Health Care Costs and Financing in World Perspective*

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Expenditures for health services, as a percentage of national wealth (gross national product, or GNP), have been rising throughout the world. Data to quantify this trend are available for many industrialized countries. The share of health spending derived from governmental sources has also been increasing. Mandatory or social insurance has developed to support health services in 70 nations. While widely used for paying doctors on a fee basis or by capitation, in Latin America doctors are organized in polyclinics and paid by salaries. General revenues are used to support Ministry of Health programs. Among health expenditures, the largest share goes to hospitalization. Cost sharing by patients is widely used to control rising costs. World trends have promoted equity in health care delivery.

The story of health care costs is one of increasing growth and cooperation throughout the world. As a percentage of national wealth, health system expenditures have been absorbing rising shares of gross national product (GNP) or gross domestic product (GDP) in almost all countries. And to permit these greater expenditures, countries have been mobilizing various collective or cooperative strategies to raise the money required.

OVERALL HEALTH EXPENDITURES

As the capabilities of the health sciences have expanded, along with greater understanding of their benefits by people, expenditures for health purposes have increased everywhere in the world. To offer just a few examples, in France—as measured in French currency—total health expenditures rose from Fr. 12,742,000,000 in 1960 to Fr. 430,348,000,000 in 1987. In this span of years, of course, the population and price level also increased, but, calculated as a percentage of the national GDP, French health expenditures rose from 6.8 percent in 1975 to 8.6 percent in 1987. The same proportion in Sweden rose from 8.0 percent in 1975 to 9.0 percent in 1987. It rose in the United States from 5.2 percent in 1960 to 11.2 percent in 1987. Over this 27-year span of time, health expenditures in Canada rose from 5.4 to 8.3 percent of GDP, and in Great Britain from 3.9 to 6.0 percent of GDP [1].

Equivalent trends in developing countries cannot be so readily quoted, but there is much indirect evidence that the proportions of GDP devoted to health have also been rising. For the year 1982, it has been reported that total health expenditures as a percent of GDP per capita were 3.2 percent in Sri Lanka and 4.2 percent in Uganda. In Indonesia they were 2.6 percent and in Peru (for 1981) they were 5.3 percent [2].

Abbreviations: GDP: gross domestic product  GNP: gross national product  HMO: health maintenance organization

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TABLE 1
Sources of Total Health Expenditures in Selected Industrialized Countries:
Percentage Distribution in 1975

| Source                  | Great Britain | West Germany | Canada | United States |
|-------------------------|---------------|--------------|--------|---------------|
| 1. Personal families    | 5.8           | 12.5         | 19.5   | 27.1          |
| 2. Voluntary insurance  | 1.2           | 5.3          | 2.5    | 25.6          |
| 3. Charity, etc.        | 0.4           | 5.1          | 2.6    | 4.6           |
| 4. Social security      | 5.0           | 62.5         | 9.1    | 11.7          |
| 5. General revenues     | 87.3          | 14.6         | 66.3   | 31.0          |
| Total                   | 100.0         | 100.0        | 100.0  | 100.0         |

Source: [4]

This enlargement of the total piece of the economic pie spent on health purposes has been associated in most industrialized countries with greater shares of financing derived from collective and public sources. In Switzerland, for example, where total health spending in 1987 was 7.7 percent of GDP, the share from public sources had risen from 62.3 percent in 1975 to 67.5 percent in 1987. In Norway the 1975 proportion from public sources was 95.5 percent, and in 1987 it rose to 98.7 percent. The equivalent trends in public/private sector ratios have not been so clear in the developing countries, but these will be explored later.

SOURCES OF HEALTH EXPENDITURES

In almost all countries, there are five major sources of health expenditures, although their proportions among countries differ greatly [3]. These sources are:

1. Private individuals and families
2. Voluntary insurance
3. Charity, industry, and lotteries
4. Social insurance or social security
5. Government revenues (all levels)

It is difficult to find exact figures to quantify these several sources, but this work has been done for 1975 by a British economist, Robert Maxwell [4]. The results for four industrialized countries are shown in Table 1. It is evident that the most socially oriented financial strategy among those four countries is found in Great Britain, especially if we recognize that general revenues depend on a progressive philosophy of taxation. The least socially oriented strategy is found in the United States, with Germany and Canada falling in between. Thus in 1975 all public sources of health expenditures in Great Britain accounted for 92.3 percent of the total, while in the United States they accounted for only 42.7 percent of the total.

