporary assessment on early retiree subsidies represent a relatively small portion of federal receipts. As shown in table 2-5, analysts' estimates differ by as much as 14 percent. but the absolute difference is only $1.6 billion for the six-year period from 1995 through 2000.

Since the assessment for retiree subsidies is based on the employers' liabilities for- retiree health benefits before reform. analysts' estimates of potential revenues from the assessment are based on estimates of employers' baseline retiree

[26] Lewin-VHI's document does not indicate why it assumed that all unionized workplaces would opt for corporate alliances. One possible explanation is that unionized workplaces traditionally have preferred to have more direct control over their own benefit programs. Under the regional alliance option, both the employers and employees would have less control over their benefit programs.

health liabilities. Variation in analysts' estimates thus reflect different estimates of the baseline retiree health liabilities currently borne by the employers. None of the analysts provided any detailed information on the subject.

1 Revenues from Recovered Tax Expenditures

In addition to new tax revenues from a higher excise tax on tobacco products, and potential y, from higher incomes and wages, the Health Security Act would attempt to raise additional funds from recovering certain health-related tax expenditures under current law.[27] For example, the act would no longer allow the use of tax-exempt cafeteria plans for employer-sponsored health benefits.[28] In addition, after 2004 the tax exclusion for health insurance premiums would be limited to the costs of the standard benefit package. Because the cafeteria plan provision represents the major source of revenues among all tax expenditure related provisions in the Health Security Act, the discussion here will focus only on the cafeteria plan provision.

Differences in Analysts' Estimates

According to the Clinton Administration, repealing cafeteria plans for health benefits would yield nearly 8 percent of the funds needed to finance reform. As shown in table 2-6, however, analysts' estimates of the amount of tax expenditures that could be recovered differ significantly, both in relative and absolute monetary terms. CBO'S estimate, for example, is $21.4 billion less than that of the Clinton Administration's, a difference of more than 68 percent.

Estimates of recoverable tax expenditures from repealing the cafeteria plan for health benefits depend on:

= the baseline tax expenditures under the plan (and the distribution of such tax expenditures across individuals at different tax brackets), and

TABLE 2-6: Estimates of Recovered Tax Expenditures, 1995-2000 ($ billions)

Clinton Administration	Congressional Budget Office	Lewin-VHI	CBO vs. Clinton Administration $ (%)	Lewin-VHI vs. Clinton Administration $ (%)	Lewin-VHI vs. CBO $ (%)
Recovered tax expenditures (from repealing cafeteria plan for health benefits)					
$31.4	$10	$1 7.0	-$214 (-682 %)	*-$14,4 (-45 9%)*	$7.0 (70 o%)

SOURCE Off Ice of Technology Assessment, 1994, based on data from Lewin-VHI, Inc , The *Fmancla/ Impacf of the Health Security Act* (Fairfax, VA Dec. 9, 1993), U S Congress, Congressional Budget Office, Analysis *of the Administration's Health Proposal* (Washington, DC February 1994), U S Executive Office of the President, Off Ice of Management and Budget, Budget of *the U S Government,* FY95 (Washington, DC U S Government Printing Office, February 1994)

[27] According to CBO, which based its estimates on data from the JCT and the OMB, total federal health-related tax expenditures have grown from $19.7 billion in 1980 to $44.2 billion in 1990, and are expected to grow to $127.8 billion in 2000 under current law (29). However, these expenditures include not only the exemption of employer-paid health insurance premiums, but also various deductions such as medical expenses and charitable contributions as well as untaxed Medicare health insurance benefits.

[28] Under the Health Security Act, the present-law exclusion for employer contributions to health benefits would still be preserved. The rationale for disallowing the use of tax-exempt cafeteria plans (and the flexible spending accounts) for health benefits is to limit employees" ability to shelter their shares of the premiums and out-of-pocket expenses in tax-exempt funds when a tax cap for health benefits is in place.

- assumptions about behavioral responses to changing plans.[29]

Although some published data exist on the magnitude of tax expenditures associated with employer-paid insurance premiums (29,39), no detailed information is available on the tax expenditures associated specifically with health benefits under the cafeteria plans.[30] Neither the Clinton Administration nor CBO has reported its estimate of baseline tax expenditures associated with cafeteria plans nor its assumptions about whether individuals will increase other forms of tax-exempt compensation.

If the Clinton Administration assumed that all current health benefits under cafeteria plans would be replaced with taxable wages, the $31.4 billion of recover-able tax expenditures it projected represents the baseline estimate of this particular tax expenditures. CBO, by contrast, stated only that it assumed that a fraction of the cafeteria plan health benefits would actually end up as wages, Compared with the Clinton Administration's implicit assumption, CBO has assumed that more individuals would opt for other tax-exempt benefits rather than additional wages.

Lewin-VHI estimated baseline health-related tax expenditures under the cafeteria plans to be $34.0 billion from 1995 through 2000, all of which could be recovered if employers did not alter their employee compensation packages. However, Lewin-VHI assumed that employers and employees are likely to shift the compensation into other nontaxable forms of benefits, such as pensions, that could still be included in cafeteria plans under reform. Specifically, Lewin-VHI assumed that only half of the potential revenues it projected ($17.0 billion, from 1995 through 2000) would be realized and the other half would be shifted to other nontaxable compensation.

Lost Revenues from New Tax Expenditures

Under the tax code, self-employed individuals are allowed to deduct only 25 percent of their health insurance costs. Under the Health Security Act, they would be allowed to deduct their health insurance premiums in full.

Estimates of baseline income tax liabilities among self-employed individuals are unlikely to differ significant] y. The number of people who are self-employed, their insurance expenses, and corresponding income tax brackets can be obtained from the Statistics of Income, an income tax database maintained by the Internal Revenue Service, and from such other federal household surveys as the CPS. Additionally, individual behavioral responses to this particular tax code change are unlike] y to be a major factor in analysts' estimates of the potential revenue lost.[31]

As shown in table 2-7, the estimates by the Clinton Administration, CBO, and Lewin-VHI differ at most by only about $1 billion from 1995 through 2000. Because of its relatively small effect on the overall budgetary impacts under health reform, differences in analysts' estimates of this new tax expenditure does not represent an area of particular concern.

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[29] The behavioral responses in this respect reflect an assumption about the possibility that employers and employees might replace the benefits currently paid for through the cafeteria plans with other tax-exempt benefits rather than with wage compensations. If one assumed that the employee's total compensation remained unchanged, and the employee preferred other tai-exempt benefits rather than wages, there would be substantially less additional wage compensation subject to taxation, and accordingly less tax expenditures would be recovered.

[30] The Department of Labor collects information on the number of employers offering cafeteria plans, the number of employees participating, and the types of options offered through the plans. However, it does not collect information on expenditures under cafeteria plans or how many cafeteria plan participants choose health insurance as part of their cafeteria plan benefits.

[31] It is possible that certain part-time workers may face incentives to become self-employed because of the favorable tax treatment of the insurance expenses of self-employed individuals. However, because only a relatively small number of individuals are involved, this is not likely to be significant in the estimates of new tax expenditures.

TABLE 2-7: Estimates of New Tax Expenditures, 1995-2000 ($ billions)

Clinton Administration	Congressional Budget Office	Lewin-VHI	CBO vs. Clinton Administration $ (%)	Lewin-VHI vs. Clinton Administration $ (%)	Lewin-VHI vs. CBO $ (%)
$8.9	$8	$7 9	-$09 (-1 0.1%)	-$10 (-11 ,2%)	-$0.1 (-1 .3%)

SOURCE Off Ice of Technology Assessment, 1994, based on data from Lewin-VHI, Inc , The *Financial* Impact *of the Health Security Act* (Fairfax, VA Dec 9, 1993), U S Congress, Congressional Budget Off Ice, *An Analysis of the Administration's Health Proposal* (Washington, DC February 1994), U S Executive Off Ice of the President, Office of Management and Budget, *Budget of the U S Government, FY95* (Washington, DC U S Government Printing Office, February 1994)

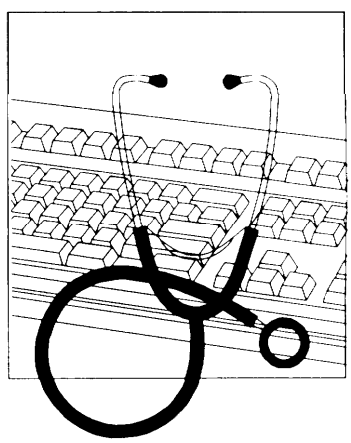
Overview of Selected Issues 3

Provisions in the reform proposals that affect the federal budget fall into two general categories:

- those that affect federal outlays, such as provisions that provide insurance premium subsidies or establish new benefits; and
- those that affect federal revenues, such as provisions that impose new taxes on individuals and/or businesses.

The following discussion examines these two general budget categories as contained in the major pieces of health reform legislation introduced in the 103d Congress. The chapter highlights key determinants necessary to estimate budget items falling under these two categories. The discussion is not formulated around any specific proposal. Rather, it focuses on general types of reform provisions and their implications for the federal budget.

Table 3-1 summarizes provisions in the major health reform legislation introduced in the 103d Congress at the time of writing, the direction of effect of these provisions on the federal budget; and the major factors necessary to estimate the magnitude of their effect. [1]



PROVISIONS THAT AFFECT FEDERAL OUTLAYS

Federal outlays for health care under reform can change either as a result of savings from existing public programs or increases in spending for new benefits, new programs, or subsidies for the purchase of private health insurance. To reduce federal spending, nearly all major health reform legislation introduced in the 103d

[1] Only bills introduced before February 1, 1994 were considered. However. the issues raised in the chapter are relevant to many approaches to rcform and to bills Introducd after February 1, 1994.

TABLE 3-1: Overview of Federal Budget Effects of Health Care Reform

Federal budget-related provisions	Potential budgetary effects	Major determinants of estimates	Reform proposals
Federal outlays			
Expenditures for subsidies or vouchers	Increase in federal spending	Baseline estimates of income distribution by family size	Affordable Health Care Now Act of 1993 (H R 3080/S 1533)
		Baseline estimates of wage distribution by firm size	Consumer Choice Health Security Act of 1993 (H R 3698/S 1743)
		Baseline expenditures for standard benefit package	Health Equity and Access Reform Today Act of 1993 (H R 3704/S 1770)
		Estimated premium level and growth under reform	Health Security Act (H R 3600/S 1757)
		Assumption about employers' and employees' behavioral responses	Managed Competition Act of 1993 (H R 3222/S 1579)
		Assumption about individuals' demand elasticity for Insurance and medical care	
Expenditures for new benefits	Increase in federal spending	Baseline estimates of the size of eligible population and partcipation rates	American Health Security Act of 1993 (H R 1200/S 491)
		Current expenditures for covered services	Health Equity and Access Reform Today Act of 1993 (H R 3704/S 1770)
		Assumption about inducement effects	Health Security Act (H R 3600/S 1757)
		Assumption about future growth rates of expenditures	
Savings from Medicare and Medicaid, and other public health Insurance programs	Decrease in federal spending	Baseline estimates of program expenditures and growth	Affordable Health Care Now Act of 1993 (H R 3080/S 1533)
		Assumption about providers behavioral responses	Consumer Choice Health Security Act of 1993 (H R 3698/S 1743)
		Assumption about Individuals' demand elasticity for Insurance and medical care	Health Equity and Access Reform Today Act of 1993 (H R 3704/S 1770)
			Health Security Act (H R 3600/S 1757)
			Managed Competition Act of 1993 (H R 3222/S 1579)

(continued)

TABLE 3-1: Overview of Federal Budget Effects of Health Care Reform (Cont'd.)

