

Administrative costs in selected industrialized countries

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The costs of health administration are compared across several countries, accompanied by discussion of some of the variations in the definition of health administration. The influence of American health accounting on other countries is examined, and findings are presented regarding the relative costs of insurance-based and direct-delivery systems. Data are presented on health administrative spending providing gross as well as per capita measures.

Introduction

Outside the United States, the cost of health care administration—of planning, regulating, and evaluating health systems—is hardly an area of academic research or public debate, except at the periphery of studies of the strengths and weaknesses of alternative financing and delivery approaches. The dearth of good evaluative studies of administrative costs in Europe and Japan exemplifies this lower level of interest in this issue. Much of the debate on administrative cost can best be labeled as “measurement without theory,” and available measures of expenditure for health administration are full of opportunities for misunderstanding in the levels they exhibit.

Neglected accountability

Health accounting in general, aside from international comparisons, has long been underdeveloped. In the mid-1970s, only a handful of countries published reasonably comprehensive, consistent, and systematic accounts of health spending, despite the fact that this spending was even then becoming one of the largest expenditures in the industrialized countries. Health expenditures have since increased on average by more than one-third in relative terms. Health accounting has dramatically improved in

many countries but, in 1992, there are still unconsolidated accounts of health systems in many industrialized nations. Accounts monitoring the level of resources consumed by health providers across countries are for practical purposes only accessible through an international source (Organization for Economic Cooperation and Development, 1985, 1987, 1991, 1992b; Schieber and Poullier, 1989). Access to quantitative descriptions of the health systems of other countries may not suffice, as each system is the product of cultural and socioeconomic forces. Individual country monographs could fill several bookshelves, although studies that simultaneously study a large number of countries are relatively rare. Interested readers may wish to turn to Schieber, Poullier, and Greenwald (1991) and Organization for Economic Cooperation and Development (1987).

In the statistical jungle to be traversed to produce these comparative accounts, outlays specifically for administration receive scarcely more attention than in analytical studies. An objective reason behind this neglect is probably the absence of an accepted definition of expenditures for health administration.

At the international level, the operational concept employed is that of the national health accounts (NHA) of the United States. Through NHA articles published yearly, the *Health Care Financing Review* has become the vehicle by which American accounting procedures have influenced much of the comparative international developmental effort in health measurement.

In the U.S. NHA, administration is the “net cost of health insurance,” i.e., administration of private and public programs, plus net additions to loss reserves, and net underwriting gains or losses of private insurers. Private administration comprises sales, underwriting, enrollment and policy service, claim adjudication, utilization review, actuarial functions, legal support services, investment functions, corporate overhead, and risk charges (adapted from Waldo, 1992). Public administration comprises planning, regulation, monitoring, and evaluation, as well as implementation and managerial costs of Federal, State, and local government programs, principally Medicare, Medicaid, and various Public Health Service activities. Outlays for administration do not include the administrative costs of providers, opportunity costs of paperwork for consumers, unallocable administrative costs such as general governmental functions and general revenue tax collection. Also not included under administration are costs of government research on health expenditures. For example, at the beginning of 1992, the Congressional Budget Office, three out of the U.S. General Accounting Office’s four divisions, the Office of Management and Budget, the National Science Foundation, and numerous private health institutions not primarily dedicated to health were involved in substantive health research programs.

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Complicating the clear delineation of the boundaries of health administration even more, many programs that have a beneficial impact on health originate in the areas of consumer protection, education, environmental protection, housing, transportation, public safety, etc. Furthermore, in many countries, the funding and provision of health services are intertwined with those of other social welfare and security programs, making it effectively impossible to separately allocate health administration costs.

The prevailing concepts of health administration in other industrialized countries, although influenced by the American concept, reflect the large array of services supplied by government agencies at all levels, by private insurers, and by charities and non-profit institutions. Services provided include the general administration functions cited (planning, monitoring, evaluation), the issuance of insurance contracts, some revenue collection, and claims reimbursement. Hospital and private practice billing are not included under general administration but are considered a cost of doing business. Research and development, as well as capital investment in construction and equipment or supplies are not included. Queuing and other non-monetary costs that may result from particular financing and delivery arrangements are also not included. Thus, concepts of health costs may more accurately reflect each country's ideal framework rather than a fully operational definition.

Observed dispersions

Health administrative expenditures range from about 1 to 7 percent of measured health expenditures (Table 1). Some misgivings are felt about the comparability of these estimates, but the dispersion in administrative cost spending is too large to be attributable to statistical vagaries alone.

