

Special Report

Summary of a conference on national health expenditures accounting

by Phoebe A. Lindsey and Joseph P. Newhouse

The following summary is of a conference to review national health expenditures accounting. Attendees focused on the annual article published by the Health Care Financing Administration (HCFA) in the Health Care Financing Review that reports how much the United States spends on medical care.

Overview

A conference on national health expenditures accounting was sponsored by the Health Care Financing Administration (HCFA) in conjunction with its research center at the Rand Corporation and the University of California at Los Angeles and was co-chaired by Joseph P. Newhouse, Director, Rand/UCLA Center for Health Care Financing Research, and Daniel R. Waldo, Chief, Health Expenditures Branch, Division of National Health Cost Estimates, HCFA. Participants submitted topics in advance for consideration; a list of participants and a synthesis of these topics, which served as an agenda, are provided in the technical note at the conclusion of the article.

The issues addressed at the conference included: definitions and boundaries of various categories used in the expenditures accounting, the presentation of the current accounting framework, refinements in the current framework, further disaggregation of the current framework, and possible expansions of the current framework or data base.

The value of continuity in historical times series was recognized at the outset and reinforced by participants throughout the conference. HCFA's resource limitations were also noted as a reminder that the development of new items could require adjustments in the current scope of work, and that issues related to the magnitude of spending in certain categories not currently covered in the accounts, or covered as a subset, might better be handled in one-time surveys.

Definitions and boundaries

The importance of using less aggregated classifications to obtain greater precision was raised early in the conference and recurred throughout the sessions. For example, "hospital care" currently includes everything that the hospital bills for, but for

some purposes it would be desirable to group physician and resident salaries paid by the hospital with the physician expenditures and the costs of drugs provided in the hospital with drug expenditures.

Disaggregation of hospital care expenditures would allow users to construct a definition and data base suited to their particular need. The proper amount of disaggregation is, of course, a matter of judgment. For example, some participants wanted a separate accounting for "preventive care," but the boundaries of preventive care are not well agreed on, and obtaining accurate data is difficult. In particular, if the volume of preventive care is estimated from claims forms, the amount will be biased downward to an unknown degree because of the incentives to obtain greater reimbursement by coding preventive services as acute or chronic care services.

The boundaries of health care as defined by the annual article¹ are now somewhat narrowly drawn. Should the annual article cover only those expenditures related to providers of medical care services or should it be broadened? For example, should it include expenditures on environmental health and sanitation services? Should it incorporate non-health sector expenditures related to medical care services such as the costs of transportation to the physician? There was consensus that definitions not be broadened, at least for now; priority ought to be given to the other matters that will be discussed later in this summary.

An increasing number of services are being provided outside the institutional setting, many in an effort to prevent or avoid the costs of institutionalization. Custodial care services are not covered by Medicare, but they may be covered in some instances by the intermediate care facility portion of Medicaid. To that degree, some portion of these services are included in the current accounts. It was concluded that it was not feasible for the Health Care Financing Administration (HCFA) to go beyond this; not only are there problems in determining when a service is health related and when it is not (e.g., if an arthritic person purchases the time of someone to clean her house, is that a health service?), there are also problems in valuing services not purchased through the market (e.g., a wife caring for an invalid husband).

A participant suggested that a reasonable delimiter would be to confine the article to services covered by medical insurance. Precisely for gray area services, however, insurance policies vary in what they cover. It was pointed out that there might be a distinction

¹*National health expenditures* is a continuing series of reports begun in the Department of Health, Education, and Welfare (Reed and Rice, 1964). The series, now the responsibility of the Office of the Actuary, Health Care Financing Administration, Department of Health and Human Services, presents the National Health Accounts of the United States.

between expenditures caused by the effects of the disease but that are unrelated to its treatment or medical management (e.g., the housecleaning example cited earlier) and expenditures that are intended to affect the course of the disease or that provide symptomatic relief or relief of anxiety.

Presentation of data base

Strengthening the current data base and making it as useful as possible to a variety of users, each with different needs, was of interest to all participants. It was noted that, for the most part, data used by HCFA to generate estimates have been collected by other entities for other purposes. Following are a series of suggestions and recommendations for improving the presentation and utility of the current data base.

Highlighting revisions of earlier data

When previously published data are revised, it should be possible for the regular user to easily identify changes.

Adjustments to data

One participant noted that the data sources used for most of the noninstitutional services are incomplete and the estimates of aggregates prepared from them are thus potentially seriously biased downward. Expenditures on certain categories of service may thus be substantially understated. On the other hand, HCFA may have no firm basis for a quantitative adjustment. It was suggested that when HCFA adjusts the data, the assumptions on which the adjustments are made should be available to the user. For example, the detail on the data sources and the assumptions made in presenting the data might be incorporated in a separate appendix and made available for users who request this level of information.