Federal budget-related provisions	Potential budgetary effects	Major determinants for estimates	Reform proposals
Federal revenues			
Taxes on income and payroll[c]	Increase or no change in federal revenue	Baseline taxable income and wage distribution by tax brackets	American Health Security Act of 1993 (H R 1200/'S 491)
		Baseline Insurance expenditures under current regime	Health Security Act (H R 3600/S 1757)
		Estimated premium levels (or Insurance expenditures) and growth under reform	
		Assumption about behavioral responses to higher income (e g use of other nontaxable compensation elasticity of labor supply)	
Taxes on tobacco products	Increase in federal revenue	Baseline expenditures (and consumption) of tobacco products	American Health Security Act of 1993 (H R 1200/S 491)
		Assumption about elasticity of demand	Health Security Act (H R 3600/S 1757)
Recovered tax expenditures[d]	Increase or no change in federal revenue	Baseline distribution of tax expenditures by tax brackets	Health Security Act (H R 3600/S 1757)a
		Baseline distribution of health benefits by tax brackets	Managed Competition Act of 1993 (H R 3222/S 1579)
		Assumption about behavioral responses to higher taxes (e g use of other nontaxable compensation elasticity of labor supply)	
New tax expendltures[d]	Decrease in federal revenue	Baseline distribution of tax expenditures by tax brackets and self-employment	Affordable Health Care Now Act of 1993 (H R 3080/S 1533)
		Assumption about estimated premiums under reform	Health Equity and Access Reform Today Act of 1993 (H R 3704/S 1770)
		Assumption about costs and particlpation rates for tax-exempt insurance	Health Security Act (H R 3600/S 1757)a
			Managed Competition Act of 1993 (H R 3222/S 1579)

[3] Not al I factors I listed here are necessary for the esimation of each provision For example the baseline estimates of wage distribution by firm IS only needed for the estimates mates of a firm subsidy, not an individual subsidy

b proposals are from the 103d Congress

[c] New tax revenues could be generated either with an Increase of tax rates or as result of higher income and wage Some reform proposals would also impose a higher tax rate on payroll or impose a new assessment on the payroll of certain employers

d some reform proposals Would eliminate or restrict the tax exclusion of certain health care related expenses that are tax-exempt under current law Some proposals would Introduce new tax expenditures either with a tax credit system for health care expenses or by excluding certain health care related expenses from taxable income

SOURCE Off Ice of Technology Assessment , 1994

Congress propose cost-saving strategies for existing public insurance programs, especially Medicare and Medicaid.

Many proposals also call for additional federal spending to subsidize the purchase of health insurance. In addition, some proposals would create new benefits, such as prescription drug coverage and long-term care, to address health care needs of certain population groups. At the most comprehensive level, some proposals would create a national health insurance program. These provisions would inevitably increase federal spending on health care.

This section will focus on three general budget items common to most of the reform proposals:

- expenditures for insurance premium subsidies or vouchers,
- expenditures for new benefits and programs, and
- savings from existing public insurance programs.

For each item, factors that might affect analysts' estimates or contribute to the variations in those estimates will be identified and described.

Subsidies or Vouchers for Health Insurance and/or Health Care

Various reform proposals have adopted markedly different approaches to extending insurance coverage to all or part of the uninsured population. The American Health Security Act (H. R.1200/S.491) would establish a national health insurance program and directly involve the federal and state governments in providing health insurance to all legal residents. The other major reform proposals would maintain a system largely based on private health insurance. Some of these private insurance-based proposals have no requirements regarding the purchase or provision of insurance, and would rely exclusive y on various regulatory and/or market mechanisms to increase the availability and purchase of health insurance. Others would require individuals to buy insurance and/or employers to provide insurance (individual and/or employer mandates). All the major reform proposals, that retain the private insurance market, would provide some level of government assistance in the form of subsidies, vouchers, or tax credits for those with incomes or wages below a given level. [1] Table 3-2 provides an overview of the provisions in various reform proposals aimed at improving access to insurance and/or health care services.

In general, additional federal expenditures that result from helping individuals to buy insurance are a function of the number of individuals and/or employers who would receive the assistance (e.g., subsidies and vouchers) and the amount of assistance across individuals and/or firms.[2] Determinants of these estimates include: eligibility for subsidies or vouchers, behavioral responses to subsidies or vouchers, and the premiums under reform.

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[1] For example, both the Health Security Act and the Managed Competition Act (H. R. 3222/S. 1579) have prescribed premium subsidies for the purchase of private health insurance. The Health Equity and Access Reform Today Act (H. R.3704/S. 1770) would use federal vouchers to subsidize the cost of qualified health plan premiums for h)w-income individuals. The Consumer Choice Health Security Act (H. R.3698/S. 1743) would provide no direct incentive or assistance in the purchase of health insurance, but instead would rely on income tax credits to offset indi-v iduals' health care spending (discussed in the new tax expenditures section below).

[2] In addition, certain administrative costs will be incurred in administering the premium subsidies. The magnitude of administrative costs related to premium subsidy program will depend on the mechanisms of payments for the premium subsidies used by different reform proposals. Under the Health Security Act, for example, the disbursement of premium subsidies is made through a single lump-sum payment to the regional alliances for the difference between alliance payments (premiums and administrative costs) and alliance receivables (employer and individual contributions, federal and state payments for Medicare and Medicaid beneficiaries enrolled in the alliance). Under the Health Equity and Access Reform Today Act (H. R.3704/S. 1770), the premium subsidy is administered through a voucher system distributed to individuals, which presumably would incur much higher administrative costs.

TABLE 3-2: Provisions in Selected Reform Proposals for Federal Assistance for Insurance and/or Health Care[a]

Reform proposals	Federal policies to subsidize the purchase of insurance and/or health care
Affordable Health Care Now Act of 1993 (H R 3080/S 1533)	Subsidy for premium costs above 150 percent of the average premium for individuals with pre-existing conditions.
Consumer Choice Health Security Act of 1993 (H R 3698/S 1743)	Federal grant to the states for health care expenditures for famlies with Incomes below 150 percent of poverty level,
Health Equity and Access Reform Today Act of 1993 (H R 3704/S 1770)	Federal vouchers for Insurance premiums with a phase-in schedule from 1997 to 2004 for families with Incomes between 90 to 240 percent of the poverty level.
Health Security Act (H R 3600/S 1757)	Subsidy for the "family share" of the premium for working famlies with Incomes below 150 percent of the poverty level
	Subsidy for the 80 percent share of premium for non-working families with Incomes below 250 percent of the poverty level
	Subsidy for employer premium spending 1) employers' premium spending capped at 79 percent of total payroll, 2) additional subsidies for smaller employers with 75 or fewer workers and average annual wage under $24,000
	Subsidy for "employer share" of premium for retired workers aged 55 to 65 not covered by Medicare
Managed Competition Act of 1993 (H R 3222/S 1579)	Subsidy for full premium costs for families with incomes below 100 percent of the poverty level
	Subsidy for part of the premium costs on a sliding scale for families with Incomes between 100 and 200 percent of the poverty level

[a] This table includes only reform proposals with specific provisions for assistance or federal subsidies for health care spending Proposals such as the [a]Amercan Health Security Act (H R 1200 S 491), which provides health coverage to all legal residents regardless of economic status, are not discussed here Additionally the tax credit provisions prescribed **in** the Affordable Health Care Now Act and the Consumer Choice Health Security Act are discussed in the new tax expenditures section below
[b] proposals are from 103d Congress

SOURCE Off Ice of Technology Assessment 1994

Eligibility

The information needed to calculate the number of individuals or organizations e] eligible to receive subsidies will naturally depend on how eligibility is determined. In general, the more complex the eligibility criteria, the greater the informational requirements. In the health reform proposals currently before the 103d Congress, eligibility criteria include: income; income and employment; and employer size, payroll, and health spending.

In some cases information needed to determine the size of the eligible population may not be readily available, or analysts may disagree on the appropriateness of certain data sources. For example, information on the distribution of employers by firm size and average payroll is one area where analysts use different data sources and methods and arrive at different estimates for the number of workers in subsidy-eligible firms (5).

Behavioral Responses to Subsidies or Vouchers

In some instances, the eligibility criteria for premium subsidies or vouchers may encourage changes in employment patterns or firm organization. For example, if smaller firms with lower average payrolls receive higher premium subsidies, employers might attempt to create small subsidiary firms with lower average wages to qualify for the higher subsidy. In this case, assumptions about individual and/or employer responses are needed to estimate federal spending on premium subsi-

dies. Analysts may differ in how they incorporate these behavioral responses in their estimates of the costs to the federal government.

Health Insurance Premiums Under Reform

The estimates of baseline expenditures for the services covered by insurance provide the basis for premium estimates under reform. The higher the estimated baseline expenditures, the higher the projected premium levels. When universal coverage (or expanded coverage) is provided, premium estimates also have to reflect expenditures associated with additional demand for health services among the previously uninsured population and individuals with less coverage than provided under the "standard benefit package."[3] In addition, the premium estimates under universal coverage or expanded coverage would have to account for changes in the amount of cost-shifting. If analysts differ in their estimates of the baseline expenditures for covered services, or make different assumptions about the magnitude of inducement effects and cost-shifting, their premium estimates and, accordingly, their subsidy estimates, will differ.

Additionally, analysts might also differ in their assumptions regarding the growth rate of premiums under health reform. Analysts who assumed a higher premium growth rate than that of others would arrive at a higher estimates for premium subsidies or vouchers, all other things being equal.

Expenditures Associated with New Public Programs and Benefits

Table 3-3 provides an overview of the provisions in various health care reform proposals that prescribe new benefits or services (e.g., preventive care, prescription drug coverage) for existing public programs or create new "entitlement-like" programs (e.g., long-term care) for certain populations with special health care needs.

How federal expenditures would be affected by certain new benefits depends on the characteristics of the benefits, as well as the federal government's involvement in providing those benefits.[4] In general, estimates of additional federal outlays attributable to new benefit provisions are affected by how analysts estimate and incorporate four parameters: 1) the number of beneficiaries, 2) baseline utilization and expenditures for the new services or benefits, 3) the inducement effects on the additional demand for the new services or benefits, and 4) the growth rate of expenditures for the new services or benefits in future years. [5]

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[3] The provision of universal health insurance coverage would essentially lower the costs of health care faced by individual consumers who are uninsured or underinsured (i.e., have coverage less than the "standard benefit package") under the current system. Ev idence from the Rand Health Insurance Experiment suggests that the demand for services, and accordingly the associated expenditures, increases as the costs of services borne by individual consumers fall (17).

[4] In cases where federal payments for the new benefits are capped by a designated amount in the legislation, the issue for analysts and Policy - makers becomes less about expenditure estimates and more about whether the policy objectives can actually be achieved as originally intended in the reform proposal.