The sixfold range found should perhaps be considered along with estimates of the ratio of total health expenditures to national expenditures. In 1990, the United Kingdom spent just over 6 percent of its gross national product (GNP) or gross domestic product (GDP) on health care, while the United States spends over 12 percent, a sizable 1-to-2 difference. Health expenditures for most other countries fall somewhere between these two: Eight countries spend 8 to 9.5 percent (Australia, Austria, Canada, France, Germany, Iceland, the Netherlands, and Sweden), and eleven spend 6.0 to 7.9 percent (Belgium, Denmark, Finland, Ireland, Italy, Japan, New Zealand, Norway, Portugal, Spain, and the United Kingdom).

Comparing components of the typical health care system (such as human and material resources), a typical dispersion of these costs as a percent of total health costs is about 1-3.5, or even 1-5 percent (Organization for Economic Cooperation and Development, 1985, 1992b). The dispersion in the share of administrative expenditures as a percent of total

Table 1
Recorded expenditures for health administration in OECD countries: Selected years, 1975-90

Country	Private and public outlays as a percent of total expenditures for health				Public outlays as a percent of all public expenditures for health			
	1975	1980	1985	1990	1975	1980	1985	1990
Australia	3.8	4.0	3.0	¹ 3.1	3.8	3.2	2.5	¹ 2.6
Austria	—	—	—	—	² 4.0	—	—	—
Belgium	—	—	—	—	10.6	—	—	5.0
Canada	1.7	1.4	1.4	1.3	1.5	1.2	0.9	³ 0.9
Denmark	—	—	—	—	0.7	0.7	0.9	¹ 1.2
Finland	—	—	—	—	2.4	2.4	2.5	¹ 2.6
France	1.3	1.4	1.5	1.5	0.3	0.2	0.3	0.2
Germany	—	5.9	6.6	6.9	—	6.1	6.5	7.1
Iceland	—	—	—	—	—	1.5	1.7	1.5
Ireland	—	—	—	—	—	2.5	3.7	¹ 3.7
Italy	—	—	—	—	—	6.6	6.3	6.8
Japan	—	—	—	—	² 2.8	—	—	² 2.5
Luxembourg	—	—	—	—	—	5.4	5.2	4.8
Netherlands	4.2	4.3	5.1	5.2	3.2	3.3	4.4	4.5
New Zealand	—	—	—	—	—	—	—	¹ 7.1
Spain	—	—	—	—	3.0	2.2	2.4	2.8
Sweden	3.7	⁴ 4.0	⁴ 3.7	⁴ 3.1	—	0.6	0.4	¹ 0.4
Switzerland	—	—	—	—	—	—	3.2	¹ 3.3
United Kingdom	—	—	—	—	—	3.0	2.4	³ 2.5
United States	3.8	4.9	6.0	5.8	3.3	3.7	2.7	2.6

¹Based on 1989 data.

²Data from (Organization for Economic Cooperation and Development, 1977).

³Based on 1987 data.

⁴Author's estimates.

NOTES: The administrative outlays in the numerator are those reported in health accounts and are subject to more definitional vagaries than the denominator. OECD is Organization for Economic Cooperation and Development. Data for Germany refer to the former Federal Republic of Germany.

SOURCE: (Organization for Economic Cooperation and Development, 1977, 1992b).

health expenditures, shown in Table 1, can thus be characterized as very large, compared with other components of health spending. Standardization of the underlying methodology would reduce but not eliminate this dispersion because some variation in administrative structures reflects the variation in financing and delivery modes. Each country follows a path of its own, even if, for taxonomic convenience, they are grouped according to selected common characteristics.

The estimates found in Table 1 can be viewed from several perspectives. In terms of levels of administrative spending, insurance-based systems are relatively more expensive than direct-delivery systems. But such estimates inevitably rely on point-in-time estimates, rather than showing levels over a period of time; therefore, comparisons should not be given much weight until the underlying series can be better harmonized.

Trends in administrative costs are less questionable. However, caution is required because all health systems examined here have experienced reforms and significant structural changes in the 1975-90 period. This caveat must be even further emphasized if trends are examined since 1960. Considering the data shown (and borrowing somewhat from the following section, which loosely corrects some of the data shown), the slope of the ratio of health administration costs to total health expenditures would be slightly downward. This general downward slope often reflects a reversal of trends in the 1960s toward increasing administrative spending. This increase was primarily a result of changes in the percent of the population protected by a public plan (i.e., the coverage ratio).