Merging data sets

The usefulness of current micro data sets for estimation of national health expenditures was discussed. Of particular concern was the exclusion of decedents and the institutionalized from the micro studies. Despite those omissions, participants felt that studies such as the National Medical Care Expenditure Study (NMCES) (National Center for Health Statistics and National Center for Health Services Research, 1977) might provide cross-checks on HCFA's estimates of total and out-of-pocket spending. HCFA staff indicated that the issue of micro studies' excluding of significant parts of the population would be brought to the attention of the Data Policy Committee, Bureau of Data Management and Strategy, HCFA, for consideration.

Timeframes

Some participants recommended the consideration of timeframes other than the calendar year for data presentation; in particular, data classified by fiscal year. The multiplicity of accounting years used by various sources means, however, that a new set of interpolations would be necessary. Seasonal adjustment of such interpolations would be difficult. Concerns were raised about false precision of such methodologies. The consensus was that the annual report continue to use the calendar year.

Input-output table

HCFA noted that an ideal approach for data presentation would be an input-output table for the health industry, similar to displays for the National Income and Product Accounts² (Bureau of Economic Analysis). Even though the difficulty in preparing such a table was recognized, there was support among the participants for such information.

Refinements of data base

Medical facility construction

The issue of medical facility construction costs arose. A number of participants argued that these costs are double counted in figures on national health expenditures. To avoid double counting, a user could exclude construction expenditures. However, the issue of which figure HCFA should use as "the" national health expenditure is still open. There was no consensus on whether the current treatment should be changed or on which figure to use as the national health expenditure.

The basis for the argument of double counting is that capital expenditure is counted as construction expense, but interest payments for financing and possibly depreciation allowances for that capital may also be counted as operating costs. On the other hand, the current treatment of construction costs is modeled on and consistent with that of the National Income and Product Accounts.

Assuming the present policy should continue, it was pointed out that data are not available on construction costs of private office buildings that rent office and laboratory space to private practitioners. No suggestions, however, were proffered on how to obtain such data. HCFA currently uses the survey of construction sites as a source, (U.S. Bureau of the Census); however, data are not available on the fraction of space devoted to medical purposes (indeed, how much, if any, of the building will be devoted to medical uses may not be known when the office building is constructed).

²The National Income and Product Accounts, first compiled in 1940, are annual tables that have been included in the *Survey of Current Business* every July since 1982. Prior to July 1982, the tables were published each July as a supplement to the *Survey of Current Business*.

Those who believed inclusion of construction costs was double counting naturally saw no problem with this omission. Others felt the construction cost item was misleading because it focused solely on structures and omitted movable equipment. HCFA noted that data on movable equipment are not available. Again, those who believed construction costs were double counted were not troubled by this omission. As an independent point, disaggregation of nursing home construction costs was suggested.

Others were concerned about data on the sources of financing, in part to estimate the value of loan guarantees. Data on sources of financing are not obtained through the survey of construction sites. Another survey of new construction and new sources of financing (American Hospital Association) was suggested as a potential data source.

Capital formation and investment issues

Some participants suggested a separate accounting of assets or capital in the health care sector. The growth of investor-owned facilities has stimulated an interest in knowing more about health facility capital formation and investment issues. Of interest are how the sources and uses of capital are changing and what the implications are for self-financing. A statement on aggregate sources and uses of capital would assist in identifying the nature, profile, and amount of capital going into the health care system as well as changes in the use of capital over time.

It was suggested that investment firms might have data on capital formation. Since the source of funds may change from what is reported during the planning phases to the source actually used on a permanent basis, caution was suggested in interpreting these data.

It was also suggested that the capital account should not only include capital equipment but also investments in training and research.

Out-of-pocket expenditures

Out-of-pocket expenditures by consumers are currently calculated as a residual; that is, HCFA starts with total expenditures, subtracts estimated third-party payments and assumes the remainder is out-of-pocket expenditures. Thus, the estimated out-of-pocket expenditures are an amalgam of the true out-of-pocket costs, unspecified sources of funds such as endowment income and income from gift shops and parking lots, and any measurement error in the other categories (i.e., statistical discrepancy). A discussion of this is contained in the 1984 national health expenditures article (Levit, et al., 1985).

A possibility for estimating the out-of-pocket component would be to use data from household interview surveys. But, as noted earlier, data on decedents and the institutionalized are missing from household surveys, causing a potential bias. Also, some payments reported on the survey as out-of-pocket may be reimbursed by insurance subsequently.