[5] [n cases where new agencies are needed, or new responsibilities and functions have to be added to the existing agencies to administer the new benefit programs, additional federal outlays would also be accrued for administrative functions. Experience from existing public insurance programs such as Medicare suggest, however, that additional federal spending for administration under reform would be relatively insignificant. HCFA estimated that Medicare overhead for administrative functions as a percentage of Medicare expenditures was only 2.1 percent in 1991 (1,2). However. not all administrative costs are borne by the federal government. Depending on the specific reform provisions, certain administrative requirements may also be imposed on state governments and numerous parties in the private sector (e.g., insurers, providers, and individuals). This report focuses only on the federal budget effects of health reform. For a detailed discussion of the administrative costs issues related to the projections of health care reform, see the OTA assessment *Under.\ tanding Estimates of National health Expenditures Under Health Reform (45).*

TABLE 3-3: Provisions in Selected Reform Proposals That Establish New Public Programs or Benefits

Reform proposals	New benefits in existing public programs or new benefit programs
Affordable Health Care Now Act of 1993 (H R 3080/S, 1533)	No new benefits in existing public programs or new benefit programs
American Health Security Act of 1993 (H R 1200/S. 491)	All public health Insurance programs (except the Indian Health Service and VA) are repealed and replaced with a national health Insurance program
Consumer Choice Health Security Act of 1993 (H R 3698/S 1743)	No new benefits in existing public programs or new benefit programs
Health Equity and Access Reform Today Act of 1993 (H R 3704/S 1770)	No new benefits in existing public programs or new benefit programs
Health Security Act (H R 3600/S 1757)	Medicare Part-B prescription drug benefits Community-based long-term care program for the severely disabled
Managed Competitopm Act of 1993 (H R 3222/S 1579)	No new benefits in existing public programs or new benefit programs

[a] Proposals are from 103d Congress

NOTE Changes in eligibility criteria for public programs are not discussed here

SOURCE Off Ice of Technology Assessment, 1994

Eligibility and Participation Rate

In some cases, the baseline estimate of the eligible population is readily available because the population is relatively well defined. Analysts need only make an assumption as to whether all of the eligible individuals would participate in the benefit program. This assumption may either be based on experiences from similar programs, or when no similar program exists, on analysts' judgments.

In some other cases, however, estimates of the eligible population are more uncertain. For example, estimates of the number of severely disabled persons who meet certain eligibility criteria depend not only on the qualityty of the survey data but also on whether the eligibility criteria themselves can be clearly defined.[6] Self-reported survey data on the health of individuals may be subject to reporting bias and misrepresent the size of population with certain health conditions. Whether the eligibility criteria are clearly defined in the legislation or the extent to which there is discretion (by the examining physicians or other individuals) to determine eligibility are also important factors that can lead to an unexpected increase in the size of the population eligible for new benefits.

Current Expenditures, Inducement Effects, and Growth Rate

In addition to the number of participating beneficiaries, analysts' estimates of the initial expenditures for new benefits are based on the current use and expenditures of the services, and assumptions about the additional demand due to lower effective prices for the services. The estimated base-year expenditures are extrapolated to future expenditures based on analysts' assumptions about the growth rates of expenditures for the public programs involved. If analysts differ in their estimates or assumptions of any of the three parameters (i.e., current expenditures, inducement effects, and future growth rates), their estimates of expenditures for the new benefits would differ as well.

[6] OTA is currently conducting a separate study assessing issues related to the eligibility criteria for federally mandated long-term care programs. The study, *Eligibility Criteria for A Federally-Mandated Long-Term Care Program*, is expected to be completed in summer 1995.

Savings from Existing Public Programs

Many reform plans have proposed ways to achieve savings from existing public programs, especially from Medicare and Medicaid. In some cases these savings are intended to help pay for new benefits. Savings could result from reducing payments to health care providers, increasing beneficiaries' premiums, increasing patient cost-sharing, or eliminating programs altogether.[7]

Analysts' estimates of savings from existing programs are determined by baseline expenditures, the magnitude of changes in provider payments and patient cost-sharing, and behavioral responses to the proposed changes in provider payments or patient cost-sharing.

Growth Rates of Public Programs Expenditures

Information on current federal expenditures for public programs is readily available. In contrast, analysts must estimate program expenditures in future years based on assumptions about public program growth rates under current law. If growth rates are overstated, the projected savings also will be overstated. For example, reform proposals that tie the expenditure growth rates of public programs to general inflation will not yield savings if spending on public programs grows at the rate of inflation without reform. In the past, analysts have tended to underestimate the growth rate of Medicare and Medicaid spending (30).

Behavioral Responses

Estimates of potential savings from public programs are also affected by assumptions about how patients respond to higher copayments and how providers respond to lower payments for particular services. Patients are likely to reduce their use of health services when a higher copayment is required (44). Providers who face lower payments for particular services may try to substitute nonregulated services, substitute higher-payment services, or increase the overall volume of services they provide (20). Providers may also adjust the coding of services. In general, analysts would have to make assumptions about both the likelihood and the magnitude of such behavioral responses.

PROVISIONS THAT AFFECT FEDERAL REVENUES

To help finance new benefit programs or expanded coverage, many reform proposals would seek additional sources of revenue in addition to the various cost-saving efforts. In most cases, the revenue would come from new taxes or restrictions on health-related tax expenditures. Examples of the latter include disallowing the use of cafeteria plans and flexible spending accounts for health benefits,[8] setting a cap on the tax exclusion of health insurance premiums, and repealing the tax exclusion of employer-paid health premiums.

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[7] Both the Health Security Act and the Health Equity and Access Reform Today Act (H. R.3704/S. 1770), for example, would rely on both mechanisms to reduce federal spending in the Medicare and Medicaid programs. The Managed Competition Act of 1993 (H. R.3222/S. 1579) also proposes to increase Medicare Part-B premiums, while at the same time repealing the Medicaid program. Both the Affordable Health Care Now Act (H. R.3080/S. 1533) and the Consumer Choice Health Security Act (H. R.3698/S.1743) propose to restructure and cap the growth of the Medicaid program and either increase the Medicare Part-B premium or establish copayments for home health care, skilled nursing facilities, and laboratory services.

[8] A Cafeteria plan, as prescribed in the Internal Revenue Code (section 125), is a benefit plan sponsored by employers where all participating employees can choose among two or more benefits consisting of cash and qualified benefits (e.g., health insurance, life insurance). Under the provisions of section 125, employers may contribute flexible benefit credits that employees can allocate toward the purchase of health benefits. Employers may also setup salary conversion mechanisms that allow employees to pay for health insurance premiums with pretax income. In addition, employers may also provide flexible spending accounts allowing employees to contribute pretax funds for health care expenditures.

In contrast to provisions that would raise new tax revenues or recover a portion of the existing tax expenditures, some reform proposals would reduce tax revenues from certain sources to provide incentives or assistance for purchasing health insurance. Examples include a higher tax deductibility of health insurance premiums for the self-employed, tax-exempt individual medical savings accounts, and income tax credits for health care spending.

The focus of this section is on three general revenue sources common to most of the reform proposals:

- revenues from individual and corporate income taxes, payroll taxes, and excise taxes on certain commodities;
- revenues from recovered tax expenditures;
- revenue loss resulting from new tax expenditures.

The section will discuss issues that might affect analysts' estimates or contribute to the variations in those estimates for each budget item. Table 3-1 identifies the relevant reform proposals and the major determinants of the estimates under each budget item.

New Taxes on Income, Payroll, and Certain Commodities[9]

Additional tax revenues from income and payroll can result from either a higher tax rate or a larger tax base as income and payrolls increase. Excise taxes on certain commodities (e.g., cigarettes) would also bring in additional revenues. Table 3-4 provides an overview of the provisions in various reform proposals that directly increase tax liability.

The information required for analysts' estimates depends on the types of tax revenues involved. For example, estimates of the potential revenues from a "sin tax" on tobacco products hinge mostly on data about current tobacco consumption and consumers' responses to higher prices (i.e., the price elasticity of demand for tobacco products). If information about the demand elasticity for tobacco products is readily available, the revenue estimation is relatively straightforward.

If health reform lowers health expenditures, wages and corporate profits may increase and lead to higher tax revenues. Estimates of this type of income-based tax revenue will mostly depend on analysts estimates of health benefits spending before and after the health reform as well as how much of the potential savings are passed through in the form of corporate profits or employee wages. Other things being equal, analysts who base their estimates on a relatively lower baseline spending would arrive at a lower level of tax revenues. Analysts who based their estimates on a relatively lower health spending under reform would arrive at a higher level of tax revenues.

Recovered Tax Expenditures

Under the current system, the federal government subsidizes spending on health care and health insurance through various tax expenditures. Examples of general categories of health-related tax expenditures under the Internal Revenue Code include: the exclusion from employee taxable income of employer contributions to workers' health care benefits (sections 105 and 106), and the personal deduction for a specified portion of the health insurance premium paid by self-employed individuals (section 162).

Many reform proposals before the 103d Congress rely on recoverable tax expenditures as a potential source of revenue. Table 3-5 provides an overview of the provisions in various reform proposals that would recover a portion of the tax expenditures.

[9] The discussion here focuses only on tax liabilities directly imposed on individuals and employers. The 1 percent assessment of gross Premium receipts imposed on the accountable health plans, as prescribed in the Managed Competition Act (H. R.3222, S. 1579) is not discussed here. In general, the estimate of potential revenues from this particular assessment is a function of premium levels, premium growth rates, and enrollment.

TABLE 3-4: Provisions in Selected Reform Proposals That Increase Tax Liability[a,b]

Reform proposals[c]	Provisions related to increase tax liability
Affordable Health Care Now Act of 1993 (H.R. 3080/S. 1533)	No provision on new tax liability
American Health Security Act of 1993 (HR. 1200/S, 491)	Individual income tax rates increase from 28 to 30 percent, and 31 to 34 percent, with 38 percent being the highest tax rate, Corporate income tax rates increase to 38 percent, Employer Medicare hospital insurance payroll tax Increases from 145 to 7.9 percent, with no cap on wages subject to payroll tax,
Consumer Choice Health Security Act of 1993 (H.R, 3698/S. 1743)	No provision on new tax liablity,
Health Equity and Access Reform Today Act of 1993 (H.R. 3704/S. 1770)	No provision on new tax liablity
Health Security Act (HR. 3600/S, 1757)	Impose a corporate assessment of 1 percent of payroll for corporate alliances. Impose a temporary corporate assessment for businesses with existing retiree health care costs, Increase the excise tax on tobacco products,
Managed Competition Act of 1993 (H.R, 3222/S, 1579)	No provision on new tax liability.

[a] This table includes only specific provisions in the major reform proposals that prescribe an Increase in tax liability and have relatively larger impacts on federal revenues It does not include the implicit assumptions about larger tax bases due to a decrease in insurance premiums

[b] Whether the Insurance premiums paid 10 the federal treasury (e g , the monthly $65 long-term care premium fOr all elderly people under the American Health Security Act) or the regional alliances (e.g , all insurance premiums for the standard benefit package under the Health Security Act) should be considered as taxes has been subject to much discussion Although the Congressional Budget Off Ice does not consider premiums paid under the Health Security Act as "taxes," it does consider premium payments paid to the regional alliances under a mandatory Insurance system as government "receipts"

[c] Proposals are from 103 Congress

SOURCE Off Ice of Technology Assessment, 1994.

TABLE 3-5: Provisions in Selected Reform Proposals That Recover Tax Expenditures Under Current Law[a]

Reform proposals	Provisions related to limiting tax expenditures
Affordable Health Care Now Act of 1993 (HR. 3080/S. 1533)	No provision on recovering current tax expenditures.
Consumer Choice Health Security Act of 1993 (H.R. 3698/S. 1743)	Repeal of current tax exclusions for health Insurance premiums,
Health Equity and Access Reform Today Act of 1993 (HR. 3704/S. 1770)	Limit the tax exclusion of health insurance premiums to a cap equal to the average costs of the lowest priced one-half of qualified health plans.
Health Security Act of 1993 (H.R. 3600/S. 1 757)	After 2004, limit the tax exclusion of health insurance premiums to benefit plans not exceeding the "standard benefit package. " Disallow any health benefits from the tax-exempt cafeteria plans.
Managed Competition Act of 1993 (H.R. 3222/S. 1579)	Limit the employer deduction of health insurance premiums to a cap equal to the lowest priced accountable health plans, Employer contributions exceeding the cap are subject to a 35 percent excise tax.[a]

a An excise tax on employers' contributions in excess of the cap technically is not recovering the tax expenditures recurred under the Current law However, since the provision also represents an effort to limit the tax subsidy of employer-paid health benefits, it is included in the discussion of recovered tax expenditures

[b] Proposals are from 103d Congress.