As an example, Finland introduced a Beveridgian-type local health service in 1964, preceding somewhat the introduction by the United States in 1966 of programs to provide health care to the elderly and the needy (Medicare and Medicaid). The Netherlands soon followed with a catastrophic health insurance law. Up to now, the history of health systems is rich with moves to enlarge the safety nets, each major step generating an increase in administrative costs of scale. Because more such moves took place in the 1960s and early 1970s, the downward trend is more pronounced in the 1980s, particularly when anomalies in Table 1 are adjusted and when the causes of a few fluctuations during the last decade are examined.

France's published health administration estimates illustrate the statistical-underestimate case; Germany, the case of the planned increase in administrative costs. The French figures grossly underestimate the level of the administrative costs. The published accounts omit the cost of social insurance (a program employing approximately 80,000 people) and show an upward statistical trend that is the opposite of the real trend. The reason given for the omission is that the social insurance program also administers two income-maintenance plans for sickness benefits and disability. The French program that covers the majority of people spent approximately 18 billion francs in 1988, or 0.3 percent of France's GDP; the plans that cover the

self-employed and farmers are smaller in size, bringing total "recordable" administrative costs to 3.8-4.1 percent of health expenditures, or 2.5-2.8 percent of all public expenditure. The genuine downward trend for France is discussed later in this article.

The sharply rising share of administrative services in Germany corresponds to changes in both the nature and volume of these services. For example, the sickness funds have added home help services and have increased exemptions from coinsurance; ambitious expenditure-restraint strategies adopted since 1977 have required increased monitoring of hospitals and physicians, which in turn generates more administrative cost (Schneider, 1992).

A downward trend in public expenditures on health administration is generally expected. Marginal transaction costs typically diminish as the number and value of transactions increase. Current information on the quantities and prices of medical goods and services in several countries listed in Table 1 suggests that prices for these goods and services have risen faster than the costs of record keeping, monitoring and evaluation, regulation, and other forms of administration. However, some costs have risen for administrative activities in public sector health spending. Public administration has sought to attract more qualified personnel over the longer run, which has closed somewhat the wage gap with the private sector. Cost-conscious administrators, helped by technological advances, have recorded considerable productivity gains in billing, settling claims, and the like. Efficiency gains in the disbursement offices of some countries, to mention just one example, have been startling and in the forefront of the productivity gains within the Organization for Economic Cooperation and Development (OECD). Cost shifting, prevalent in the financing of health services, can also be found in administration, as illustrated by the removal of free postal handling of national health insurance reimbursement in France (a saving to the insurers valued at more than one billion francs, some \$200 million passed on to the insured).

Policies to restrain the growth in health expenditures have involved computerization of billing and records, use of "smart" cards, and auditing of administrative expenses, all of which are aimed at reducing the relative weight of administrative costs. In France, the sickness insurance bodies (Caisses Primaires d'Assurance Maladie) reduced their number of employees by 5 percent from 1980 to 1990, a decade during which expenditures increased by 1.3 percentage points of GDP. Through attrition, a further reduction of 15-20 percent of health administration employment is expected during the 1990s.¹ This is not a unique

¹Productivity gains have been considerable, though largely unmeasured, in the provision of medical services. Because of a lack of outcome measures, much output is still valued by means of throughputs, or as the weighted sum of inputs. These methods unfortunately do not take into account changes in the production function, and often appear as increases in units of inputs for specific units of outputs.

Table 2
Per capita measures of income and expenditures for health administration: 1990

Country	GDP per capita	Per capita health expenditures		Per capita expenditures for health administration	
		Total	Public programs only	Total	Public programs only
Australia	15,983	1,304	894	¹ 38	¹ 22
Austria	16,620	1,393	927	—	—
Belgium	16,363	1,227	1,012	—	51
Canada	19,063	1,770	1,237	23	² 11
Denmark	16,756	1,053	873	—	¹ 10
Finland	16,451	1,284	1,040	—	26
France	17,364	1,532	1,140	24	3
Germany	18,317	1,486	1,089	102	78
Iceland	15,851	1,358	1,180	—	18
Ireland	10,630	748	561	—	¹ 18
Italy	16,021	1,236	939	—	64
Japan	17,994	1,171	843	—	—
Luxembourg	19,340	1,393	1,274	—	61
Netherlands	15,747	1,286	918	67	41
New Zealand	13,258	976	798	—	¹ 54
Spain	11,792	777	625	—	17
Sweden	16,813	1,451	1,298	³ 39	¹ 5
Switzerland	21,280	1,633	1,112	—	35
United Kingdom	15,682	972	823	—	² 17
United States	21,933	2,566	1,089	149	29

¹Based on 1989 data.