A minor accommodation would be to relabel the category to indicate that both out-of-pocket costs and the statistical discrepancy are included in the same category, but no consensus was reached on this suggestion.

A question was raised as to whether the Part B (supplementary medical insurance) Medicare premium should be considered an out-of-pocket, private expenditure; it now is not, and the expenditures it finances are considered public expenditures on medical care. Consider first the out-of-pocket issue. Individually paid premiums for private health insurance are also not treated as out-of-pocket expenditures, a designation reserved for payments at the time of service. Two suggestions were made: treat all individually paid private premiums and Part B as a separate category of out-of-pocket expenditures, or disaggregate and identify the amount consumers pay for Part B premiums so that users could incorporate this category where they wished.

With respect to whether these expenditures should be considered public or private, the present system is consistent in its treatment of Part B premiums and Workers' Compensation; just like Part B of Medicare, the medical component of Workers' Compensation is treated as a public program even though most benefits are privately financed.

Allocating insurance deductibles

How a common insurance deductible is allocated across several services was of concern to some conference participants. It was recognized that there is no nonarbitrary method to allocate a common deductible, but the method HCFA uses (i.e., allocate in proportion to total expenditure on various services) might be better publicized.

Medicare and Medicaid buy-ins

Presently, Medicaid buy-ins to Medicare are shown as both Medicare and Medicaid expenditures, though there is no double counting in the total figure that is shown. HCFA indicated that the data are presented in this way to maintain consistency.

No change was recommended for this methodology of allocating the buy-ins.

Disaggregation of data base

Hospital care

The hospital care component of the personal health care services category currently includes hospital-based physician and dentist costs, as well as the salaries of medical and dental residents. One participant estimated that the inclusion of these two types of expenses overestimated expenditures on hospital services per se by about 14 percent in 1978. Some participants suggested that these expenses be excluded from the hospital care category and attributed to their respective categories (i.e., physician and dentist).

Some also suggested that the data on residents and full-time physicians be shown separately; this would permit a clearer picture of the direct cost of medical education.

It was recommended that hospital outpatient costs be presented separately from inpatient costs to provide a more accurate picture of what is occurring in these two facets of hospital care. This issue is discussed in greater detail in a later section of this summary.

Another recommendation regarding hospital care was to differentiate between short- and long-term hospitals. Some argued for differentiating patient care, teaching, and research costs, but allocation of joint costs would be necessarily arbitrary. No consensus was reached on the desirability of such a differentiation.

The disaggregation of room and board costs from ancillary services was suggested, as was a breakdown of ancillary services into laboratory, X-ray, and other categories.

The need to track hospital administrative costs was suggested in view of the increased complexity of the administrative requirements and the growth of the investor-owned segment of the hospital industry.

Some participants wished hospital profits disaggregated. It was pointed out that accounting profit does not generally respond to economic profit. No consensus was generated on this suggestion.

Physician services

Data on physicians in office-based private practice was requested by those interested in international comparisons. There was also special interest in disaggregation of services provided by such physicians to hospital inpatients and outpatients, because of the probable differential insurance coverage of such services.

There is a question whether residents and other physicians whose salaries are paid by hospitals should be counted as hospital costs or physician costs. Some participants argued that these salary costs should be counted as physicians costs. If so, the 1978 estimates for expenditures for physician services would be underestimated by at least 9 percent. The estimates for expenditures for physician services are based largely on data compiled by the Internal Revenue Service from business income tax returns.

Further disaggregations recommended were to separate ancillary services provided in the office and physicians' costs, and to further divide ancillary costs incurred in the office into laboratory and X-ray costs.

Nursing home care

The latest national nursing home survey (National Center for Health Statistics) was done in 1977. In light of the high growth rate of long-term care expenditure, updated information is important.

Participants recommended that nursing home data be disaggregated into data on skilled nursing facilities

(SNF's) and intermediate care nursing facilities (ICF's). Information on a subset of ICF's, the intermediate care facility for the mentally retarded (ICF-MR), needs to be available because of the apparent recent growth in this type of facility and the effect such growth is having on other sections of the industry as beds are downgraded to ICF-MR status. Starting with the 1983 national health expenditures article (Gibson et al., 1984) these figures have been presented in the text of the article. The growth in the ICF-MR category, however, may reflect a shift of services from State budgets to the Federal budget by bringing previously provided services under the umbrella of the Medicaid program, i.e., there may be less growth in actual services than the ICF-MR expenditures suggest.

