

# Appendix: Method of the Study

**T**his report, *Understanding Estimates of National Health Expenditures Under Health Reform*, is published as part of the Office of Technology Assessment's (OTA) study, *Understanding the Estimates Under Health Reform*. This report evaluates analyses of the impact of various health reform proposals on national health expenditures (NHE) by comparing analysts' assumptions about key policies in proposals with the available empirical research on these policies.

To summarize the method used for this report, 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. This appendix also contains complete references of analyses reviewed in this report (table B-1).

## FOCUS OF THE STUDY

This report was requested in August 1993 by OTA's Technology Assessment Board and Senator Ted Stevens in response to findings in the OTA report *An Inconsistent Picture: A Compilation of Analyses of Economic Impacts of Competing Approaches to Health Care Reform by Experts and Stakeholders* published in June 1993. The Technology Assessment Board members and Senator Stevens expressed concern at the wide array of predictions of changes in NHE outlined in *An Inconsistent Picture*, and requested that OTA do a followup study to assist policy makers in understanding why predictions might be so variable. The Technology Assessment Board approved the study in July 1993, and OTA staff began working on the project in August 1993.

TABLE B-1: Analyses Examined by OTA

Proposal	Analysis	Reference citation
American Health Security Act of 1993 (H.R. 1200/ S.491) <sup>a</sup>	CBO	U.S. Congress, Congressional Budget Office, "H. R 1200, American Health Security Act of 1993, " Washington, DC, December 1993, U.S. Congress, Congressional Budget Office, "S 491, American Health Security Act of 1993, " Washington, DC, December 1993
Comprehensive Health Reform Act of 1992 (H.R. 5919) <sup>b</sup>	CBO	U.S. Congress, Congressional Budget Office, <i>Estimates of Health Care Proposals From the 102d Congress</i> , Washington, DC, July 1993
Health Care Cost Containment and Reform Act of 1992 (H.R. 5502) <sup>b</sup>	CBO	U.S. Congress, Congressional Budget Office, <i>Estimates of Health Care Proposals From the 102d Congress</i> , Washington, DC, July 1993
Health Security Act (H.R. 3600/S 1757) <sup>a</sup>	CBO	U S Congress. Congressional Budget Office, <i>An Analysis of the Administration's Health Proposal</i> , Feb. 8, 1994
	Clinton Administration	U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Washington, DC, unpublished table, Apr. 7, 1994, U S Department of Health and Human Services, Office of Assistant Secretary for Planning and Evaluation, "The Health Security Act A Financial and Distributional Analysis," Washington, DC, January 1994
	Lewin-VHI	Lewin-VHI, Inc., <i>The Financial Impact of the Health Security Act</i> , (Washington, DC; Dec. 9, 1993)
Health Security Act (H R 3600/S. 1757), <sup>a</sup> Lewin-VHI scenario without government cost controls	Lewin-VHI	Lewin-VHI, Inc., <i>The Financial Impact of the Health Security Act</i> , (Washington, DC: Dec. 9, 1993)
Managed Competition Act of 1992 (HR. 5936) <sup>b</sup>	CBO	U.S. Congress, Congressional Budget Office, <i>Estimates of Health Care Proposals From the 102d Congress</i> , Washington, DC, July 1993.
	ESRI	Meyer, J A , Snow-Carroll, S , and Wicks, E , "Managed Competition in Health Care: Can It Work?," Economic and Social Research Institute, Washington, DC, May 1993,
Managed competition plan, Starr version	Sheils et al	Sheils, J.F, Lewin, L.S., and Haught, R A "Potential Public Expenditures Under Managed Competition, " <i>Health Affairs</i> 12 (suppl.): 229-242, 1993
National health plan, full savings scenario	ESRI	Meyer, J.A., Silow-Carroll, S., and Sullivan, S., <i>A National Health Plan in the U.S. The Long-Term Impact on Business and the Economy</i> , (Washington, DC Economic and Social Research Institute, 1991 )
National health plan, administrative savings scenario	ESRI	Meyer, J A, Snow-Carroll, S , and Sullivan, S , <i>A National Health Plan in the U. S.. The Long-Term Impact on Business and the Economy</i> , (Washington, DC Economic and Social Research Institute, 1991 )

TABLE B-1: Analyses Examined by OTA (cont'd.)