²Based on 1987 data.

³Author's estimates.

NOTES: All estimates are expressed in average GDP purchasing power parities. Some health expenditure data are projections of a likely outcome. Administrative outlays are those recorded in health accounts and are subject to vagaries of definition. When 1990 figures could not be obtained, their ratio to total (or public) outlays for health for the last year available was applied to the health expenditure figures for 1990. GDP is gross domestic product. Data for Germany refer to the former Federal Republic of Germany.

SOURCES: (Organization for Economic Cooperation and Development, 1992a, 1991).

illustration of the streamlining of administrative procedures observable in Europe.

Per capita measures

Broadly similar levels in the share of health expenditures attributable to paperwork, management, monitoring, and regulation mask huge differences in the actual dollar expenditures. This is because of differences in the wealth of nations, and thus their ability to pay for health care, and because of differences in the propensity to consume medical care. Table 2 compares the per capita spending for health administration converted to U.S. dollars using purchasing power parities (PPPs).²

The United States, with the highest income per capita in the OECD (Table 2, leftmost column) and with health expenditures exceeding the nearest country's per capita by approximately \$800 (measured in PPPs), spends approximately \$150 per person for health administration. In Germany, where GDP per capita stands at 84 percent of the U.S. level and health

expenditures per capita at 58 percent of the American level, recorded administrative outlays of \$102 per person equal 68 percent of the comparable U.S. level. In the Netherlands, GDP per capita stands at 72 percent of the American level, health expenditures at 50 percent, and administrative outlays are 45 percent of those in the United States.

The public expenditure estimate for the United States in the rightmost column of Table 2 is not based on the total population but rather on the elderly, the needy, veterans, and other small segments of the population. If the levels shown in Table 2 are plausible, Germany, the Netherlands, and the United States would be in a league of their own. These data confirm that countries with segmented sources of insurance pay for their flexibility through higher administrative costs. Compare, for example, Canada, with its GDP per capita equal to 87 percent of the U.S. level, health expenditures at 69 percent, and recorded administrative outlays at 15 percent of U.S. levels. As hinted above, this correlation would appear stronger still if the French data reflected true costs. It is perhaps useful to note that the reforms initiated in the late 1980s and early 1990s in Germany, the Netherlands, France, and the United Kingdom explicitly address administrative efficiency.

The nature of the various regulatory instruments adopted by these countries reflects the strong intercountry differences in their administrative expenditures.

²Purchasing power parities are rates of currency conversion that eliminate differences in price levels between countries. This means that a given sum of money will buy the same basket of goods and services when converted into those currencies at the PPP rates. The measure by which the estimates in Table 2 are obtained is PPP rates for the entire product of nations. The PPP benchmark revisions used in Table 2, based on year 1990 and available since January 1992, have resulted in a new set of parities considerably different from those obtained by extrapolating the previously used 1985 benchmark base.

Varying scope of administrative expenditures

The validity of international comparisons depends on the intrinsic practices within each nation, including concepts, definitions, and nomenclatures. The process of harmonization of macroeconomic accounts started more than 50 years ago, and the first international guidelines on national accounting principles date from 1952. The first meeting to adopt a common national health accounting blueprint, trace the boundaries of health and social welfare systems, and determine uniform reporting concepts and nomenclatures has yet to be convened. International studies of health expenditures still rest on ad-hoc, jury-rigged comparisons of definitions adopted for domestic reporting. Perhaps as a result of these difficulties listed above, a few ratios in Table 1 and administrative expenditure levels in Table 2 appear less than plausible.

Administrative outlays are, in each country's definition, a small component of the total. The search for uniformly accepted definitions of administrative cost has been less intensive than for its larger components, with only a few timid attempts in the debate, including those found in *Public Expenditure on Health* (Organization for Economic Cooperation and Development, 1977) and references in various health systems reform debates.

Two questions dominate the issue of comparability of health administration cost data: Which agents (governments or other public agencies, and private insurers) are counted, and which transactions or services are counted?

Concerning the agents of insurance, the broadest common elements appear to be the following:

- On the public side, included are a collection of agencies of central government (Federal in the United States), local government (States, counties, and municipalities in the United States), and social security institutions (combined with the Federal Government in the United States but treated as autonomous agents in most countries).
- On the private side, non-profit and commercial insurers, non-profit operators such as charities and philanthropic foundations (only for appropriate health activities), the Red Cross and similar institutions, and (in Europe) professional associations dealing with health policy implementation and management.