Drugs and medical sundries

Drug costs to hospital inpatients are currently allocated to hospital care. A study of drug expenditures in the United States (Glarmet-Lenoir, and Herisson, 1980) by the Centre de Recherche pour l'Etude et l'Observation des Conditions de Vie estimated hospital drug expenditures for prescription drugs, in retail prices, at \$5.5 billion in 1978 (\$1.5 billion for outpatient and \$4.0 for inpatient drugs). Some participants believed these expenditures should be treated as drug expenditures rather than as hospital expenditures. If these expenditures were to be so treated, hospital expenditures would have been overstated by 7.3 percent. HCFA suggested that this problem might be addressed by disaggregating hospital expenditures. Determining which drug cost is to be used in such a disaggregation is not straightforward: Is cost the ingredient cost, what the hospital paid for the drug, what a prescription would have cost on average in the private sector, what the hospital charges, or what is reimbursed? Hospital expenditure data now reflect hospital revenue; if drugs provided in the hospital are moved from hospital expenditure to drug expenditure, it seems appropriate to define the expenditure as what the hospital paid for the drug plus some imputed cost for dispensing. Any additional markup on drugs that was used to subsidize other hospital services would then be allocated to hospital services.

Private drug company research and development is now included with drug expenditure; this might be shown separately to permit a better estimate of the Nation's research effort.

Other supplies and professional services

Recommendations for disaggregating these data came from a number of participants, in particular that eyeglasses and appliances be differentiated. A source could be the Bureau of Labor Statistics' *Consumer Expenditure Interview Survey* that is issued periodically (approximately every 10 years) and includes the expenditure class, "nonprescription drugs and medical supplies."

Participants also suggested that other professional services be disaggregated into (at least) categories of chiropractors, optometrists, and other.

Outpatient services

The need to distinguish hospital outpatient from inpatient care was expressed by many conference participants. Medicare's prospective payment system for hospitalization provides incentives after admission for a hospital to offer as many services as possible on an outpatient basis, which underscores the interest in outpatient department care. The difficulty in comparing expenditures on hospital outpatient care with expenditures in other types of ambulatory care, given each hospital's individual cost allocation methods, was noted; in other words, a patient expenditure on hospital outpatient care may either subsidize or be subsidized by inpatient care.

Interest was also expressed in knowing the proportion of hospital outpatient versus inpatient services that are provided to health maintenance organization and preferred provider organization members.

Outpatient care expenditures on freestanding emergency centers, surgery centers, renal dialysis centers, and birthing centers, were also thought important to include. Such centers appear to be competing with hospitals for profitable types of services and are growing.

A data source for outpatient laboratory service is the journal *Laboratory Management* from United Business Corporation. It was suggested that this source could be validated through the use of Medicare's Part B claims data.

HCFA participated recently in a series of meetings to discuss revisions to the *Standard Industrial Classification (SIC)* (Office of the President, 1972), which provides the industry definitions most often used in data collection. Among the recommendations to be presented to the full SIC committee were several aimed at differentiating these types of establishments. Unfortunately, SIC revisions would not become evident for several years.

To segregate inpatient from outpatient data, it was suggested that a benchmark year be established, data collected, and alternative methods of allocation considered. Other data sources may need to be subsidized to obtain needed information and sample studies may need to be conducted to fill in the gaps.

Geographic disaggregation, small area statistics

Although the utility and reliability of small area statistics were questioned by some, a majority of participants expressed interest in small area statistics to permit better observation of changes in the delivery system, to learn about variations in practice patterns (e.g., between Medicare prospective payment system waiver States and nonwaiver States), and to help

evaluate cost-containment efforts at the State and local level.

It was suggested that the personal health expenditures category be broken down to provide expenditure data by State, by service, and by Medicare, and that a time series be maintained.

HCFA noted that state estimates done in 1966 and 1969 are being updated with data through 1982 (Cooper, Gibson, Rice, 1982). HCFA will include Medicare tables adjusting expenditures from place of service to the residence of the beneficiary by state. Some participants expressed a desire to examine data both by place of service and place of residence (Levit et al., 1985).

HCFA is also currently working on a disaggregation of national health expenditures by age. A report has subsequently been published of 1977 and 1984 data showing a breakdown of expenditure by those 65 years of age and over but there is no age disaggregation for the under-65 years of age population (Gibson et al., 1984). Participants suggested age breakdowns for the categories 75-84 years and 85 years or over and expressed interest in having age data on an annual basis.

HCFA's Division of Information Analysis was recommended as an excellent source for small area statistics.

State and local government expenditures

An interest in knowing the proportions of health expenditures attributable to State and local government separately was expressed. This would be helpful if it could be presented on a State-by-State basis when HCFA publishes small area statistics. Such data currently come from the U.S. Bureau of the Census and are aggregated at HCFA. The importance of differentiating source when funds flow from the Federal to the State to local government levels was noted. It was observed that U.S. Bureau of the Census data show the distinction between direct and intergovernmental expenditures (*Governmental Finances*).