SOURCE Off Ice of Technology Assessment, 1994

The information required for analysts' estimates depends on the specific approaches used to recover health-related tax expenditures. For example, if the tax subsidy for employer-paid health benefits were limited through a tax cap that treats excess benefits (relative to the tax cap) as employee income, one would need information about the distribution of excess benefits across individuals at different income tax bracket.

A critical issue is the assumption analysts make about how individuals and employers will respond to the proposed tax changes and whether options for other tax-exempt benefits exist. For example, if employers and employees could transfer the taxable health benefits or wages into other forms of tax-exempt compensation, the amount of recoverable tax expenditures would be limited.[10]

I New Tax Expenditures

To achieve various policy objectives, many reform proposals would introduce new or additional tax subsidies for certain health-related spending. For example, many proposals would allow self-employed individuals to deduct their health insurance premiums in full, or make spending for long-term care premiums and contributions to individual medical savings accounts tax deductible.[11] Table 3-6 gives an overview of the provisions that would introduce new tax expenditures.

TABLE 3-6: Provisions in Selected Reform Proposals That Create New Tax Expenditures

Reform proposals[a]	Provisions related to new tax expenditures
Affordable Health Care Now Act of 1993 (H.R. 3080/S 1533)	Raising the tax deductibility of health insurance premiums to 100 percent for self-employed individuals. Tax deductibility of spending for long-term care insurance premiums. Full tax deductibility for medical savings accounts
Consumer Choice Health Security Act of 1993 (H. R 3698/S, 1743)	Income tax credits for health spending. Income tax credits for medical savings accounts.
Health Equity and Access Reform today Act of 1993 (H R 3704/S. 1770)	Raising the tax deductibility of health Insurance premiums to 100 percent for self-employed Individuals, Tax deductibiliy of spending for long-term care Insurance premiums. Full tax deductibility for medical savings accounts.
Health Security Act (H. R. 3600/S. " ***757)***	Raising the tax deductibility of health insurance premiums to 100 percent for self-employed Indviduals. Tax deductibility of spending for long-term care insurance premiums.
Managed Competition Act of 1993 (H. R 3222/S 1579)	Raising the tax deductibility of health insurance premiums to 100 percent (up to the tax cap) for self-employed individuals.

[a] Proposals are from 103d Congress

SOURCE Off Ice of Technology Assessment, 1994

[10] In theory, assumptions about the elasticity of labor supply (i.e., whether people will work more or less as a result of the change in their income taxes) will also need to be considered. That is because, depending on the relative size of the income and substitution effects, wage changes may affect labor supply in many different ways. Federal agencies responsible for budget estimation (e.g., OMB, the Treasury Department, CBO, and JCT) adopted a "constant gross domestic product (GDP)" assumption and required analysts to assume total employment compensation would remain unchanged under reform. By impl ication, the constant GDP assumption would translate into an assumption that labor supply and demand would remain fixed (i.e., near perfect inelasticity with respect to income and price) over the budget period. See appendix B for a more detailed discussion of the "constant GDP" convention used by federal analysts.

[11] Conceptually, medical savings accounts can be viewed as similar to the flexible spending accounts sponsored by many employers. The differences are that funds remain in the flexible spending account at year-end are forfeited and the flexible spending accounts are tied to employment, while the medical savings accounts are not.

The information required to arrive at the estimates of new tax expenditures will depend on the specific type of tax expenditure proposed. For example, estimating the cost of fully deductible health insurance for self-employed individuals depends on three factors: the number of individuals who are self-employed, the respective income tax brackets of the self-employed, and the distribution of additional health insurance expenses subject to tax-exclusion across individuals in different income tax brackets.

Since self-employed individuals currently are allowed to deduct 25 percent of their health insurance premiums, most of the baseline information about self-employed individuals and their health insurance premiums related to tax expenditures presumably is readily available. The critical element that might cause estimates of the tax expenditures to vary is the amount of additional health insurance expenses subject to tax exclusion, which in turn depends on analysts' estimates of the premium levels and premium growth rates under reform.

Estimates of lost revenues from other sources of tax expenditures are likely to be subject to greater uncertainty than the estimates of tax expenditures resulting from the self-employed tax deductibility provision. For example, estimates for the tax expenditures associated with the tax-exempt individual medical savings accounts would depend mainly on: the amount of savings being put into those accounts, and the number of medical savings accounts across different income tax rate groups (i.e., the participation rate).

Since individual medical savings accounts do not exist under current law, analysts may use the experience of other programs, such as individual retirement accounts or flexible spending accounts, to infer the participation rate and amounts of potential savings in the medical savings accounts programs. However these programs differ from medical savings accounts. For example, since funds remain in the flexible spending account at year-end are forfeited, and not all employers provide the flexible spending accounts, the participation rate and level of flexible spending accounts may understate both the participation and the magnitude of savings for medical savings accounts.

Similarly, estimates of additional tax expenditures for the favorable tax treatment of long-term care insurance premiums will be affected by the costs and participation across individuals at different income tax brackets. These estimates also have to take into account the potential inducement effects on the demand for such insurance as well as on the utilization of related services. Since analysts may differ in their assumptions about the demand of such insurance, estimates of the related tax expenditures are likely to vary too.

Estimates of Other Reform Proposals

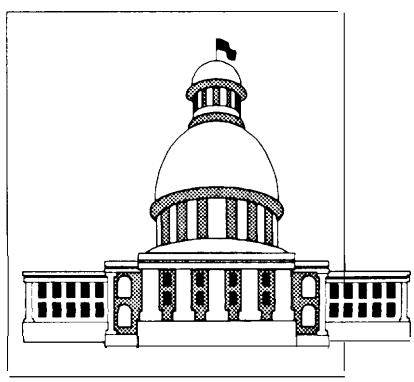
4

The uncertainty and variations in analysts' estimates of the impact of health reform on the federal budget is not unique to the Health Security Act. This chapter provides a brief overview of potential areas of uncertainty in analysts' estimates of two other bills introduced in the 103d Congress: the American Health Security Act of 1993 (H. R. 1200/S.491) and the Managed Competition Act of 1993 (H. R.3222/S. 1579). So far only CBO has estimated specific provisions of these two bills. However, CBO'S analysis is likely to highlight areas of potential uncertainty that will also influence other analysts' estimates of these bills.

AMERICAN HEALTH SECURITY ACT OF 1993 (H. R.1200/S.491)

I CBO'S Estimates of the American Health Security Act

The American Health Security Act would create a national health insurance program modeled on the Canadian single-payer system. [1] CBO estimated only national health expenditures and fed-



[1] The House and the Senate versions of the bill are similar except that the Senate version would prohibit coinsurance or copayments on all services, while the House version would only prohibit coinsurance or copayment for acute care or preventive services.

eral outlays under the House and Senate versions of the bill, not the revenue effects (34,35).2

Compared with the estimation of the Health Security Act's effects on the federal budget, the estimation of outlays under a single-payer system is relatively straightforward. Under the new national health insurance program nearly all spending currently covered by private health insurance would be shifted to the public sector. Thus, the estimation of federal outlays can be ascertained by determining what is currently spent on private insurance coverage. A few adjustments have to be made, however, to account for the additional demand for health care services induced by better insurance coverage, as well as for the effects of possible savings due to "simplified" health insurance administrative structures and functions. Since the American Health Security Act also prescribes limits on the growth rate of public spending for health care, the effects of such limits also have to be taken into account.

Based on this general methodology, CBO estimated that total federal spending for the national health insurance program (essentially federal payments to the states for covered services) would amount to $630 billion in 1997, $939 billion in 1998, and $1.1 trillion in 2000.[3] Federal spending for the national health insurance program would be funded mostly by an increase in income and payroll taxes, a hospital insurance tax, and additional excise taxes on certain products such as tobacco. Additionally, part of the federal expenditures for the national program will be offset by "savings" from repealing Medicare, Medicaid, and other existing federal health programs.

The estimation of savings from Medicare and Medicaid and the American Health Security Act is relatively straightforward. The amount essentially equals the estimates of baseline spending for the repealed programs.[4] CBO estimated that baseline Medicare and Medicaid spending by the federal government would be $265 billion and $174 billion respectively, in 2000. Thus, repealing the two programs would save $439 billion. Taking into account this revenue effect, net additional federal outlays under the act would be $371 billion, $556 billion, $571 billion, and $583 billion for the four years from 1997 through 2000.

| Potential Uncertainty in CBO'S Estimates

Conceptually the estimation of federal spending for covered services appears to be relatively straightforward, but in practice, many aspects of the process are subject to uncertainty. Four factors are critical to CBO'S estimate, none of which can be estimated precisely:

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2 Although a few analysts have projected the economic effects of health reform under a generic single-payer system, CBO's analysis is the only one that has provided expenditure estimates specific to the provisions of the proposed legislation. Most other analyses focus only on national health expenditures and have not addressed specifically the issue of federal budget effects of a single-payer system. For example, Lewin-VHI's two analyses, "O Canada: Do We Expect Too Much From Its Health System?" (23), *and National Health Spending Under A Single-Payer System: The Canadian Approach(11*), provide estimates only for national health expenditures and have not explicitly discussed the implications of a national health budget and changes in federal outlays. The Lewin-VHI analyses suggest that a system of health expenditure budgets would result in substantial savings in health spending. It estimated that if the single-payer program were to reduce the rate of growth in per-capita health spending by 1 percent each year, U.S. health spending would be reduced by$137 billion over the period from 1991 through 2000. The estimated savings, however, are pertinent only to national health expenditures, and it is not possible to derive from Lewin-VHI's estimates what the federal budget effects would be of either a generic single-payer system or, specifically, the American Health Security Act.

3 The figures presented here are the projections for the House version of the bill. The projected federal outlays under the Senate version are slightly higher, as the bill would require no coinsurance or copayments for any covered services. Also note that the substantial increase in the additional outlays from 1997 through *1998* result from the fact that the projected figures are for fiscal years, not calendar years. While the bill is assumed to take effect in January 1997, FY 1997 actually includes the last three months of 19%, when the current system would still be in place.

4 Conceptually, the only uncertainty or variations across different estimates in such cases would be the differences in the baseline estimates of Medicare and Medicaid expenditures and growth rates of federal spending on these programs.

- the baseline health expenditures pertinent to the covered services and the growth rate of spending on these services,
- the additional demand for health services due to enhanced insurance coverage,
- the decrease in administrative spending resulting from the simplification of insurance administration and structure, and
- the likely effectiveness of expenditure limits prescribed by the legislation.

As discussed earlier, the baseline growth rate of health care spending is a critical factor in estimating savings under reform. Analysts who assume different growth rate of health care spending under current law will arrive at different projections of savings under anew system. Similarly, behavioral responses to changes in insurance coverage and the extent of administrative savings under a single-payer system are all areas of contention among analysts.[5]

Rather than assume that the limits on expenditures would work as intended, CBO assigned an effectiveness rating to the limits[6] The effectiveness rating of the expenditure limits is a critical factor for the estimates. Assigning an effectiveness score to expenditure limits is a very difficult exercise and one that depends greatly on analysts' judgments.[7] CBO estimated what national health expenditures would be under the act using alternative effectiveness ratings, but they did not perform a similar analysis for the federal budget estimate.