An internationally acceptable definition for transactions should include general administration, planning, regulation, monitoring, record keeping, claims reimbursement, and the like.

Readily identifiable gaps in the administrative cost data result from limitations in governmental reporting. For example, France, New Zealand, and Portugal appear to include only central government expenditures, whereas perhaps four-fifths of the outlays may be incurred by health boards and social insurance

program schemes.³ The British data include expenditures by the regional health authorities, district health authorities, and family health service authority staff, but a separate set of estimates covers administrative and clerical manpower in hospitals. Another gap relates to drug inspections and enforcement: These activities are included in most series, but in several countries, such activities are budgeted through law enforcement agencies. Food inspection in many countries comes under agriculture, or sometimes consumer protection agencies. The armed forces, prison authorities, school boards, and welfare departments all operate health services. Wherever possible, these services are included in the health expenditures reported in this article, but the administrative costs associated with them are typically assumed by the agencies providing the services.

Data on administrative outlays are readily accessible for the total sum of social security programs. A proportional rule—allocating costs in proportion to each function—does not work because public pensions, family benefits, and other cash entitlement programs are cheaper to administer than casualty insurance and claims reimbursement. Data separating the administrative cost of each function are not readily accessible. Should any inferences be made from the aggregate administrative costs, they would show a more pronounced trend than that exhibited on the righthand side of Table 1; if bureaucratic productivity were equally shared among all functions, the downward trend would be confirmed. One example is provided by Belgium, where the largest social insurance carrier enacted an even more stringent productivity drive than that in France. As a result of this drive, administrative costs in Belgium dropped sharply. France, as well as several countries for which estimates are not supplied on the lefthand side of Table 1, would at first glance appear to be countries with decreasing total administrative expenditures because social insurance programs overwhelmingly dominate the provision of insurance, and competition among private insurers appears to be minimal.

³The *Caisses Primaires d'Assurance Maladie* in France presently employs some 80,000 staff, not counting personnel collecting contributions. Their salaries are not included in the national health accounts. In *Dépenses de Santé: Un Regard International*, Yannick Moreau (to be published) quotes a figure of 4.5 percent as social security expenditures (medical branch); payments and reimbursements from this group cover roughly what constitutes personal health care expenditures in the United States (i.e., about 85 percent of measured health outlays using the OECD definition). That 4.5 percent, however, is not comprehensive, because it excludes contribution collection costs, a few other functions of the system, and other general government outlays listed in Table 1. A 10.8-percent estimate for total health expenditures for 1974 (supplied in *Public Expenditure on Health* [Organization for Economic Cooperation and Development, 1977]) is more than twice the level accounted for by combining the two sets of data and cannot be considered as plausible in the early 1990s. Productivity gains have been sharp in the administration of France's health programs. A conservative guess would be a ratio for total health administration figures in the 5-to-6-percentage-points range and a public health administration figure in the 6-to-7-percentage-points range, a sharp decrease from the levels of two decades ago.

Policy implications

The restructuring of the basic administrative arrangement through which health services are delivered is high on the agendas of most European countries. Their health care objectives vary considerably, depending on cultural and other preferences. But with few exceptions, this restructuring is being planned without administrative efficiency being a specific goal.

Considered as a group, European health systems are evolving from variants of the command-and-control model (adopted in the post-World War II years for reasons of social effectiveness) toward more competitive structures. Stability, for many years, was the most sought-after quality: a stable knowledge base regarding the services to be provided, a stable organizational base of financing and delivery, and stable expectations from the patients. Equity considerations did prevail over efficiency, but it would be wrong to evaluate the European systems as having been harshly rationed.

This model of stability is breaking down in Europe, north and south. The delivery of health care has become more complex and thus requires more flexibility. Rigid structures are crumbling. Allocation of block grants to providers is yielding to the newly discovered principal of "money following the patient." To contain expenditure growth, market mechanisms are being reintroduced—not pure neoclassical competition, but contracts between providers and the financing agents. The precise forms differ in Belgium, the Netherlands, Sweden, and the United Kingdom, and these restructured systems are mostly too new to provide conclusive evidence of their efficiency. However, if recent German experience is any indication, a stable ratio of health expenditures to GDP can be maintained along with a high level of services, even with increasing administrative costs.

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