It was suggested that this separation of data into state and local government categories would be useful in addressing issues of municipal or county hospital bad debt and uncompensated care.

Philanthropy and industrial in-plant expenditure

It was suggested that these expenditures be disaggregated by type of service (Gibson et al., 1984). In Table 12 in the Winter 1984 article (Levit et al., 1985), the industrial in-plant expenditure was the \$1.8 billion figure shown under other health services.

Program administration and insurance net cost

It was suggested that these two components be disaggregated for better international comparability.

This has been done. In Table 3 in the Winter 1984 article (Levit et al., 1985), for example, the net cost of health insurance (the \$10.5 billion figure) appears as the private insurance portion of program administration and net cost of insurance. The net cost of insurance value, however, may be unreliable because of arbitrary allocations of joint costs and possible cross-subsidization of one line of business by another (e.g., life and health).

Health maintenance organizations

Because of the gains in enrollment of health maintenance organizations (HMO's), it was recommended that data on HMO's be shown separately in the article. Data on HMO's currently come from a survey sent to them by the Office of Health Maintenance Organization, Health Care Financing Administration; this survey does not now allocate costs to services. HMO's that use other hospitals for their inpatient care show that component as a separate category and HMO hospitals that admit patients from the community also segregate out expenditures by non-HMO members.

Mental health

Some argued for disaggregating mental health costs and showing them separately. One rationale is to track the effect of the deinstitutionalization movement on mental health budgets. It is easier to measure services provided by institutions; services and expenditures for those services at the community level are much more difficult to systematically measure and report.

A 1980 study of mental health and some substance abuse issues was cited as a possible source for some information (Alcohol, Drug Abuse and Mental Health Administration, 1980). Another source suggested was the National Institutes of Mental Health (NIMH) of the Public Health Service.

A question was raised regarding how the developmentally disabled population would be addressed in the context of mental health issues—in particular, would expenditure on the developmentally disabled be considered a mental health expenditure? There was no resolution of this issue.

Expansions of current data base

Costs of medical education

To have more complete information on health expenditures, it was recommended by participants that the costs of medical education outside hospitals be included in the annual article. Such data are now not included. Data are currently available for expenditures for medical schools but not for nursing schools or for other categories of allied health professions. Even including only medical schools would be better than complete exclusion.

Tax expenditures for health care

The possible presentation in the annual article of tax expenditure data and the value of the medical care deduction under the individual income tax was discussed. In effect, this issue relates to the sources of funds for medical care, for example, whether a component of private insurance premiums ought to be considered tax financed. *Tax Expenditures: Current Issues and 5-Year Budget Projections for Fiscal Years 1982-86* and the *Tax Expenditures: Current Issues and 5-Year Budget Projections for Fiscal Years 1984-88* from the Congressional Budget Office (CBO) estimate these expenditures; it is not clear that HCFA needs to play any additional role.

HCFA staff indicated a preference for relying on CBO and the Monthly Treasury Statement of Receipts and Outlays of the United States Government from the U.S. Department of the Treasury data for such information rather than incorporating them into the annual article.

Including eligibles for public programs

Including the number of eligibles for public programs in the annual article was raised for consideration. Without knowing the number of eligibles it is difficult to interpret trends in expenditure data for public programs. Whereas data pertaining to total national expenditures can be readily put on a per-person basis, data on public programs cannot.

There are, however, difficulties in determining the number of eligibles. Programs such as the Indian Health Service or the Veterans' Administration track people who receive services rather than people eligible for service, since the latter figure is unknown. Medicaid can provide a recipient count, but because people switch back and forth in their eligibility even during a year, it is nearly impossible to obtain unduplicated counts. As a limited step, however, some participants felt it would be easier to interpret the data on Medicare expenditure if HCFA published the number of enrollees in the annual article.

It was suggested that the 1980 National Medical Care Utilization and Expenditure Survey (National Center for Health Statistics and Health Care Financing Administration, 1980) or NMCES or other household surveys might provide such data on the number of eligibles.

Inclusion of malpractice premiums

A request was made to incorporate malpractice premium data into the annual report. Best Review: Property/Casualty Insurance Edition from A. M. Best Company, Inc. has some data on malpractice premiums, but these data are incomplete. One participant noted that a HCFA survey on physician practice costs and expenditures may provide information on malpractice premiums. Some argued

that although such data were interesting, they were outside the scope of the annual article in the *Health Care Financing Review*.

Price indices and expenditure distributions

Some wished HCFA to make an effort to use Medicare claims data to calculate unit price indices; others suggested using Medicare claims data to estimate the cost of certain conditions; still others wanted simple distributions of gross expenditure. In general, it was felt that these also were subjects worthy of analysis, but that they should not be part of the annual article in the *Health Care Financing Review*.