MANAGED COMPETITION ACT OF 1993 (H. R.3222/S.1579)

I CBO's Estimates of the Managed Competition Act

The Managed Competition Act of 1993 would establish regional health plan purchasing cooperatives (HPPCs), which would allow individuals and small groups to purchase health insurance at prices comparable to what large groups pay.[8] It would also provide subsidies to low-income families to purchase health insurance.

So far, only CBO has provided estimates of the federal budget effects of the act (39).[9] According

[5] For a detailed discussion on the uncertainty associated with the potential savings from administrative streamlining, see the OTA report *Understanding Estimates of* National *Health Expenditures Under Health Reform* (44).

[6] A detailed discussion of CBO's estimation methodology for the American Health Security Act appeared in a separate OTA report, *Understanding Estimates of National Health Expenditures Under Health Reform (44). The* general methodology discussed there also applies to the estimates of federal budget effects under the American Health Security Act.

[7] For a detailed discussion on the effectiveness of expenditure limits and the assignment of effectiveness scores, see the OTA report *Understanding Estimates of National Health Expenditures Under Health Reform (44).*

[8] Managed competition, as defined by A lain Enthoven, one of the original architects of the concept, is a "purchasing strategy to obtain max i-mum value for consumers and employers, using rules for competition derived from macroeconomic principles" (4). Other than the Managed Competition Act, several health reform proposals in the 103d Congress, such as the Clinton Administration's Health Security Act (H. R.3600, S.1757) and the Health Equity and Access Reform Today Act (H. R.3704/S.1770), also have elements of managed competition.

[9] A few analysts have provided estimates of the economic effects of health reform either under a generic managed competition System or under the Managed Competition Act of 1992 proposed in the 102d Congress. For example, Sheils and colleagues' analysis, "Potential Public Expenditures Under Managed Competition," (22) provided expenditure estimates under a managed competition system proposed by Paul Star. Meyer and colleagues' analysis, *Managed Competition in Health Care: Can It Work? (14),* provided estimates of federal budget effects under the Managed Competition Act of 1992. However, estimates from these analyses are not directly comparable to CBO's estimates of the latest version of the legislation. There are important changes (e.g., the provisions of premium subsidies for low-income individuals) between the Managed Competition Act of 1992 and 1993 which would result in substantial differences in federal expenditures.

to CBO, the bill, if implemented in 1996, would add $19 billion to the federal budget deficit from 1996 through 2000.[10]

I Potential Uncertainty in CBO's Estimates

Two major provisions of the act would have the most significant and direct effects on the federal budget. One is the repeal of Medicaid; the other is the premium and cost-sharing subsidy to enable low-income families to purchase and use insurance through the HPPCs.

The estimate of federal outlays for the premium and cost-sharing subsidy is by far the most critical element in projecting the bill's effect on the federal budget. The level of the subsidy depends primarily on the estimated premium for the least expensive health plan in a region. Higher premiums would inevitably increase federal outlays. The act, however, does not specify a "standard benefit package." Analysts therefore are left to their own discretion in estimating premiums.[11]

In addition, estimating the number of families eligible for the subsidy is complicated because the act does not require employers to sponsor or contribute to insurance benefits for their employees. It is plausible that some employers who currently pay a substantial share of their employers' insurance premiums may decide to drop the benefit and shift the costs of insurance to the federal subsidy program. Thus, the estimate of the number of eligible families depends not only on the income distribution but also on assumptions of employers' behavioral responses.

Estimates of Medicaid "savings" can be made simply from the estimates of baseline spending for the program. The only potential source of variations across different projections in this case is the baseline expenditure estimates and the growth rates of federal spending for Medicaid. Since most private analysts usually adopt CBO's baseline projections, differences tend to be negligible.

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10 According to CBO's estimates, the federal deficit would be substantially higher ($189 billion from 1996 through 2000) if individuals eligible for premium assistance were to receive the full amount of subsidies as prescribed in the legislation. However, under the funding mechanism specified in the act, the federal government would reduce the proportion of the premium subsidies it paid (for low-income people not receiving Medicare) if the savings from Medicaid and other revenue sources failed to cover the cost of the subsidies. The resulting shortfall in subsidies would have to be absorbed by the health plans.

11 CBO's analysis provided two different estimates based on two benefit packages, one with comprehensive benefit identical to the "standard benefit package" in the Clinton Administration's proposal, the other with limited benefits that costs 20 percent less than the comprehensive plan. However, conceptually this is different from a sensitivity analysis that is based on two different premium estimates for the same benefit package.

Appendix A: Acknowledgments

A

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Consad Corporation
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B Appendix B: General Description of the Budgetary Process[1]

The federal budget is produced through the cooperation of many offices in the government. Within the executive branch, the Office of Management and Budget (OMB) is officially responsible for the overall projection of the budget, although numerous agencies and departments play important roles. At the basis of all budget estimates is the macroeconomic forecast produced by OMB, the Council of Economic Advisers, and the Treasury Department, which is represented for this purpose by the Office of Economic Policy. The group is informally referred to as the "Troika."

On the expenditure side, OMB must perform many more functions than in the revenue process, where it mainly takes the numbers provided by Treasury and collates them into the overall budget. Because OMB has expertise in many of the expenditure functions, it generally collects, collates, and checks for consistency on the expenditure numbers (gathered from numerous agencies) in the budget process. OMB even directly forecasts a few expenditure items. The process is a two-way street. Specific departments such as Defense, Health and Human Services, and Education, for instance, provide various levels of input into the macroeconomic assumptions. To a large extent, the expenditure forecasts are developed within each department and the information is collected and integrated by OMB.

Given a particular forecast, receipts are estimated by the Office of Tax Analysis in Treasury. Payroll tax estimates are developed in conjunction with the Social Security Administration (social insurance payroll taxes) and the Department of Labor (unemployment insurance). OMB does not change the revenue estimates provided by Treasury. These forecasts can be changed indirectly, however, by modifying the underlying macroeconomic assumptions.[2]

In Congress the budget estimation process is a bit different. The Congressional Budget Office (CBO) and the Joint Committee on Taxation (JCT) dominate the estimating process in the same

[1] This appendix is adapted from the appendix in an OTA contractor paper for this project by Steuerle and Wallace (24).

[2] The forecasts may Present a more or less positive view of the future. For example, a decrease in the forecast for inflation can lead to a forecast of lower government spending .On the revenue side, a change in the forecast for interest rates can significantly alter the forecast of investment and consumer spending.

way that OMB and Treasury do in the executive branch. Revenue estimates for bills generally are made by JCT, just as the Treasury provides such estimates for the executive branch. CBO is responsible for the congressional estimates and analysis of the federal budget. CBO often derives its expenditure estimates from data provided by the expenditure departments of the executive branch and OMB. Because CBO's staff is relatively small, it relies mainly on JCT and Treasury data for the revenue aspect of the budget estimates. In point of fact, all of the estimators at Treasury, JCT, OMB, CBO, and relevant executive departments communicate closely with each other, and their estimates of federal receipts and outlays are usually quite similar.

One difference between the executive and legislative branches is the macroeconomic forecast. This forecast is at the heart of many budgetary forecasts. The Troika and CBO each uses its own sense of the future and interpretation of the output from macroeconomic models to produce the forecast. These models, in turn, are based on historical relationships among aggregate indicators and forecasted trends in certain indicators. These forecasts become crucial for estimating future changes in expenditures and taxes as a result of a bill. In large part, the estimates are based upon past growth trends, modified slightly for economic cycles and demographic changes.[3]

OMB produces its budget near the beginning of the calendar year mainly under "proposed services" for the fiscal year in question. OMB'S budget baseline, therefore, *includes* any presidential proposal for tax or expenditure changes in the budget year. CBO, on the other hand, emphasizes a "current services" budget—a budget that assumes services will be maintained under the current tax and expenditure code—since it does not want to presume what would be enacted (or favored) by Members of Congress.[4] OMB's macroeconomic forecast, budget estimates, and revenue estimates, therefore, could end up very different from those of CBO and JCT.

COMPONENTS OF BASELINE BUDGET ESTIMATES

The revenue and expenditure forecasting methodologies of both branches of government are complex, and many of the components of revenues and expenditures are interrelated. Table B-1 provides a summary of the major inputs of the budget forecasting process. Changes to any of these components can significantly alter the resulting budget projection. The first column of the table presents the main components of the budget forecasting process.[5] These inputs include: 1) the macroeconomic forecast, which is produced under various assumptions about the outlook for the economy; 2) the baseline of the government programs, health expenditures, income subject to tax, and other variables that are developed using the macro forecast and other models and analyses; 3) current tax laws; 4) current law on expenditures; and **5)** the rules regarding debt financing.

The second column of the table indicates which office produces the components, and the period covered by the information. A number of agencies and offices provide input to OMB and CBO for all types of analyses. The third column shows the use of the inputs in the overall budget process. The last column contains commentary on each input.

Expenditure and revenue forecasting depend on assumptions about the distributions of income and employment. Many of these assumptions in-

[3] Despite adjusting for past cyclical patterns of economic growth, macroeconomic forecasts by tradition contain no future recessions.

[4] It is not always easy to figure out what to include in either budget. This has been especially true in recent years because Congress has adopted requirements to *reach certain aggregate targets* for discretionary and other spending. CBO estimates current services, for instance, by assuming that new legislation is enacted to meet these targets.

[5] Other agencies and analysts in the private sector may produce budget forecasts for their own uses. The discussion here focuses on the methods used by OMB and CBO.

TABLE B-1: Overview of Baseline Budget Projection Components

Component (output)	Supplier of component and period covered	uses	Comments
Macroeconomic forecast including: **Income by sector** **Prices (health/general iCPI)** **Employment by sector** **Population** **Consumption** **Investment, etc.**	**OMB, CBO, private, and other forecasting firms.** **OMB and CBO make 5-year projections, other firms and offices vary, SSA makes 75-year projections.**	As an input to produce estimates of baseline components of expenditures and taxable income, as an instrument to project changes in expenditure and tax policy.	Macroeconomic forecasts are of various levels of sophistication, from econometric models to relatively simple growth models. Forecasts are made under some assumption regarding policy, current law, or proposed law.
Baseline of: **National health expenditures** **Health care needs** **Income distribution** **Distribution of age** **Number of families in poverty** **Income subject to tax** **Capital income** **Wage and salary income** **Corporate profits** **Other income**	**Individual models and analysis.** **Within the Clinton Administration these include models in individual departments, CBO, private, academic, and other modelers. Forecasted baselines are projected for 1 to 5 years (except SSA).**	**Used as** the baseline for many policy simulations and budget projections. Provides an overview of the current status of various facets of the economy and status under proposed legislation.	The development of baseline involves estimation of behavioral responses, hitting targets of actual data from a variety of sources including the CPS, Statistics of income (IRS). Projecting the baseline typically includes use of some macroeconomic forecast. Baseline models also include number of users of various services (e.g., Medicaid) and number of tax filers.
Current law and proposed law tax code **Definition of AGI,** taxable income Tax preferences, deductions, exemptions Taxable income by source Tax liability	**IRS tax code, OMB.** **Budget tax components developed by OMB, CBO, private models.**	**Used as** the basis for the revenue component of the budget forecast.	This component is used interactively with some form of tax calculator, and includes behavioral components for capital gains realizations, deductions, and compliance. The code provides definitions for taxable income, etc.
Current law rules on nondiscretionary and discretionary expenditures Participants in programs (Medicaid, Medicare, AFDC, etc.) **Total spending by type of program** **Budgeted expenditures by type**	**OMB, CBO, private models.**	**Used as** the expenditure basis of the budget forecast.	This component is used Interactively with specific models and analyses for each component of expenditure. In health, these estimates are correlated closely with estimates of national health expenditures.
Debt financing	OMB, **CBO, private models.**	Listed as a separate expenditure component of the budget.	This component uses, among other items, the macroeconomic forecast components related to Interest rates and investment.