Proposal	Analysis	Reference citation
Single-payer plan, CBO version with patient cost-sharing	CBO	U.S. Congress, Congressional Budget Office, <i>Single-Payer and All-Payer Health Insurance Systems Using Medicare's Payment Rates</i> , CBO staff memorandum, Washington, DC, April 1993.
Single-payer plan, CBO version without patient cost-sharing	CBO	U S Congress, Congressional Budget Off Ice, <i>Sing/e-Payer and All-Payer Health Insurance Systems Using Medicare's Payment Rates</i> , CBO staff memorandum, Washington, DC, April 1993.
Single-payer plan, GAO version	GAO	U.S. Congress, General Accounting Off Ice, <i>Canadian Health Insurance: Estimating Costs and Savings for the United States</i> , GAO/HRD-92-83 (Washington, DC: U.S. Government Printing Office, April 1992).
Single-payer plan, Grumbach et al. version	Grumbach et al.	Grumbach, K., Bodenheimer, T., Himmelstein, D., et al., "Liberal Benefits, Conservative Spending The Physicians for a National Health Program Proposal, " <i>Journal of the American Medical Association</i> 265(19) 2549-54, 1991.
Single-payer plan, Lewin-VHI version	Lewin-VHI <sup>c</sup>	Lewin-ICF, <i>National Health Spending Under a Single-Payer System: The Canadian Approach</i> (staff working paper prepared by J.F. Sheils and G.J. Young) (Fairfax, VA 1992),
Single-payer plan, Woolhandler and Himmelstein version	Woolhandler and Himmelstein	Woolhandler, S., and Himmelstein, D., "The Deteriorating Administrative Efficiency of the US, Health Care System, " <i>New England Journal of Medicine</i> 324(18):1253-1258, 1991.
Universal Health Care Coverage Act of 1991 (H R 1300) <sup>b</sup>	CBO	U.S. Congress, Congressional Budget Office, <i>Estimates of Health Care Proposals From the 102d Congress</i> , Washington, DC, July 1993

KEY: CBO = U S Congress, Congressional Budget Off Ice, ESRI = Economic and Social Research Institute; GAO = U S General Accounting Off Ice

<sup>a</sup>Bill numbers are for 103d Congress.

<sup>b</sup>Bill numbers are for 102d Congress.

<sup>c</sup>Analysis was conducted by Lewin - ICF. The company was acquired and expanded in 1992 For purposes of this report all Lewin studies are Identified as Lewin-VHI.

SOURCE Off Ice of Technology Assessment, 1994

OTA assembled an advisory panel to assist it in determining what issues and materials to consider in examining estimates of NHE under health reform. The 14 individuals who agreed to serve 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, Professor at

Harvard University, Division of Health Policy Research and Education, chaired the panel.

The advisory panel first met September 8, 1993. At that meeting, the panel discussed the purpose and possible methods of the study. The panel agreed that OTA should study the key assumptions made by analysts that drive analysts' estimates of changes in NHE under reform. The panel also encouraged OTA to study analysts' methods for estimating the federal budget effects of reform.

At a second meeting of the advisory panel held December 22, 1993, OTA staff updated panel members on the progress of the report and asked whether the panel felt that the assumptions that OTA staff were examining were important ones. Members of the panel who attended the meeting agreed that most of the assumptions being examined by OTA were key to projections of NHE under reform, and provided further direction for the study. OTA was not able to examine evidence on every key assumption that goes into every estimate of NHE under reform.

In order to determine which assumptions were critical to projections of the impact of reform, OTA carefully examined documentation of available analyses. OTA studied estimates of specific health reform proposals from the 102d and 103d Congress as well as analyses of general health reform approaches not introduced as formal legislation. OTA also spoke to analysts, attended briefings, attended relevant hearings in Congress, and attended conferences related to health reform to understand which assumptions would be most important in estimating NHE under reform proposals.

## RESEARCH

OTA'S research for this study took two approaches: 1) understanding analysts' methods of estimating the effects of key policies on NHE under health reform, and 2) reviewing the available empirical research literature on the assumptions used to make these estimates. OTA examined available written documentation on analyses of health reform proposals, and contacted analysts for further clarification and explanation.