Recommendations

Following are the recommendations and suggestions from the Conference on National Health Expenditures Accounting, October 11-12, 1984. The recommendations and suggestions do not take into account the costs of the changes; no attempt was made to estimate such costs. Any action based on these suggestions would, of course, consider the cost of implementation. "Desirability" is intended to mean only that there would be positive benefits from the change, not that the benefits would exceed the cost.

- Although data on nonhealth sector costs such as transportation costs and environmental health costs may well be significant, these should not be added to the expenditure series at this time.
- When previously published data are revised, it should be possible for the regular user to easily identify changes.
- When HCFA adjusts data, the assumptions on which the adjustments are made should be available to the users.
- Detail on data sources and assumptions made could be incorporated into a separate appendix made available to requesters.
- The need for survey data to validate and disaggregate the aggregate data HCFA now uses should be brought to the attention of the HCFA Data Policy Committee.
- The annual article should continue to use the calendar year, as opposed to other fiscal years, as the basis for the annual article.
- The development of an input-output table was regarded as desirable, resources permitting.
- If a capital account is constructed, it should include not only capital equipment but also investment in training and research.
- The method HCFA uses to allocate a common insurance deductible across several categories might be better publicized.
- It would be desirable to show data on residents and full-time physicians separately from other hospital costs.
- It would be desirable to separate inpatient and outpatient physician costs, as well as inpatient and outpatient hospital costs.

- It would be desirable to disaggregate expenditure on skilled nursing facilities and intermediate care facilities.
- To better estimate the Nation's research effort, it would be desirable to separate out the private drug company research, which is now currently included with drug expenditures.
- It would be desirable to disaggregate expenditures on eyeglasses and appliances.
- It would be desirable to disaggregate expenditure on other professional services such as chiropractors, optometrists, and others.
- It would be desirable to disaggregate personal health care expenditures by State and age. It would also be useful to include the age categories 75-84 years and 85 years or over.
- It would be desirable to show data on health maintenance organizations separately.
- It would be desirable to include costs of medical education that occur outside of hospitals.

There was no consensus on the following suggestions:

- Whether expenses for hospital-based physician and dentists and the salaries of medical and dental residents should be removed from the category of hospital care and attributed to their respective categories (i.e., physician and dentist).
- Whether expenditure on hospital care for short- and long-term hospitals should be differentiated.
- Whether expenditures for hospital room and board costs should be differentiated from ancillary costs, or whether ancillary costs should be disaggregated into laboratory, X-ray, and other categories.
- Whether nursing home construction costs should be disaggregated from other facility construction costs.
- Whether drug costs currently allocated to hospital inpatients should be reallocated to the drug category.

Technical note

List of attendees with affiliation at the time of the conference

Patricia Munch Danzon
Duke University

David Dolkart
American Hospital Association

Dean Farley
National Center for Health
Services Research

Roger Feldman
Council of Economic Advisors

Robert B. Helms
Assistant Secretary for Planning and Evaluation
Department of Health and Human Services

Thomas Hodgson
National Center for Health Statistics

William Hsaio
Harvard School of Public Health
Harvard University

Donald Jones
Health Insurance Association of America

Herbert E. Klarman
New York University

Phoebe Lindsey
Rand-UCLA Center for Health Policy Studies
The Rand Corporation

Gabrielle Lupo
Office of Management and Budget

Nelda McCall
SRI International

Kathleen Means
Department of Health and Human Services

Jack A. Meyer
Center for Health Policy Research
American Enterprise Institute

Samuel A. Mitchell
Federation of American Hospitals

Francis D. Moore, M.D.
Harvard Medical School

Joseph P. Newhouse
The Rand Corporation

Jean Pierre Poullier
Organisation de Cooperation et de Development
Economique

Dorothy P. Rice
Aging Health Policy Center
University of California, San Francisco

Simone Sandier
Centre de Recherche pour l'Etude et l'Observation des
Conditions de Vie

Anne A. Scitovsky
Palo Alto Medical Research Foundation

George Silver
Center for Health Studies
Yale University

Joseph G. Simanis
Social Security Administration

Gordon R. Trapnell
Actuarial Research Corporation

Participants from the Health Care Financing
Administration were:

Ross H. Arnett
Barbara Cooper
Carol Cowell
Lawrence Davidoff
Allen Dobson
Franklin Eppig
Charles Fisher
Mark Freeland
Guy King
George Kowalczyk
Helen Lazenby
Katharine Levit
Pat McDonnell
George Schieber
Sally Sonnefeld
Daniel Waldo
Patricia Willis