In back of the last four of the five sources of health expenditures in Table 1, lie various long and complex social and political movements. Local tax revenue support for health service can be traced to classical Greek city-states, where public physicians were appointed and paid to serve impoverished free men; sick slaves were the responsibility of their masters. Much later, medieval guilds used cooperative fundraising to help a sick member, and from these voluntary insurance programs there developed the “krankenkassen” or sickness funds of early nineteenth-century Eu-
rope. In the later nineteenth century, the Bismarck government made membership in a sickness fund compulsory for workers and their employers; thus, social security was born and eventually spread to 70 nations—including nearly all of Latin America. In the twentieth century, general tax revenues at the national level became the most widely used method of raising money for health purposes.

The social security mechanism has been implemented in countries in a great variety of ways. The European countries, first to apply it, used the periodic contributions of workers and employers to build funds, which would pay fees to private doctors for their customary services. A few countries paid doctors by capitation—monthly amounts for each person (whether sick or well) signing up with a particular doctor. In Chile, however, and then in other Latin American countries, the pattern of medical remuneration was modified. Since its origin in 1924, the Chilean program has paid doctors, not for each service or procedure, but for their time. Most doctors work in polyclinics or hospitals for a certain number of hours each day. This pattern has since been adopted by most developing countries on all continents, with social security programs of medical care [5].

Almost always, these collective methods of raising money for health purposes were associated with controversy. Physicians thought that departure from personal payments jeopardized the doctor-patient relationship, and they opposed these strategies. Even sickness funds opposed any regulation by government. Nevertheless, all sorts of social financing of health care have grown in both public and private sectors. Private insurance and even charitable donations have become subject to increasing regulation by government, to protect consumers.

The prevention of disease and promotion of health are supported everywhere by governmental tax funds—often combining revenues at central and local levels. Medical and related treatment is also supported by government funds, though insurance—both governmental and private—is also very widely used. The use of voluntary insurance to finance medical care often entails certain difficulties, resulting from the deliberate selection of insurance risks.

DIVERSE NATIONAL PATTERNS

Overcoming the opposition to collectivized strategies of health care financing requires a certain maturity in any society. This maturity, especially in the scope of government, usually depends on industrialization and urbanization. Hence it tends to be greater in the more economically developed countries and less in the economically less developed countries. Analyses of data from the 1970s by the World Bank shows the contrast strikingly, and is presented in Table 2. We see that public (as against private) support of health expenditures varies from 91.8 percent in Sweden to only 16.0 percent in India. As a percentage of GNP, furthermore, total health spending in the 1970s absorbed from 7.3 percent in Sweden down to 2.5 percent in India and only 1.9 percent in the Philippines [6].

Certain exceptions to the contrasts evident in Table 2 are worth noting. Sri Lanka is a developing country in which the government accords very high priority to health—60.0 percent of health spending in the 1970s. In the highly developed United States of America, on the other hand, in the 1970s government contributed only 42.7 percent to support the health system [7].

In most Latin American countries, the health-related funds derived from statutory
social security programs are substantial, often exceeding the Ministry of Health budget supported by general revenues. If these two sources of public funds are simply classified as "governmental," their origins in eight Latin American countries during the period 1978–1980 were distributed as shown in Table 3.

For Latin America’s largest country, Brazil, data on health expenditures from all sources, public and private, are available for 1982 [8]:

| Source                  | Percent |
|-------------------------|---------|
| General tax revenues    | 25.75   |
| Social security         | 35.68   |
| Voluntary insurance     | 11.21   |
| Charity, etc.           | 0.89    |
| Individuals and families| 25.67   |
| Total                   | 100.0   |

In Latin America, it is sometimes asserted that large expenditures by social security programs compete with Ministry of Health budgets and keep them low. In 1976, with a colleague, I did a study to examine this relationship and found that the assertion was not true. Among 12 Latin American countries, those with strong social security programs, as measured by the percentage of national population covered, also had relatively stronger (not weaker) Ministries of Health; those with weak social security programs had relatively weaker Ministries of Health. Both of these public programs varied directly with the level of national wealth or GNP of each country [9].