KEY: AFDC = Aid to Families with Dependent Children program, AGI - adjusted gross income; CBO = U S Congress, Congressional Budget Office; CPI = consumer price index; CPS = current population survey; OMB = U.S Executive Office of the President, Office of Management and Budget. SSA = U S Department of Health and Human Services, Social Security Administration, IRS = U.S. **Department of** Treasury, Internal Revenue Service

SOURCES: Sunley, E., and Weiss, R., **"Revenue** Estimation," **Tax** *Notes* (June 10, 1991), pp458-472, U SCongress, Joint Committee on Taxation, "Discussion of Revenue Estimation and **Methodology"** (Washington, DC: Aug 13, 1992), U.S. Department of Treasury, Office of Tax Analyses, *Compendium of T= Research 1987* (Washington DC US Government Printing Off Ice, 1987); U S. Department of Treasury, Office of Tax Analysis, "Estimating **the** Impact **of Health Reform on Federal Receipts, " Washington,** DC, Dec 9, 1993

teract. Note also the crucial role played by the actual rules, regulations, and procedures under which taxes are collected and expenditures are made. A slight change in what is viewed as permissible under, for example, income tax or Medicaid regulations can change estimates of the budget deficit by billions of dollars. Furthermore, a change in any component of the macroeconomic forecast or other more "narrow" parameters, such as effective marginal tax rates, can change the budget forecast.

Many of the items listed in table B-l—for example, distribution of income by adjusted gross income (to determine taxes), distribution of income relative to eligibility criteria in income-tested expenditure programs, tax preferences, and program participants—are estimated by using household survey data and microsimulation models. Differences in the calibration due to use of different data sets will lead to different baselines of income and expenditures. Tax code and expenditure rules are also put into models—i.e., these rules are approximated by computer language—to be able to simulate the outcomes of changes in rules on baseline revenues and expenditures. Finally, changes in debt financing rules and interest rates will influence the debt finance expenditure.

AN ESTIMATING CONVENTION

The Constancy of GDP and Other Macroeconomic Variables

Within both the executive branch and Congress, estimators often make estimates for bills under an assumption of constancy for gross domestic product (GDP) and other large-scale macroeconomic variables, such as employment and total income. Estimators within and outside the government are influenced differently by this convention, and their estimates vary accordingly.

OMB and CBO typically treat proposals during the year under a constant GDP assumption, meaning that the total change in GDP under any proposal is usually assumed to be zero. Thus, even if there are decreases in output by one sector, they are offset by increases in another sector. This convention is adopted for a variety of reasons, among them the impossible task of estimating the change in national output that would result from every bill and amendment that comes before Congress. Another rationale is that every bill put forward by an Administration or Member of Congress is intended to do some "good." To the proponent, therefore, it must have a positive effect. In fact, though, whether a bill is good or bad from a macroeconomic standpoint often goes beyond 'what can be determined scientifically.

This estimating convention has led some to criticize the estimates as being static and to argue that no behavioral adjustments are incorporated. While the estimates assume that the overall level of economic activity is not influenced by a particular proposal, the estimates do allow for such behavioral changes as sectorial shifts in employment, the composition of income, the allocation of savings and investment, the recognition of capital gains and other income for tax purposes, and participation rates in programs. The estimates thus are hardly static.[6]

[6] For a description of the dynamic elements of revenue estimating, see Nester (15).

C Appendix C: Databases Used To Develop Health Reform Estimates

Many estimates reviewed in this report were developed, in part, using microsimulation models. In microsimulation models, the unit of analysis is an individual person and household. To develop expenditure estimates under health reform, the models usually depict the changes in individual health insurance coverage and health care expenditures between a base case, usually current law, and an alternative scenario with specific policy changes.

The models simulate health expenditures under alternative scenarios by adjusting the data for each individual and family. To estimate aggregate health care expenditures under alternative scenarios, expenditures of individuals and families are simulated and then summed over all units. Data on many different variables are required. Not all of these data are collected in any single database. Consequently, several different databases have served as sources of data for health care reform estimates. Table C-1 provides an overview of the major databases used by various analysts to develop health care reform estimates. The most important types of data and databases are the following:

Demographic and Economic Characteristics of the Population

- Current Population Survey (CPS) March Income Supplement
- National Medical Expenditure Survey (NMES) Household Survey

Health Care Expenditures of Individuals

- NMES Household Survey
- Consumer Expenditure Survey (CES)

Health Care Utilization

- NMES Household Survey
- National Health Interview Survey (HIS)

Aggregate Health Care Expenditures over Time and in the Future

- National Health Accounts (NHA)

Individual Tax Characteristics and Payments

- Statistics of Income (SOI) Individual Income Tax Returns

Health Insurance Characteristics

- NMES Health Insurance Plans Survey (HIPS)
- Health Insurance Association of America (HIAA) Health Insurance Survey

Firm Characteristics

- County Business Patterns (CBP)
- HIAA Health Insurance Survey

Hospital Utilization and Expenditures

- American Hospital Association (AHA) Annual Survey of Hospitals

TABLE C-1: Databases Used to Develop Health Reform Estimates

Database	Description	Use in models	Models used
Current Population Survey (CPS), March Income Supplement	Sponsored by BLS and BC Monthly cross-sectional survey of 60,000 U S households Data collected Include labor force status for ages 15 and older March CPS Includes supplementary questions on income and employment status, and health Insurance coverage during previous calendar year	Serves as host database for HCFA and CBO. In several models, including HCFA, AHCPR, and Lewin-lCF, it is matched with 1987 NMES and provides Information on Insurance status, family income, gender, age, poverty classification, family composition, race and ethnicity, sex, and employment status Also used to age the NMES data in some models	HCFA's SPAM Model CBO Lewin-VHl's HBSM model AHCPR AHSIM model
National Medical Expenditure Survey (1987)	Sponsored by AHCPR and HCFA Five rounds of data collection between February 1987 and July 1988 for sample of 14,000 households (Household Survey), plus surveys of physicians and health care facilities providing care to the survey sample households during 1987 (Medical Provider Survey) and of employers and insurance companies responsible for their Insurance coverage (Health Insurance Plan Survey) The database also Includes a survey of 13,000 residents of institutions such as nursing and personal care homes, psychiatric hospitals, and facilities for mentally retarded persons (institutional Population component). Data collected include utilization, expenditures, and sources of payment for all major forms of medical care, demographic and socioeconomic characteristics of respondents, Insurance coverage of respondents, information from medical providers about respondents, and access to medical care.	In the HCFA and AHCPR models, NMES is the source for such key elements as health expenditures and utilization. HIPS, a derivative of NMES, is used in the AHCPR model for such data elements as employer's establishment size, industry, location, and premium sources.	Lewin-VHl's HBSM model AHCPR AHSIM model CBO
Consumer Expendi - ture Surveys (CES)	Sponsored by BLS. CES are specialized surveys in which the primary purpose is to collect data relating to family expenditures for goods and services used in day-to-day living. Data are also collected on the amount and sources of family income, changes in savings and debts, and demographic and economic characteristics of family members The current survey actually consists of two separate surveys the Interview Survey, where each consumer unit in the sample is interviewed every three months over five calendar years, and the Diary Survey, which is completed at home by participating families over two consecutive one-week periods	CES are a source of excise tax information and source of Information on individuals' health premiums and out-of pocket health care spending under the CBO model	CBO

(continued)

TABLE C-1: Databases Used to Develop Health Reform Estimates (Con'td.)

Database	Description	Use in models	Models used
County Business Patterns (CBP)	Sponsored by BC. All business establishments with one or more paid employees (except agriculture production, railroad, most government, and household employment) in all U.S. counties are represented. Data collected on employment, payroll, and number of establishments by employment-size classes; data tabulated by detailed industry based on 1987 edition of the Standard Industrial Classification (SIC) manual. At the three-digit SIC code level, 450,000 aggregate industry records from over 3,000 counties in the U.S. exist.	Within the CBO model, CBP is used as a source of wage information. Within AHCPR, CBP is used to impute average wages.	AHCPR AHSIM model CBO
National Health Accounts (NHA)	Aggregate time series database developed by HCFA. NHA are statistics representing total national health expenditures for all goods and services relating to health care, and the sources of payments for these goods and services.	NHA are used within the CBO, AHCPR, HCFA, and Lewin-VHI models for benchmarking health care spending by category	HCFA's SPAM Model AHCPR AHSIM model Lewin-VHI's HBSM model CBO
Statistics of Income (SOI) Individual income Tax Returns	Developed by the IRS. Samples of tax returns and supporting schedules are abstracted each year from approximately 100 million tax returns; sample sizes are about 80,000 returns in even years and 120,000 returns in odd years. Data collected on taxpayers' income, exemptions, deductions, credits, and taxes owed.	SOI serve as a source for income tax information within the CBO and AHCPR models.	AHCPR AHSIM model CBO
Health insurance Association of America (HIAA) survey	Sponsored by Health Insurance Association of America The HIAA Survey was discontinued in 1993. The HIAA survey database includes data on employee health benefits coverage and health costs. The HIAA database originally presented data in terms of employee-level health benefits. In recent years the database has been weighted by national population counts of both firms and employees, by size of firm, public versus private firm categorization, and region.	Used in the AHCPR model to project market shares for FFS, HMO, and PPO plans by region. Used by Lewin-VHI for premium data. Lewin-VHI also uses HIAA for information on coverage of workers, average payroll, share of individuals with family coverage, eligibility of workers, and income level. The HIAA Survey is a source for information on employment-based insurance premiums within the CBO model.	Lewin-VHI's HBSM model AHCPR AHSIM model CBO

(continued)

TABLE C-1: Databases Used to Develop Health Reform Estimates (Con'td.)