Topics for discussion

The following was sent to participants in advance and constituted an agenda:

1. We will begin with those suggestions made in the article, "Estimating the direct costs of illness," (Scitovsky 1982). Many of those suggestions were brought up by others as well. The first set of suggestions relates to reclassification of existing expenditures. For example, Scitovsky suggests the allocation of hospital-based physician costs to physicians (and similarly for hospital-based dentists). While discussing the allocation of hospital-based physician charges, we should touch on "the cost of medical education." There are some theoretical problems with defining the cost of medical education, but this concern does suggest at a minimum breaking apart hospital based physician costs and breaking them in turn into full time staff and resident costs. Should that much be done? Is it feasible or desirable to do more? Scitovsky also suggests that the cost of drugs given in the hospital and nursing homes be allocated to drugs. More generally, can drugs dispensed outside retail outlets be allocated to categories other than drugs?
2. Some participants raised the issue of the boundaries of the health sector. There are several possibilities for expansion: custodial services for the chronically ill; other private expenditures that are not spent within the health sector such as transportation to the provider, cost of special diets, etc.; and public expenditures on the environment including air and water. There is concern about including institutions that are emerging in the grey area between inpatient and outpatient care such as surgicenters and urgicenters. To what degree are such institutions included in the existing data? If they are not included, does the American Hospital Association have any

plans for collecting data in this area? Is anyone else collecting data?

3. Some have argued that estimates for noninstitutional services are biased downward (Scitovsky, 1982). To what degree is this the case? If it is the case, what can and should be done about it? In particular, suppose it is generally agreed that there is a downward bias in a figure, but the bias cannot be estimated from data. Should HCFA add an explicit judgmental adjustment to the estimates so that the estimates reflect a "best" estimate? There are clear analogies to the U.S. Bureau of the Census problem with respect to assumed undercounts.

4. A third set of suggestions has to do with more disaggregation of existing data. For example, hospital data might be disaggregated by control, service, and stay, as well as by inpatient and outpatient services. Further, long-term care units in hospitals could be identified. One can raise the question of how hospitals should be aggregated; what are the conceptual bases for grouping certain types of hospitals with others? Could physician services be disaggregated into inpatient and outpatient services? Because they are insured to different degrees, an increase in insurance coverage is likely to affect outpatient physician services more than inpatient and conversely. Perhaps estimates could be constructed from the National Medical Care Expenditure Survey. Should home health care be accounted for separately? Can laboratory work be accounted for separately?

5. Several respondents suggested a confusion between stocks and flows in the current system and the apparent double counting of construction expenditure. The double counting occurs because in cases other than donated capital, charges for capital embodied in construction will presumably be passed on and be reflected in revenues. The current treatment is, however, consistent with national income accounting.

6. Some respondents suggested an asset account. In this case, the notion of keeping hospital and nursing home construction separate appears to have merit. An apparent inconsistency between including hospital construction, but not medical office building construction, was also noted.

7. Any number of people would like small area statistics. Some talk about regional data, some about State data. Some also suggest data sorted by site of provider and residence of patient. Although one can see any number of uses for such data, little is known about the costs of generating them. One suggestion was that the Medicare claims data by State could be provided on a more frequent basis than is currently done.

8. Some individuals would like the financing of care for the mentally ill kept as a separate category.

9. Some suggest including tax expenditure, both the deduction for health insurance and the deduction for medical expenditure. That is, these categories would be shown as public expenditure (presumably in a separate category), and private expenditure would be correspondingly reduced.

10. Should State and local government expenditure be separated?

11. Should sources of funds for construction, including bonds and guaranteed loans, be included? Should the value of the guarantee be imputed as an expenditure?

12. Should research expenditure be disaggregated into public and private components?

13. How should expenditures that are partially financed by an insurance policy with a common deductible be allocated among uses? In principle, any answer would have to be arbitrary. Some discussion might nonetheless be useful. An example of the problem is as follows: Suppose an individual has a policy with a \$200 deductible. That person spends one night in a hospital at \$500 and has physician bills of \$500. Insurance pays \$800 of the \$1,000 total; the person pays \$200. What percentage of the hospital expenditure is credited to private health insurance and what percentage to direct payment? What percentage of physician expenditure?

14. Should annual revisions in the data be given greater prominence?

15. Are the adjustments to the Internal Revenue Services data on physicians still appropriate? Would the American Medical Association data be a better source for physician data on income?

16. Are the Bureau of Economic Analysis data the best source for drugs and drug sundries, and eyeglasses and appliances?

17. Is anything known about the magnitude of error introduced into the data from trying to combine one source of data with another?