 Readers may be interested in the influence of domestic politics on the public/private mixture of health expenditures. In Chile, there are data for these expenditures before and after the Popular Unity government of Salvador Allende, and also
after the onset of the Pinochet military dictatorship [10]. Here are the proportions:

| Political Period         | Private | Public |
|--------------------------|---------|--------|
| Before Allende (1969)    | 53      | 47     |
| During Allende (1970–74) | 49–51   | 51–49  |
| Early Pinochet (1975)    | 58      | 42     |
| Later Pinochet (1978–80) | 63–66   | 37–34  |

It is apparent that the Pinochet dictatorship led to an increased private sector and a decreased public sector, relative to conditions under Allende. It would be interesting to learn about these proportions in 1989–1990.

PURPOSES OF HEALTH EXPENDITURES

Within overall national health expenditures, what is the distribution of money spent on different health purposes? Such analytical breakdowns are available for several highly industrialized countries, and the percentage distribution in four of them is shown in Table 4. Expenditures for hospitalization in the United States,
Canada, and France, it may be noted, absorb nearly half of all health expenditures. The lower figure of 32.7 percent in Japan, furthermore, is probably misleading, since, in that country, private medical clinics may have up to 19 beds, without being counted as hospitals [11].

In all four countries of Table 4, the expenditures for drugs, though substantial, are still an understatement; they apply only to out-of-hospital drugs, since those taken in hospitals are included in the hospitalization figure. The relatively low percentage figure for drugs in the United States, furthermore, applies to an extremely large total health outlay, so that in absolute money the expenditure is very large. Ambulatory care in all these countries, of course, includes physician’s care in offices or patient homes, as well as dental care and other out-of-hospital health services [12].

The composition of health expenditures in developing countries cannot be so readily reported, since the necessary studies have seldom been made. There is indirect evidence, however, that the relative expenditures for hospitalization, especially by government, in most developing countries are still higher than in the industrialized countries. They are also higher for drugs, which must generally be imported, and relatively lower for the categories of ambulatory care and “other.”

A widely recognized problem of developing countries, especially in Africa and Southeast Asia, is the inordinately high public expenditures for one or a few hospitals in the national capital. Sometimes such institutions absorb more money from the national government budget than the entire health system in the rest of the country. The World Health Organization movement for stressing primary health care has been gradually counteracting this emphasis, but it is an uphill battle against the medical power elite.

**IMPLICATIONS AND CONCLUSIONS**

The worldwide trends in health expenditures have led to several health system strategies in countries. Almost everywhere there is mounting concern for the rising costs—both in absolute money and as a proportion of national wealth. This concern has led to various methods of cost containment. At the same time, the extension of democratic concepts has generated worldwide concern for the achievement of equity in national health systems.

Slowing the rise in costs naturally calls for greater efficiency in the delivery of health services. This goal has been sought in different ways among countries, but most methods involve increased organization of health care delivery, in order to mobilize less costly personnel in teams and to modify medical incentives. The prepaid group practice or “health maintenance organization” (HMO) is a widely used approach. With doctors paid by salaries or capitation, they have no financial incentive to multiply services unnecessarily. Sound professional leadership, of course, is then needed to avoid the opposite abuse of underserving patients [13].

The costs of an organized health program may sometimes be controlled by imposing direct co-payments on the patient. Several health insurance programs, both voluntary and statutory, impose such co-payments on patients at the time of service, even though it is the doctor more than the patient who usually decides on second or subsequent visits in a case. Cost sharing is a greater burden on families of low income, so that the process creates inequities. It is noteworthy that the oldest social insurance program in the world, in Germany, has never required co-payments and has controlled costs in other ways.
Along with efficiency, organized health care delivery fosters higher quality of service; professional isolation is the greatest threat to quality. In an organized health program, standards may be maintained for appointments and performance. There are also better channels for patient complaints and corrective actions.

As the benefits of medical science have grown and a wider understanding of their value has spread, equity in health care has become a worldwide goal. Equity calls for services in accordance with personal needs, not with purchasing power or any other factor. Few countries have attained full health care equity, but most countries are moving toward it. Since ancient times, there has been a contest between health service as a market commodity and health service as an entitlement of society. Since the end of World War II, with the liberation of colonies, the extension of education, and the growing force of democratic principles, the recognition of health care as an entitlement of society has been winning out. In any individual, sickness is unpredictable, and methods for its effective treatment seldom correspond to personal financial resources. Throughout the world, therefore, methods of financing are being developed to implement modern health service as a basic human right.

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