Database	Description	Use in models	Models used
American Hospital association (AHA) annual survey of hospitals	Sponsored by the American Hospital Association's Hospital Data Center Mailed to all hospitals, both AHA registered and nonregistered in the United States and its associated areas, U S government hospitals *outside* United States not Included Data collected Include a profile of services, utilization, personnel, and finances of hospitals in U.S. and associated areas	In the AHCPR model, AHA data are used to segregate overall rates of growth in hospital spending into components attributable to Inpatient and outpatient services CBO uses AHA Surveys in Medicare cost estimates	AHCPR AHSIM model CBO

KEY AHA - American Hospital Assoaatlon, AHCPR = U S Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, AHISM = Agency Health SimulationModel BLS - U S Department of Labor, Bureau of Labor Statistics; CBO = U S Congress, Congressional Budget Office, CBP = County Business Patterns, CES = Consumer Expenditure Survey, CPS = Current Population Survey, FFS - fee-for-service, HBSM - Health Benefits Simulation Model, HCFA = U S Department of Health and Human Services, Health Care Financing Administration; HIAA - Health Insurance Association of America, HIPS = Health Insurance Plan Survey, HMO = health maintenance organization; IRS = Internal Revenue Survey, NHA = National Health Accounts, NMES - National Medical Expenditure Survey, PPO = preferred provider organization; SOI = Statistics of Income, SPAM = Special Policy Analysts Model

SOURCE Lewin-VHI, Inc , *The Financial Impact of the Health Security Act* (Fairfax, VA Dec 9, 1993), Rivlin, A M , Cutler, D M , and Nichols, L M "Financing, Estimation, and Economic Effects, " *Health Affairs 13(1) 30-49,* 1994; U S Congress, Congressional Budget Off Ice, *An Analysis of the Administration's Health Proposal* (Washington, DC U S Government Printing Off Ice, February 1994), U S Congress, Off Ice of Technology Assessment, *Understanding Estimates of the National Health Expenditures Under Health* Reform, OTA-H-594 (Washington, DC U S Government Printing Office, May 1994)

Each model has a host database that serves as the central source of data. The CPS serves as the host database for the Health Care Financing Administration's (HCFA) and the Congressional Budget Office's (CBO) model. NMES serves as a host for the Agency for Health Care Policy and Research's (AHCPR) and Lewin-VHI's analyses.

No one database regularly provides the majority of the variables needed to evaluate alternative health care policies. In addition to the host database, several other databases are used piecemeal to fill in various gaps left by the host database.

Analysts use various types of procedures to link different databases. This in turn may lead to differences in the estimates of different analysts. Statistical matching is one such technique that is used to add or impute information to one database by using information from a different database. Records in the two files are classified by elements they share in common (such as age, sex, or income). Then other data elements from the records in the "donor file" can be attached to the host file records drawn from the same matching group.

For example, CPS has information on demographic and economic characteristics of persons and families (including health insurance coverage and employment characteristics), but it does not have information on health care expenditures. In the Health Care Financing Administration's (HCFA) SPAM Model, each CPS record is matched to the record of a similar person or family in the NMES Household Survey database (in terms of age, sex, income, and insurance coverage), and the health expenditures data for that person or family are added to the CPS record.

All survey databases correspond to a past year when the data were collected. (The NMES data were collected in 1987. The most recent March CPS data used by many analysts were collected in 1993 and provide information for 1992.) To provide estimates pertinent to the population in current or future years, the existing survey data must be adjusted (or "aged") to correspond to the changes in population characteristics and other relevant information (e.g., expenditures, income). This is usually done in two stages. First, each record is reweighted to correspond to projections of the population by specific characteristics relevant to the analysis, such as age, sex, race, and insurance coverage. Most analysts adjust population weights in their models to match population projections by the U.S. Bureau of the Census or by the Office of the Actuary of the Social Security Administration. Second, individual income and health expenditure data on each record are adjusted so that, in the aggregate, the totals either reflect the income growth over time or match certain aggregate projections, such as the National Health Accounts produced by the Office of the Actuary of the Health Care Financing Administration.

Appendix D: Method of the Study

D

This background paper is published as part of the Office of Technology Assessment's (OTA) study Understanding the Estimates Under Health Reform. OTA recently published its main report, *Understanding Estimates of National Health Expenditures Under Health Reform* (U.S. Congress, OTA, 1994), which focuses on the assumptions analysts used in their estimates of the national health expenditures under various reform proposals.

This particular background paper evaluates major areas of disparities and potential sources of variations in analysts' estimates of the federal budget effects of key reform provisions. Specifically, this paper uses three different estimates of the Health Security Act to discuss the major determinants that may account for the differences across analysts' estimates. To summarize the method used for this paper, this appendix divides the report's development into four sections: focus of the study, research, analysis, and review. These sections overlap to some extent and are not strictly chronological.

FOCUS OF THE STUDY

The study was requested in August 1993 by OTA's Technology Assessment Board and Senator Ted Stevens in response to findings in a June 1993 OTA report, *An Inconsistent Picture: A Compilation of Analyses of Economic Impacts of Competing Approaches to Health Care Reform by Experts and Stakeholders.* Members of the Technology Assessment Board and Senator Stevens expressed concern over the wide array of estimates of the economic impact of health reform as outlined in *An Inconsistent Picture,* and requested OTA to do a followup study to assist policy makers in understanding why estimates are so variable. The Technology Assessment Board approved the study in July 1993, and OTA staff began working on the project in August 1993.

OTA assembled an advisory panel to assist in determining what issues and materials to consider in examining economic and budgetary estimates of reform proposals. The 14 individuals on the panel represented a variety of perspectives and had expertise in health policy, health economics, quantitative analysis, economic models, macroeconomics, health care delivery, and health systems of foreign countries (see listing at the front of this report). Joseph Newhouse, the John D. MacArthur Professor of Health Policy and Management at Harvard University, chaired the advisory panel.

To determine the critical elements in analysts' estimates of federal budget effects associated with specific reform provisions, OTA staff carefully

examined documentation of available analyses. Because estimates of federal budget effects under the health reform are very sensitive to the specific provisions that define the federal government's involvement in providing health care and insurance, OTA staff studied only estimates of specific health reform proposals from the 103d Congress. OTA staff also spoke to analysts, attended briefings, attended relevant congressional hearings, and attended conferences on health reform to understand how specific reform provisions might affect the federal budget and the major determinants of analysts' estimates. On January 15, 1994, OTA started its research and analysis of various estimates of the federal budget effects under health reform.

RESEARCH

OTA'S research for this background paper relied mainly on an examination of available documentation on analyses of health reform proposals. On numerous occasions, OTA staff also contacted analysts for further clarification and explanation. OTA staff members met with representatives from the Agency for Health Care Policy and Research, the Congressional Budget Office, the Department of the Treasury, the General Accounting Office, Hewitt Associates, Lewin-VHI, Mathematical Policy Research, Inc., the Office of Management and Budget, the Office of the Assistant Secretary for Health, the Urban Institute, the American Academy of Actuaries, and the Wyatt Company. OTA staff spoke with representatives from the Health Care Financing Administration, the Economic and Social Research Institute, and the Economic Policy Institute.

OTA also commissioned contractor papers to assist in analyzing relevant issues and limitations in the budget estimation process. OTA convened a workshop of the contractors on October 1, 1993, to discuss the relation of the various contractor papers to the study as a whole. Many of the contractor papers were reviewed externally; some will be available from the National Technical Information Service (NTIS). See table D-1 for a list of contractor papers related to the estimates of federal budget effects under health reform.

ANALYSIS

In its paper, OTA first proposed a framework to examine how federal expenditures and receipts are likely to be affected by reform provisions that either expand or limit the federal government's presence in the health care market. Based on the framework, OTA used various estimates of the Health Security Act (H. R.3600/S.1757) to illustrate how estimates of federal budget effects under health reform might differ and what factors would most likely contribute to the differences in analysts' estimates. OTA's analysis, however, is hampered by its limited access to analysts' models. With a few exceptions, analysts provided only a

TABLE D-1: Contract Papers Prepared for the *Understanding Estimates of Federal Budget Effects Under Health Reform* Paper

Kathryn Langwell, Ph. D., KPMG Peat Marwick, Washington, DC, "Employment Effects of Health Reform, '(June 1994,

Lynn C. Paringer, Ph. D., California State University at Hayward, Hayward, California, "Assessing the Assumptions Behind Definitions, Projections, and Uses of Baseline National Health Expenditures, " June 1994.

● **Eugene Steuerle, Ph. D.,** The Urban Institute, and Sally Wallace, Ph D , Georgia State University, "Projecting the Impact of Health Reform on the Federal Budget. A Summary of the Estimation Process and Its Limitations, " January 1994 (NTIS #PB94-181021)

Cynthia Sullivan, Ph. D., Sullivan Research Services, Chicago, Illinois, "Strengths and Weaknesses of Employer Health Benefits Surveys as Inputs to Microsimulation Modeling of the Effects of Health Reform on National Health Expenditures, " December 1993.

NOTE Asterisks indicate those papers available from National Technical Information Service, Springfield, VA, (703) 487-4600.

general description of their methodology, and little information regarding the input data and estimation steps they used in their models. [1] In most instances, OTA could only analytically infer the major factors that may have contributed to the differences in estimates based on its understanding of the general methodology used by different analysts.

REVIEW

Upon completion of the draft paper, OTA sent the manuscript to the study's advisory panel and relevant outside experts (see appendix A). Reviewers included members of organizations whose analyses were examined in this paper, as well as individuals from academia, think tanks, private consulting firms, public interest groups, the health insurance industry, congressional support agencies, and the executive branch. Reviewers' comments and critiques were incorporated where appropriate.

The OTA staff that prepared this report received assistance from other OTA staff members. Meetings were held with a "shadow panel" consisting of OTA staff from other programs with particular expertise and interest in methods and approaches to estimating the economic effects of health reform. Members of this panel provided helpful comments and critiques of the analytical approach adopted by this paper. The final draft of the report was sent to the Technology Assessment Board on June 25, 1994.

[1] Typically, federal agencies responsible for budget estimate (e.g., Treasury, Office of Management and Budget, Congressional Budget Office, and Joint Committee on Taxation) do not make available to the public information regarding the methodology behind estimates of major pieces of legislation. Relative to the norm, federal analysts have provided more information regarding the methodology used in estimating the effects of health care reform. However, most of the information released so far is a description of general methodology, which usually does not help in identifying the input figures and estimation steps taken in the analysis.

E Appendix E: Abbreviations and Glossary

ABBREVIATIONS

AHA	American Hospital Association
AHCPR	Agency for Health Care Policy and Research (USDHHS)
AHSIM	Agency Health Simulation Model
BLS	Bureau of Labor Statistics (USDOC)
CBO	Congressional Budget Office (U.S. Congress)
CBP	County Business Patterns
CES	Consumer Expenditure Survey
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services (USDOD)
CPS	Current Population Survey
CRS	Congressional Research Service (Library of' Congress)
FFS	fee-for-service
GDP	gross domestic product
HCFA	Health Care Financing Administration (USDHHS)
HIAA	Health Insurance Association of America
HIPS	Health Insurance Plan Survey
HMO	health maintenance organization
HPPC	health plan purchasing cooperative
IRS	Internal Revenue Service (U.S. Department of Treasury)
JCT	Joint Committee on Taxation (U.S. Congress)
NHA	National Health Accounts
NMES	National Medical Expenditure Survey
OMB	Office of Management and Budget (U.S. Executive Office of the President)
OTA	Office of Technology Assessment (U.S. Congress)
PPO	preferred provider organization
SOI	Statistics of Income
SPAM	Special Policy Analysis Model
USDHHS	U.S. Department of Health and Human Services
USDOC	U.S. Department of Commerce
USDOD	U.S. Department of Defense
USDOL	U.S. Department of Labor

GLOSSARY

Affordable Health Care Now Act of 1993 (H.R.3080/S.1533)
A health reform proposal sponsored primarily by Rep. Robert Michel and Sen. Trent Lott in the 103d Congress that would require employers to offer, but not pay for, a basic health benefit plan. The proposal includes regulation of underwriting and rating practices in the small group market and requirements that insurers offer three different health plans and portability of coverage. It also includes measures to encourage development of multiple employer purchasing groups.

American Health Security Act of 1993 (H. R.1200/S.491)
A health reform proposal sponsored by Rep. Jim McDermott and Sen. Paul Wellstone in the 103d Congress that would establish a single-payer national health insurance program, federally mandated and administered by the states. This program would replace private health insurance and public program coverage. The program would provide coverage of comprehensive health and long-term care benefits. A national board would establish a national health budget that would be distributed among the states, based on the national average per capita cost of covered services, adjusted for differences among the states in costs and the health status of their populations.