18. Can financial and clinical information be married to produce cost of disease estimates? Should they be? Somewhat along the same vein, should anything be provided about the distribution of expenditure?

19. Is the value provided for construction inconsistent by applying only to structures and not to equipment?

20. Should the profits and reserves of private insurance carriers be disaggregated from other prepayment and administration costs? Among other things, this might lead to better international comparability.

21. Is more detail on data sources, assumptions, and calculations needed?

22. Would fiscal year data as well as calendar year data be useful?

23. Should the Part B Medicare premium be considered a private expenditure?

24. Present practice is to consider Medicaid buy-ins into Medicare as both Medicaid and Medicare expenditure (though there is no double counting in the total figure). Should this practice be changed?

25. Would more frequent breakdowns of expenditure by age group be useful?

26. Should HCFA make an effort using Medicare claims to calculate unit price indices?

27. Should eligibles for public programs be included?

28. Should data on malpractice premiums be included? If so, how would one decide which types of inputs that physicians or hospitals spend money on should be included?

References

- Alcohol, Drug Abuse, and Mental Health Administration: *National Data Book*. DHEW Pub. No. (ADMHA) 80-938. Washington. U.S. Government Printing Office, Jan. 1980.
- American Medical Association: *Socioeconomic characteristics of medical practice*. Center for Health Policy Research. Chicago. 1985.
- Best Review: *Property/Casualty Insurance Edition*. A.M. Best Company, Inc. Oldwick, N.J.
- Bureau of Labor Statistics: *Consumer expenditure survey: Interview survey*. U.S. Department of Labor. Washington. U.S. Government Printing Office.
- Bureau of Labor Statistics: *Interview Survey*. Bulletin Series. U.S. Department of Labor. Washington. U.S. Government Printing Office.
- Congressional Budget Office: *Tax Expenditures: Current Issues and 5-Year Budget Projections for Fiscal Years 1982-86*. Washington. Congress of the United States. Sept. 1981.
- Congressional Budget Office: *Tax Expenditures: Current Issues and 5-Year Budget Projections for Fiscal Years 1984-88*. Washington. Congress of the United States. Oct. 1983.
- Cooper, B., Gibson, R., and Rice, D.: U.S. National health accounts: Historical perspectives, current issues, and future projections. *Accounting for Health*. Paris, France. Economica, 1982.
- Financial Management Service: *Monthly Treasury Statement of Receipts and Outlays of the United States Government*. U.S. Department of the Treasury. Washington. U.S. Government Printing Office.
- General Liability and Medical Malpractice Insurance Marketing*. A.M. Best Company. Oldwick, N.J.
- Gibson, R. M., Levit, K. R., Lazenby, H., and Waldo, D. R.: National health expenditures, 1983. *Health Care Financing Review*. Vol. 6, No. 2. HCFA Pub. No. 03195. Office of Research and Demonstrations, Health Care Financing Administration. Washington. U.S. Government Printing Office, Dec. 1984.
- Glarmet-Lenoir, C., and Herisson, L.: *La Consommation Pharmaceutique en France et aux U.S.A., 1960-1978*. Paris, France. Centre de Recherche pour l'Etude et l'Observation des Conditions de Vie, 1980.
- Laboratory Management*. New York. United Business Corporation.
- Levit, K. R., Lazenby, H., Waldo, D. R., and Davidoff, L. M.: National health expenditures, 1984. *Health Care Financing Review*. Vol. 7, No. 1. HCFA Pub. No. 03206. Office of Research and Demonstrations, Health Care Financing Administration. Washington. U.S. Government Printing Office, Nov. 1985.
- Office of Management and Budget: *Standard Industrial Classification Model*. Executive Office of the President. Washington. U.S. Government Printing Office. 1972.
- Reed, L., and Rice, D.: National health expenditures: Object of expenditures and source of funds, 1962. *Social Security Bulletin*. Vol. 27, No. 8. SSA Pub. No. 64-11700. Office of Research and Statistics, Social Security Administration. Washington. U.S. Government Printing Office, Aug. 1964.
- Scitovsky, A.: Estimating the direct costs of illness. *Milbank Memorial Fund Quarterly* 60(30):463-91, 1982.
- U.S. Bureau of the Census: *Governmental Finances*. Census of Government Series. U.S. Department of Commerce. Washington. U.S. Government Printing Office.
- U.S. Bureau of the Census: *Value of New Construction Put in Place*. Construction Report C-30-YY-M. U.S. Department of Commerce. Washington. U.S. Government Printing Office.
- U.S. Bureau of Economic Analysis: U.S. National Income and Products Accounts. *Survey of Current Business*. U.S. Department of Commerce. Washington. U.S. Government Printing Office.