OTA staff members met with representatives from the Agency for Health Care Policy and Research,<sup>2</sup> the Congressional Budget Office, 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 Planning and Evaluation,<sup>3</sup> the Urban Institute, American Academy of Actuaries, and the Wyatt Company. OTA staff spoke with representatives from the Health Care Financing Administration,<sup>4</sup> the Economic and Social Research Institute, and the Economic Policy Institute.

OTA's review of the empirical evidence included studies in published research literature on topics relevant to policy assumptions made by analysts. OTA examined the methods and findings of key studies.

OTA also commissioned contractor papers to assist in analyzing relevant empirical evidence. OTA convened a workshop of the contractors on October 1, 1993 to discuss the relation of the various contractor papers to the report as a whole. Many of the contractor papers were reviewed externally; some will be available from the National Technical Information Service (NTIS). For a list of contractor papers, see table B-2.

## ANALYSIS

OTA compared its findings from its review of the empirical research literature with assumptions made by analysts in estimates of NHE under health reform. OTA attempted to assess the reasonableness of assumptions made in analyses and whether other equally plausible assumptions could be made.

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<sup>1</sup>For example, advisory panel members and OTA staff agreed that the cost of the benefit package under alternative reforms would be a critical determinant of NHE and that it could be useful to examine how benefit packages are "priced" by different entities. However, the panel also agreed with OTA staff that this question was of such magnitude and complexity that an analysis of it could not be completed by the deadline for this report.

<sup>2</sup>Within the Department of Health and Human Services.

<sup>3</sup>Ibid.

<sup>4</sup>Ibid.

**TABLE B-2: Contract Papers Prepared for the Understanding Estimates of National Health Expenditures Under Health Reform Report**

**Jon B. Christianson, Ph. D., Bryan Dowd, Ph. D., John Kralewski, Ph. D.,** University of Minnesota, Minneapolis, Minnesota, and Catherine Wisner, Health Care Consultant, Minneapolis, Minnesota, "Minnesota as a Model of Managed Competition, " forthcoming.

**Baruch Fischhoff, Ph. D.,** Carnegie Mellon University, Pittsburgh, Pennsylvania, "Assessing the Assumptions Behind Projections of Individual Consumer Decisions in Health Care Reform, " in preparation.

**Kathryn Langwell, Ph. D.,** KPMG Peat Marwick, Washington, DC, "Employment Effects of Health Reform, " in preparation.

**Robert Miller, Ph. D., and Harold Luft, Ph. D.,** University of California at San Francisco, San Francisco, California, "Assessing the Assumptions Behind Health Reform Projections: Cost-Savings Due to HMOS," January 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, " in preparation.

● **John A. Rizzo, Ph. D.,** Yale University, New Haven, Connecticut, "Physician Volume Responses to Fee Changes, " December 1993.

● **Dennis Scanlon, M. A., and Mark Kamlet, Ph. D.,** Carnegie Mellon University, Pittsburgh, Pennsylvania, "Assessing the Assumptions Behind Consumers' Choice of Health Insurance Plans and the Implications of Such Choices for Projecting Economic Impacts of Differing Approaches to Health Reform, " April 1994.

**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.

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

In its report OTA discussed evidence that supported specific assumptions and also highlighted gaps in the knowledge base that contributed to the uncertainty of estimates. OTA attempted to examine how altering assumptions surrounded by uncertainty affected estimates of NHE. Performing this type of sensitivity analysis was not always possible, however, because OTA's access to models used by analysts was limited.

## REVIEW

Before sending a draft of this entire report for external review, OTA asked analysts to review preliminary drafts of sections of the report related to their analyses. Not every analyst had time to review the document at this stage.

OTA next sent a draft of the full report to the project's advisory panel and to relevant outside experts (see appendix A). Reviewers included members of organizations whose analyses were examined in this report, as well as individuals from academia (health economics, health services

research, and health law), think tanks, private consulting firms, public interest groups, philanthropic organizations, the health insurance industry, health law, state and local governments, congressional support agencies, and the executive branch. Reviewers' comments and critiques were incorporated where appropriate.

The OTA staff who wrote this report received assistance in their analysis from other staff members of OTA. 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 impacts of health reform. Members of this panel assisted in identifying overarching themes from across the individual chapters of the report and in developing general critiques of the analytical process. Further meetings with other OTA staff sharpened the report's conclusions and policy implications outlined in the first chapter. The final draft of the report was sent to the Technology Assessment Board March 25, 1994.