Baseline
The state of a system before any proposed policy change or reform. It is a benchmark for measuring the effects of proposed policy changes. It can refer to the expenditures, the demographic compositions, or the underlying macroeconomic factors that are generally used as the input parameters in estimating the effects of reform.

Cafeteria plan
A benefit plan provided by employers that allows all participating employees to choose among two or more benefits consisting of cash and qualified benefits (e.g., health insurance and life insurance). Under section 125 of the Internal Revenue Code, employers may contribute flexible benefit credits that employees can allocate toward the purchase of health benefits. Employers may also set up salary conversion mechanisms that allow employees to pay for health insurance premiums with pretax income. Employers may also provide flexible spending accounts allowing employees to contribute pretax funds for health care expenditures.

Consumer Choice Health Security Act of 1993 (S.1743/H.R.3698)
A bill introduced by Sen. Don Nickles and Rep. Cliff Stearns in the 103d Congress under which all persons would be required to purchase health insurance through a plan meeting federal standards relating to minimum benefits and rating and underwriting practices, or through a state-established health plan. Current tax exclusions for employer-sponsored health plans would be replaced with refundable tax credits for a portion of the premium cost of qualified health insurance plans and for other medical expenses. Employers currently providing health benefits would be required to convert them into added wages.

Corporate alliances
A term used in the Health Security Act (H. R.3600/S.1757) that refers to entities created by employers with 5,000 or more employees to provide health insurance. Corporate alliances would have to enroll all eligible persons and provide the comprehensive benefit package. They would have to offer a choice of at least three health plans, one of which would be a fee-for-service plan.

Cost-sharing
The provisions of a health benefit plan that require the enrollee to pay a portion of the cost of services covered by the plan, typically exclusive of premium cost-sharing (sharing the cost of a health care plan premium between the sponsor and the enrollee). Usual forms of cost-sharing include deductibles, coinsurance, and copayments. These payments are made at the time a service is received or shortly thereafter, and are only made by those insured people who seek treatment.

Cost-shifting
The condition that occurs when health care providers are not reimbursed, or not fully reimbursed, for providing health care and, therefore, charges to those who do pay are increased.

Current Population Survey (CPS)
Sponsored by the Department of Labor's Bureau of Labor Statistics, and the Department of Commerce Bureau of the Census, the CPS is a continuing monthly cross-sectional survey of about 60,000 U.S. households. Data collected includes labor force status for ages 15 and older. The March CPS includes supplementary questions on income, employment status, and health insurance coverage during the previous calendar year.

Disproportionate share hospitals
Hospitals that serve a relatively large volume of low-income patients and therefore receive a payment adjustment under the prospective payment system (PPS) from Medicare and Medicaid.

Elasticity of demand
The percentage change to be expected in the demand for an economic good in response to a specified percentage change in one of its determinants, such as price or income.

Entitlement programs
Programs that provide benefits paid out automatically to all who qualify unless there is a change in underlying law. These programs may or may not require an annual appropriation by Congress. Social Security and Medicare, for example, are autonomous trust funds that possess the authority to pay benefits without an annual appropriation by Congress. Many other individual benefit programs such as Medicaid, Supplemental Security Income, and Aid to Families with Dependent Children programs, are all considered entitlements by Congress.

Flexible spending account
A reimbursement account under which participating employees are reimbursed for medical expenses or other nontaxable employer-sponsored benefits. A flexible spending account can either be part of a cafeteria plan or a stand-alone benefit plan.

Health Equity and Access Reform Today Act of 1993 (H.R.3704/S.1770)
A reform proposal introduced by Rep. Bill Thomas and Sen. John Chafee and others in the 103d Congress that would require all persons to purchase coverage through a qualified health plan or face a penalty for noncompliance. All employers would be required to offer their employees enrollment in a qualified health plan or face a penalty for noncompliance, No employer, however, would be required to make contributions for coverage of an employee. Small employers and individuals could participate voluntarily in state-established purchasing cooperatives or select other qualified health plans. All plans would have to offer standard benefits and would be subject to restrictions on rating and underwriting practices. Federal subsidies in the form of vouchers would be phased in for low-income persons, subject to savings being achieved under the Medicare and Medicaid programs.

Health Security Act (H.R.3600/S.1757)
A proposal devised by the Clinton Administration that would require all persons to obtain a comprehensive health benefits package from large insurance purchasing cooperatives called health alliances. Health plan premiums would be paid through a combination of employer and individual contributions, supplemented by federal subsidies for some types of firms, early retirees, and persons with incomes below certain levels. A national health care budget would be established for expenditures for services covered under the comprehensive package. This budget would limit both initial premiums and the year-to-year rates of increase that could be charged by health plans participating in the alliances. Ultimately, premiums could grow no faster than the rate of growth in per capita gross domestic product, unless Congress specified a different inflation factor.

Home health care
Items and services such as nursing, therapy, and health-related homemaker or social services provided as needed in patients' homes by a home health agency or others under arrangements made by a home health agency,

Hospital insurance tax
The Medicare program consists of two parts: the hospital insurance (Part-A) program and the supplementary medical insurance (Part-B) program. The hospital insurance program is financed primarily through the hospital insurance payroll tax contributions paid by employers, employees and the self-employed. For wages paid in 1993, the total hospital insurance tax rate is 2.9 percent of the first $135,000 of wages. One half of the taxis imposed on the employee and one half on the employer. All wages paid after December 31, 1993, will be subject to hospital insurance taxes. Under current law, state and local government employees hired before April 1, 1996, are not covered under Medicare, thus are not subject to hospital insurance tax, unless a voluntary agreement is in effect.

Induced demand
The increase in the demand and utilization of health care services associated with an increase in the insurance coverage for the services or other nonprice factors.

Long-term care insurance
Insurance for medical and social services care provided by both institutional and noninstitutional providers to persons with debilitating chronic health conditions.

Managed competition
An approach to health reform that would combine health insurance market reform with health care delivery system restructuring. The theory of managed competition is that the quality and economy of health care delivery will improve if independent groups compete with one another for consumers in a government-regulated market.

Managed Competition Act of 1993 (H.R.3222/S.1579)
A proposal sponsored by Rep. Jim Cooper and Sen. John Breaux in the 103d Congress that would allow states would establish health plan purchasing cooperatives (HPPCs) that would contract with accountable health plans (AHPs), AHPs would be required to cover a uniform set of benefits and comply with premium rating and underwriting standards. All employers would be required to offer, but not pay for, coverage in an AHP. Small employers with 100 or fewer employees would have to participate in the HPPC; larger employers could offer their own AHP. Health plan expenses would be tax deductible up to the cost of the lowest-cost basic plan in an area. An excise tax would be imposed on employer contributions in excess of this level.

Medicaid
A joint federal/state program that provides health care and health-related services for low-income individuals. Medicaid regulations are established by each state within federal guidelines, and the eligibility requirements and services covered vary significantly among the states. In general, Medicaid pays for medical, nursing home, and home health care for individuals who meet the eligibility requirements. In some states, Medicaid also pays for adult day care and in-home services such as personal care and homemaker services. Financial eligibility for Medicaid is determined by a means test, in which a ceiling is placed on the maximum income and assets an individual may have in order to qualify for assistance. The income and assets levels are low in all states and very low in some states.

Medicaid noncash recipients
Individuals who are covered by Medicaid but do not receive cash assistance (e.g., persons who qualify for Medicaid as medically needy).

Medical Savings Accounts
A trust created or organized exclusively for the purpose of paying the medical expenses of beneficiaries of such a trust.

Medicare
A nationwide, federally administered health insurance program authorized by Title XVIII of the Social Security Act of 1965 to cover the cost of hospitalization, medical care, and some related services for eligible persons over age 65, persons receiving Social Security Disability Insurance payments for two years, and persons with end-stage renal disease. Medicare consists of two separate but coordinated programs--hospital insurance (Part-A) and supplementary medical insurance (Part-B). Health insurance protection is available to insured persons without regard to income, and is mainly funded through the U.S. Treasury and the Medicare portion of the payroll tax.

Medicare Part-B
See *Medicare.*

Microsimulation model
A model that essentially conducts program experiments (simulations) on large samples of microdata for individual decision units. In general terms, the first step, which serves the same function as the control group for an experiment, is to prepare a baseline database representing the current situation, that is, the situation in the absence of a program change. The second step is to simulate the program change and its impact. The third step is to summarize the differences between the baseline and alternative program databases. Microsimulation models typically include routines to generate the database, routines to mimic the rules of government programs, and routines to produce tabulations of the simulation results. They may also include routines to simulate behavioral responses to proposed program changes.

National Health Accounts (NHA)
The National Health Accounts are statistics representing total national health expenditures used to identify all goods and services relating to health care, and the amount spent on these goods and services.

National health expenditures (NHE)
An estimate of national spending on health care made up of two broad categories: 1) health services and supplies, which consist of personal health care expenditures (the direct provision of health care), program administration and the net cost of private health insurance, and government public health activities; and 2) research and construction of medical facilities.

National Medical Expenditure Survey (NMES)
A survey conducted by the USDHHS involving five rounds of data collection, between February 1987 and July 1988, sampling 14,000 households (Household Survey). The NMES also surveys physician and health care facilities providing care to members of a household sample during 1987 (Medical Provider Survey) and employers and insurance companies responsible for their insurance coverage (Health Insurance Plan Survey). The NMES also included an institutional survey of 13,000 residents of nursing and personal care homes, psychiatric hospitals, and facilities for mentally retarded persons.

Payroll taxes
Taxes based on wages and salaries that often are levied against both employer and employee but are collected for the government by employers.

Premium
The periodic payment made to an insurer under the terms of an insurance contract.

Regional alliance
As defined in the Health Security Act, a regional alliance can be a nonprofit organization, an independent state agency, or an agency of the state which contracts with certified health plans to provide coverage to residents of the region. An alliance would be required to offer a contract to any certified plan seeking to serve in its area unless the plan's proposed premium exceeded the per capita

premium target by more than 20 percent. The alliance would also be required to ensure that at least one fee-for-service plan is available among plan offerings.

Sensitivity analysis
An analysis of the effect of changes in key assumptions or uncertainties on the findings and outcome of an overall study.

Skilled nursing facilities
A facility that provides skilled nursing care. A "distinct part skilled nursing facility" is a distinct unit within the hospital that provides such care (i.e., beds set up and staffed specifically for this service), is owned and operated by the hospital, and meets Medicare certification criteria.

Tax credit
The amount that can be directly subtracted from the amount of tax due for a taxpayer.

Tax deductibility
Under the provision of the Internal Revenue Code, businesses can generally deduct, as a business expense, from their gross incomes certain expenses such as the full cost of health insurance coverage provided for their employees.

Tax exclusion
Under the provisions of the Internal Revenue Code, certain portions of an individual's income or noncash compensation, such as employer contributions for health benefits, is excludable from his or her gross income (for the purpose of determining income taxes) and wages (for the purpose of determining payroll taxes).

Tax expenditures
As defined by the Congressional Budget and Impoundment Act of 1974 (Public Law 93-344), tax expenditures are reductions in individual and corporate income tax liabilities that result from special tax provisions or regulations that provide tax benefits to particular taxpayers. These special provisions can take the form of exclusions, credits, deductions, preferential tax rates, or deferrals of tax liability.

Uncompensated care
Care for which a provider or health care facility does not expect to receive payment.

Voucher
A form or check indicating a credit against future purchases or expenditures.

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